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Final Evaluation EU – STREIT PNG: Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea

Contract N° SEA-2023-38483

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FINAL REPORT



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Final Evaluation EU–STREIT–PNG: Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea

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List of acronyms and abbreviations

AAP	Accelerated Action Plan
ACIAR	Australian Centre for International Agricultural Research
AF	Adaptation Fund
AMAMAS	Agricultural Meteorological Advisory Monitoring and Services
AMIS	Agricultural Market Information System
ATM	Automated Teller Machine
BESS	Battery Energy Storage System
BPNG	Bank of Papua New Guinea
CASA	Civil Aviation Safety Authority
CB	Cocoa Board
CCDA	Climate Change and Development Authority
CEFI	Centre of Excellence in Financial Inclusion
CEPA	Conservation and Environment Protection Authority
CGC	Credit Guarantee Corporation
CPB	Cocoa Pod Borer
CSA	Climate-Smart Agriculture
CSOs	Civil Society Organization
DAC	Development Assistance Committee
DAL	Department of Agriculture and Livestock
DF	District Feeder Road
DICT	Department of Information and Communications Technology
DIP	Deliberate Intervention Programme
DNPM	Department of National Planning and Monitoring
DoWH	Department of Works and Highways
DWITS	Directorate for Work Implementation and Technical Services (Provincial Level)
DYC	District Youth Council
EEAS	European External Action Service
EIIP	Employment-Intensive Infrastructure Programme
EMMP	Environmental Management and Monitoring Plan
EQ	Evaluation Question
ESM	Environmental and Social Management
ESP	East Sepik Province
ET	Evaluation Team
EU	European Union
EUD	Delegation of the European Union
EUR	Euro
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organization of the United Nations
FCCB	Forestry, Climate Change and Biodiversity (Programme)
FIS	Fisheries Information System
FSN	Food and Nutrition Security
FSP	Financial Service Provider
FT	Full Time
FTT	FAO Thiaroye Processing Technique

GALS	Gender Action Learning System
GAP	Good Agricultural Practices
GI	Geographical Indications
GIS	Geographic Information System
GPS	Global Positioning System
HH	Household
HP	Horsepower
HT	Half time
ICAO	International Civil Aviation Organization
ICCO	International Cocoa Organization
ICO	International Coffee Organization
ICT	Information and Communication Technologies
ICTs	ICT (Resource) Centers
ID	Identification
ILO	International Labour Organization
INT	International
IPA	Investment Promotion Authority
IPM	Integrated Pest Management
IT	Information Technology
ITC	International Trade Centre
ITU	International Telecommunication Union
JC	Judgement Criterion
KPIs	Key Performance Indicator
KW	Kilowatt
KWh	Kilowatt-Hour
KWp	Kilowatt Peak
KYC	Know Your Customer
LA/LR	Local Access Road
LLG	Local-Level Government
LMS	Learning Management System
LT	Local Trunk Road
MAF	Mission Aviation Fellowship
MIS	Management information system
MoU	Memorandum of Understanding
MS	Member State (of the EU)
MSME	Micro, Small and Medium Enterprises
MTDP	Medium-Term Development Plan
MTE	Mid-Term Evaluation
MW	Megawatt
MWh	Megawatt-Hour
NAP	National Adaptation Plan
NARI	National Agriculture Research Institute
NASP	National Agriculture Sector Plan
NAT	National
NDCs	Nationally Determined Contributions
NDSP	National Development Strategic Plan
NEA	National Energy Authority

NEC	National Executive Council
NFA	National Fisheries Authority
NFIS	National Financial Inclusion Strategy
NFSP	National Fisheries Strategic Plan
NGO	Non-Government Organisation
NICTA	National Information and Communication Technology Agency
NYDA	National Youth Development Authority
OECD	Organisation for Economic Co-operation and Development
OED	Office of Evaluation
PACD	PNG Agriculture Commercialisation and Diversification (Project)
PGK	Papua New Guinean Kina
PIMU	Project Implementation and Management Unit
PMV	Personal Mobility Vehicle
PNG	Papua New Guinea
PPL	PNG Power Limited
PSC	Project Steering Committee
PT	Provincial Trunk
PTF	Programme Task Force
PV	Photovoltaic
RAA	Rural Airstrip Agency
REDD	Reducing Emissions from Deforestation and Forest Degradation
RMG	Road Maintenance Group
ROI	Return on Investment
RTMP	Road Transport Master Plans
RuTIMS	Rural Transport Information Management System
SIB	Spice Industry Board
SO	Specific Objective
SPA	Strategic Priority Area
STC	Short-Term Consultant
STREIT	Support to Rural Entrepreneurship, Investment and Trade
STREITMIS	STREIT Management Information System
TVET	Technical and Vocational Education and Training
TWG	Technical Working Group
UK	United Kingdom
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UniTech	Papua New Guinea University of Technology
UNSDCF	United Nations Sustainable Development Cooperation Framework
USD	United States Dollar
VC	Value Chain
VSAT	Very Small Aperture Terminal
WHO	World Health Organization

Executive summary

Introduction

Evaluation objectives and scope: This final evaluation of the EU-funded programme *Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea* (EU-STREIT PNG) was commissioned by the European Union Delegation (EUD). The evaluation covers the implementation period from 2 January 2020 to 30 September 2025, with field observations undertaken in November 2025. Its primary purpose is to provide an independent assessment of the extent to which the strategic objectives of EU-STREIT PNG have been achieved. The evaluation addresses nine evaluation questions (EQs) covering relevance, effectiveness (including cross-cutting objectives), efficiency, sustainability and EU added value.

Programme description and country context: With a budget of EUR 81.3 million, the implementation of EU-STREIT PNG follows a One UN approach led by the Food and Agriculture Organization of the United Nations (FAO) with the International Labour Organization (ILO), the International Telecommunication Union (ITU), the United Nations Capital Development Fund (UNCDF) and the United Nations Development Programme (UNDP). The programme promotes inclusive and sustainable economic development across ten districts in the East Sepik and Sandaun provinces (Sepik region) by strengthening cocoa, vanilla and fisheries value chains (VCs) and their enablers, targeting around 100,000 farmers and fisherfolk.

Specific Objective 1 (SO1), led by FAO, focuses on increasing income from the three VCs (and enhancing nutrition through fisheries). Outputs under SO1 include sustainable production and inclusiveness in each VC. SO2 focuses on strengthening climate-resilient value chain enablers. Outputs under SO2 include conducive business, trade, policy and regulatory environment for sustainable rural agripreneurs and Micro, Small and Medium Enterprises (MSMEs); strengthened VC support services for financial inclusion (led by UNCDF) and digital inclusion (led by ITU); increased production and access to renewable energy systems (led by UNDP), and improved and climate-proof rural transport infrastructure (led by ILO).

Papua New Guinea presents a challenging context marked by geographic isolation, cultural diversity and institutional constraints. The programme aligns with Vision 2050 and the Medium-Term Development Plan (MTDP) IV, while addressing persistent challenges such as weak capacity, limited infrastructure, inequality affecting women and young people, and climate related risks.

Evaluation methodology: The nine EQs were addressed using an evaluation matrix, in which each EQ was assessed through a selection of judgement criteria and measurable indicators to identify main findings. A mixed methods approach was applied, combining qualitative and quantitative data from both secondary sources and primary fieldwork, as well as existing quantitative data. The analysis was also guided by a Theory of Change (ToC), which was developed by the evaluation team during the inception phase due to the absence of a complete programme-level ToC. The evaluation matrix was informed through triangulated evidence from the document review, field interviews, focus groups discussions and site observations to ensure findings were balanced, justified and as accurate as possible according to the time available. In total, the sample included visits to 31 VC groups and 34 enablers, which is over six percent of the programme's total of 1,047 interventions (772 VC groups and 275 enablers).

Main findings

EQ1: To what extent were the programme objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?

Findings 1 and 2: The programme is well aligned with national, EU and UN strategies and benefits from a coordinated One UN approach involving five UN agencies specialising in agriculture production and processing, digitalisation, financial services, renewable energy and transport infrastructure. However, its design does not sufficiently address the long-term sustainability needs of its main actions, which is not aided by a general lack of support to the downstream needs of the cocoa and vanilla VCs, notably market and trade development needs through which strong national and subnational ownership and private sector engagement could be harnessed to ensure production gains are fully linked to stable and alternative markets.

Finding 3: The relevance of selected value chains varies significantly, with cocoa highly suitable due to strong institutional support and market demand, whereas vanilla is less relevant due to a constant drop in prices between 2020-2025 and weak leadership on promotion and regulation of vanilla by the Spice Industry Board. Fisheries VCs were found to be the least relevant, because insufficient attention was given from the design phase to key issues such as the lack of quality fish feed and fingerling suppliers for fish farming in the Sepik

region to major problems of market access for capture fisheries, which is crucial to sustaining livelihoods of riverine and coastal fishing groups.

Findings 4 and 5: The programme's geographical focus on the Sepik region is considered appropriate given high poverty and isolation rates. However, the basis for selecting specific locations and partners is unclear, and limited baseline analysis combined with weak inter-institutional coordination between the programme's sub-components contribute to constraining the programme's ability to address systemic constraints such as weak extension services and market access, which are key to optimising effectiveness.

EQ2: To what extent has the programme increased economic returns and opportunities for cocoa, vanilla and fisheries value chains actors?

Findings 6 and 7: The cocoa VC has been the most effective in strengthening sustainable value chains, delivering significant income gains from around USD 35 per household to as much as USD 162 through rehabilitation of resilient cocoa varieties, improved post-harvest handling and favourable global prices, with many households reinvesting in production and improving livelihoods. In addition, the programme is on track to increase cocoa grinding capacity in PNG from 180 tonnes/year in 2025 to over 3,800 tonnes by end of 2026 if three new processors are able to fully install, test and commission new plant and/or equipment supported by the programme in 2026. However, these gains are undermined by persistent weaknesses in farmer group governance, including limited bookkeeping and reporting capacity, which threaten access to more stable markets and, in the absence of a programme strategy to address new government compliance requirements by 2027, risk leaving many groups unable to meet minimum accounting and reporting standards.

Finding 8: The vanilla VC has been far less effective, as gains from increased production and training have been offset by fungal disease on some of the pods, weak market access and sustained global price declines, leading many farmers to reduce or abandon production. This highlights inadequate risk management as well as limited ability to respond to market shocks. Indeed, many farmers complained there was an absence of reliable buyer linkages, forcing dependency on a limited number of aggregators who dictate prices.

Finding 9: Support to the fisheries VC has generated modest improvements in household nutrition, particularly through aquaculture, but the majority of fishers interviewed stated limited impact on income to support the transition to sustainable community-based fisheries management as foreseen in the Financing Agreement. In the case of aquaculture, restricted access to key inputs like quality fish food and tilapia fingerlings the programme has responded by supporting the development of hatcheries and local feed production, but with little or no extension, this has resulted in low-input, low-output systems that generate no surpluses for sale as participants had anticipated to generate an income. In the case of capture fisheries VCs, the creation of large beneficiary groups combined with limited market access and inadequate cold chain infrastructure has restricted income gains, indicating a lack of assessment on underlying constraints and barriers to establishing market-oriented fisher groups.

EQ3: To what extent has the programme strengthened and improved the efficiency of value chain enablers?

Findings 10 and 11: The programme has advanced policy dialogue and aspects of financial inclusion, particularly through its support to the National Financial Inclusion Strategy, reducing "know your customer" requirements and encouraging private sector engagement in financial inclusion. However, its broader contribution to strengthening the enabling environment remains limited. The installation of 21 ICT resource centres compared to nine planned has demonstrated important benefits, such as greater off-grid autonomy, reduced operating costs than previous diesel gensets and enhanced rural access to online services at five ICT centres. Nonetheless, the majority of ICT centres are not fully operational, lack reliable internet and equipment, and do not have business plans or long-term operation and maintenance arrangements. Moreover, the integration of the ICT centres in wider government programmes like the smart villages and islands initiative supported by ITU was not evident.

Findings 12 and 13: The programme has strengthened financial inclusion by improving the capacity and incentives of financial service providers to expand into rural areas, resulting in a significant increase in access points (305) and new accounts (119,500) than planned. Interviews confirm rural access points reduce travel time, lower costs and have improved security. Nonetheless, many accounts are reported to be inactive, in part due to preferences for cash, limited financial literacy and unreliable network coverage, so digital financial services are not yet widely used for VC transactions and uptake of credit remains limited.

Findings 14 and 15: Investment in photovoltaic (PV) systems has produced mixed results. The larger systems (20–100 kW) installed in six schools and three health centres have delivered strong efficiency gains and enabled them to operate as ICTs, resulting in improved access to training among different groups in the local community. This is constrained, however, by the absence of impact monitoring, the risks associated with the lack of maintenance arrangements, and insufficient alignment with wider government programmes mentioned in findings 10–11. The distribution of smaller systems (up to 6 kW) at the VC group level targeting lead

farmers/fishers has been less effective due to technical limitations such as low performance in poor weather and corrosion. In contrast, solar dryers have demonstrated clear efficiency gains for on-farm cocoa and vanilla processing, in particular reducing drying times and losses.

Findings 16 to 18: Investment in climate-resilient transport infrastructure has resulted in the rehabilitation of 170 km of rural roads to date, which is lower than planned, while 313 km of spot maintenance is in line with plan. These works have delivered significant efficiency gains for local communities by improving year-round access to main towns, reducing travel time and costs, and supporting increased sales of cocoa. Efficiency gains in terms of system-wide impact are less evident, due to limited active engagement with provincial authorities and poor alignment between infrastructure and VC locations, resulting in a relatively small percentage of VC beneficiaries able to directly access one of the improved roads within a 5 km radius (20 percent). In addition, the labour-based spot maintenance through Road Maintenance Groups (RMGs) supported local employment and community ownership but no longer complies with new regulatory requirements that require all RMGs to be registered.

EQ4: How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?

Finding 19: The programme achieved satisfactory levels of women's participation in the development of the VC groups (18 percent), especially considering the strong cultural norms in the Sepik region that suggest the original target was unrealistic. Moreover, youth participation has been higher than planned (35 percent), confirming almost 54 percent of all participants have come from marginal groups. However, the quality of their participation has varied across the VCs, especially due to limited access to services such as training at the ICT centres for reasons highlighted Findings 11 and 17.

Finding 20: Progress in strengthening decision making and leadership for women and youths has improved in some cases indicating it is uneven in the VCs, with strongest inclusion rates witnessed in fisheries and MSMEs, while cocoa and vanilla VC remain largely male dominated. Local gains in confidence, voice and institutional representation are evident, but they are not matched by structural needs, notably greater access to assets, especially land tenure, which is an area not monitored by the programme.

Finding 21: The programme has delivered clear human and social capital benefits for women and youths through skills development, group formation and increased confidence, but economic gains have been more limited and uneven. In particular, women's economic empowerment lags behind their increased participation due to persistent social norms, limited control over income, and the absence of targeted measures to address underlying structural barriers.

EQ5: To what extent was the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

Findings 22–24: EU-STREIT PNG has integrated environmental protection and climate resilience into its objectives, climate-smart agriculture (such as agroforestry and mixed cropping), community-based fisheries management, and climate-proofed infrastructure. Solar PV systems also support climate adaptation and mitigation. However, gaps in environmental and climate monitoring and baseline data, the delayed launch of the agro-meteorological system in the e-Agriculture Strategy, and general lack of monitoring of the outcomes of the above actions in the programme's monitoring system (STREITMIS) has resulted in limited information on changes in soil health, biodiversity, water quality, fish stocks or climate vulnerability. Moreover, effective integration of risk management in decision-making and planning is largely missing despite a climatic vulnerability analysis conducted by UNDP and the Climate Change Development Authority in East Sepik in 2017.

Findings 25-28: sustainable farming practices in cocoa and vanilla were evident through the introduction of resilient varieties and their integration in local agro-forestry and inter-cropping systems. However, linkages to certification schemes and attention to ecosystem sustainability to manage and protect fish stocks foreseen in the Financing Agreement were not evident. As such some key environmental risks and data gaps, notably environmental baselines to verify environmental gains, persist in the Sepik region. In summary, the programme has been effective in preventing deforestation by adopting a rehabilitation-only approach but fallen short on raising awareness and action on broader environmental and climate resilience measures, in particular nature-based solutions, that are key to the long-term sustainability and impact of the VCs promoted.

Findings 29–30: The programme's approach to environmental sustainability and climate adaptation has successfully avoided deforestation in the cocoa and vanilla VCs through a strict strategy of promoting only rehabilitation of cocoa blocks and vanilla plots. However, despite clear indications in the Financing Agreement to include ecosystem restoration measures and broader nature-based solutions to address flooding, erosion, coastal degradation, or biodiversity loss, there is little evidence on this in the programme. Consequently, the

programme's environmental interventions have not applied a regenerative approach, which is likely to limit long-term resilience and the establishment of sustainable supply-side VCs.

Finding 31: EU-STREIT PNG has exceeded its renewable energy targets by 254 percent, confirming a tangible reduction in carbon emission reductions. For example, the programme's nine PV systems are estimated to have avoided 1,409 tCO₂e over four years, while the deployment of thermal solar dryers for cocoa farmers may have contributed an additional 461,000 tCO₂e avoided. This suggests both actions demonstrate low-carbon impact that aligns with the Government of PNG's climate commitments and MTDP IV priorities.

EQ6: To what extent was the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

Finding 32: EU-STREIT PNG had a clear and appropriate governance structure at the strategic level, based on a multi-tiered system of the Programme Steering Committee, aid at the planning and operational level by Technical Working Groups (TWGs) and the Programme Implementation and Management Unit (PIMU) responsible for day-to-day implementation of work plans. However, operationally, coordination was challenging due to the large number of implementing partners, unclear or delayed terms of reference for the TWGs and PIMU, and strong sector-focused planning among the main stakeholders. This limited integrated decision-making, inter-sectoral learning, and sub-provincial coordination, affecting the alignment of interventions with local-level rural development priorities.

Findings 33-34: The programme's governance structure has been effective in convening implementing partners, agreeing annual work plans, monitoring targets via STREITMIS, and addressing logistical and compliance issues. However, structural weaknesses, including low levels of local government engagement at the district level, strong sector-targeted UN agencies who apply their own operational, procurement and reporting procedure, have limited an integrated rural development approach. Similarly, the Contribution Agreement enables each agency to apply their own rules and regulations, which has prevented proactive measures like planned procurement and pooling of resources to take advantages of the economies of scale. As a result, despite the intensification of implementation through the introduction of the Accelerated Action Plan (AAP) in 2023, a fully multi-sector and integrated approach to the implementation of EU-STREIT has not materialised.

Findings 35-36: The STREITMIS M&E system has been highly effective in tracking output delivery to support accountability on annual work planning and progress reporting. Since the launch of the AAP, the establishment of the Targets and Achievements matrix in the STREITMIS has enabled better tracking of the AAP. However, an absence of baseline data, limited tracking of outcome-level indicators, and a focus on compliance and visibility have restricted the system's use for learning, adaptive management, and assessing transformational change. As a result, STREITMIS is primarily used to inform progress reports on output delivery, rather than to guide strategic decision-making on outcomes.

EQ7: To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?

Findings 37-38: The One UN approach initially underperformed financially between 2020 and 2023, averaging annual expenditure rates of 38 per cent. This was due to limited government capacity, high staff turnover, the COVID-19 pandemic and weak multi sector coordination. Performance improved markedly in 2024 and 2025, with expenditure reaching around 85.7 per cent of the EU budget by September 2025, driven by the AAP and adaptive management. However, the Contribution Agreement allows the application of UN accounting rules, which has prevented the disclosure of expenditure against the detailed breakdown of planned costs presented in the work plans. As a result, it is not possible to assess how far the programme has delivered value for money at the sub-component level. However, contractual data shared from the transport infrastructure sub-component does indicate high design and pre implementation costs, confirming the costs associated with the logistical challenges and limited local capacity increase unit costs, which largely explains lower than planned rehabilitation of rural roads.

Findings 39 to 40: The programme mobilised and stabilised a large team of consultants, averaging 67 core staff from 2023, contributing to improved implementation, particularly in cocoa, digitalisation and transport infrastructure. Staff were generally competent with strong provincial collaboration, although gaps in field coverage and expertise in trade, private sector engagement and transport policy limited higher level outcomes and sustainability.

Findings 41 to 42: UN agency procurement procedures and limited forward planning caused significant delays, particularly for roads, ICT centres and renewable energy, ranging from six months to up to three years. Procurement quality issues further reduced efficiency and value for money, as some equipment was unsuitable or incomplete, requiring corrective action and raising concerns about sustainability.

EQ8: What are the financial, institutional, social, and environmental risks to sustaining project results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the project's achievements?

Findings 43-45: EU-STREIT PNG faces significant risks that are likely to affect its sustainability. This has not been aided by its exit strategy which became outdated and updated in the final work plan where emphasis remains on implementation, with no clear information on the establishment of comprehensive handover arrangements. Consequently, questions over post-closure oversight, asset operation and maintenance, and institutional ownership remain. Institutional sustainability is further constrained by limited operational capacity at provincial and district levels, weak inter-institutional coordination, and handover of systems like the e-Agriculture and road maintenance (RuTMS) systems that will need populating with data, as well as operation and maintenance support. Meanwhile, financial inclusion risks are more contained, with financial service providers largely able to continue services. However, unless actions are taken to reduce the number of dormant accounts, the long-term sustainability of rural access points where turnover is lowest are likely to become uneconomic and close.

Findings 46-47: The programme's long-term sustainability is most at risk from financial and institutional gaps. There are currently no concrete, costed post-programme funding commitments in place to support handover of the programme's main activities and results to maintain key services that the VC groups and enablers require. This includes funding to maintain critical services like extension, quality improvement and control of cocoa beans, vanilla pods and fish products (such as smoked and frozen fish), or the operation and maintenance of ICT centres, PV systems and rural infrastructure. Limited private sector investment and high dependence on programme resources also appear to be important factors on sustaining their continuation. Institutional and regulatory misalignment, particularly between RuTMS and DWITS procedures, or on the continuity of the RMGs beyond programme closure in early May 2026.

Findings 48-49: EU-STREIT PNG's exit strategy incorporates some environmental, social, and climate safeguards, such as rehabilitation-based production, promotion of solar dryers, and community-based management, but these measures are not formally institutionalised or financed for the post-closure period. Significant gaps remain. For example, in the fisheries value chain, no attention is given to ecosystem management to address declining stocks, and there is no provision on how to manage e-waste. Social sustainability risks persist due to only partial integration of gender, youth, and human-rights considerations, unclear governance around customary land tenure, and a lack of locally resourced mitigation measures. Without a structured and fully financed sustainability strategy aligned with environmental and climate frameworks, the sustainability of the programme's results is uncertain.

EQ9: To which extent has the Action added value over and beyond what could have been achieved by the Member States' acting on their own?

Findings 50-51: EU-STREIT PNG has demonstrated clear added value compared to France, the only EU Member State (MS), that has a cooperation programme in PNG. In particular, the EU acts as important coordination platform and is able to mobilise large-scale resources that France, or other MS would struggle to match. This demonstrated by the EU-STREIT programme, where its budget of EUR 81.3 million is able to leverage political influence (especially through the UN agencies) to address the need for cross-sector reforms, alignment with national strategies, and investments through initiatives funded by EU initiatives such as the Global Gateway (GG) dedicated to infrastructure improvements. At both national and provincial levels, the EU is widely perceived as providing scale, continuity, and visibility, particularly in remote areas. However, this added value is partially offset by complex delivery modalities and the ongoing down-sizing of EU staff in PNG. This highlights its coordinating role to sustain influence and leverage cooperation in areas such as the GG or Team Europe in PNG may decline.

Summary of conclusions and recommendations

EQ	Conclusion	Recommendation(s)
EQ1 Relevance	Highly relevant to PNG government, EU, and partners; relevance to beneficiaries mixed due to limited baselines and analysis, especially on market integration and institutional capacity.	Before closure: Develop STREIT Sustainability Strategy with clear institutional ownership and embed actions in government policies/programmes/budgets. Future programming: Design commodity VCs with evidence-based ToC, integrate quantitative/qualitative indicators, gender/youth objectives, and costed budgets.
EQ2 Effectiveness – VCs	Cocoa: yields and quality improved, but market links underdeveloped. Vanilla: limited impact due to price decline and structural barriers.	Before closure: (i) for cocoa embed sustainability steps in the CB (participatory review, traceability, Memoranda of Understanding, extension support, LMS training); (ii) for vanilla pilot quality improvement, traceability, MoUs, integration of

EQ	Conclusion	Recommendation(s)
	Fisheries: marginal returns; nutrition gains limited; market access barriers persist.	Learning Management System (LMS). (iii) for fisheries embed sustainability steps in the National Fisheries Plan (market linkages, inputs/advisory, post-harvest handling, forward purchase pilots, extension, LMS). Future programming: Base VCs on feasibility and market/trade studies.
EQ3 Effectiveness – VC enablers	Finance, energy, and transport locally strengthened, reducing costs and improving access, but gains uneven due to limited systemic reform.	Before closure: ICT/PV – operational and operations and maintenance plans, align LMS with Digital Government Plan; UniTech as strategic VC hub. Transport – Integrate Provincial Transport Plans, communicate RMG changes, develop training, update policy with local employment focus. Future programming: None specified.
EQ4 Effectiveness – Gender and youth	Significant gains in participation, skills, and frameworks; economic empowerment limited by socio-cultural barriers.	Before closure: Embed in National Women and Youth in Agriculture Policy; formalise provincial partnerships; integrate Gender Action Learning Systems via Training of Trainers. Future programming: Target interventions addressing livelihoods, structural barriers, and economic autonomy.
EQ5 Effectiveness – Environment and climate	Environmental/climate risks mitigated via climate-smart practices and infrastructure, but monitoring and institutionalisation remain weak.	Before closure: Recruit climate expert, develop risk maps, coordinate online training on climate/environment risk. Future programming: None specified.
EQ6 Efficiency – Governance and M&E	Strategic governance appropriate; operational governance fragmented; M&E reactive, compliance-focused, limited learning.	Before closure: None. Future programming: Simplify governance, joint operational guidance, integrate in UN Contribution Agreements, outcome-oriented M&E with baselines and annual tracking.
EQ7 Efficiency – Resource management	Financial and human resources sufficient from 2024; efficiency constrained by lack of cost analysis, reactive management, fragmented procurement, and equipment flaws.	Before closure: None. Future programming: Integrate financial/results management, track unit costs/return on investment, coordinated inter-agency procurement with specialists, harmonised systems, joint dialogue.
EQ8 Sustainability	Sustainability uncertain without costed post-closure arrangements and clear institutional ownership.	Before closure: Extend programme to develop Sustainability Strategy, finalise handover, strengthen capacity transfer, recruit short-term coordinator. Future programming: Secure time-bound institutional commitments to fund priority VC enablers and private-sector initiatives.
EQ9 EU added value	EU scale, integration, coordination, and leverage provide broader coverage, policy alignment, co-funding; complex delivery and downsizing may reduce advantage.	Before closure: None. Future programming: EUD to strengthen coordinating role to unite Member States for joint funding initiatives (e.g., Team Europe).

Lessons learned

20 lessons learned were identified, of which five are of significant strategic importance. They are:

- (i) Programmes achieve lasting impact when design aligns with local systems, capacities, and realistic resources, avoiding over-ambitious target.
- (ii) (VC gains in cocoa and vanilla require alignment of production increases with strong linkages to quality development and alternative markets, while fisheries VCs need to understand their input and economic needs, difficulty to access markets and sustainable resource management to sustain fish stocks.
- (iii) Strengthening financial inclusion and rural infrastructure depends on external support to de-risk entry of the private sector, provide vital skills development, and embed maintenance within local institutions.
- (iv) Long-term sustainability requires an integrated framework combining financial planning, safeguard enforcement, climate risk management, and private sector engagement with clear commercial incentives and risk-sharing.
- (v) Effective governance and adaptive management are essential to ensure harmonised procedures, proactive decision-making, and operational guidance, enabling investments and interventions to deliver sustained impact.

1 Introduction

1.1 Evaluation objectives and scope

The Terms of Reference (ToR, included in Annex I) for the final evaluation of the Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (EU-STREIT PNG) programme specify that the global objective is twofold. First, to provide the relevant services of the European Union (EU) and development partners, the interested stakeholders and the wider public with an overall independent assessment of the performance of the EU-STREIT PNG programme and the reasons underpinning such results. Second, to identify key lessons learned, conclusions and related recommendations to inform decision makers on how to improve current and future interventions. Specific objectives are to inform the exit strategy of the programme, draw lessons, and to be accountable for the use of resources of the EU and the Food and Agriculture Organization of the United Nations (FAO) in relation to the results of the intervention.

The ToR require a total of nine evaluation questions (EQs) to be addressed to determine how far EU-STREIT PNG has achieved its objectives. The questions are grouped under the OECD-DAC evaluation criteria with EQ 1 covering relevance, EQs 2-3 effectiveness (Specific Objectives), EQs 4-5 effectiveness (cross cutting objectives), EQs 6-7 efficiency, EQ 8 sustainability and EQ 9 the added value of EU cooperation compared to bilateral cooperation of the EU's Member States (MS), which in PNG is only provided by France. The ToR also specify that the scope of the evaluation covers the entire duration of the programme's implementation from the start of operations on 2 January 2020 to 30 November 2025 (end of the field phase of the final evaluation).¹ The scope includes all activities carried out under the two Specific Objectives (SOs) of the EU-STREIT PNG programme in East Sepik and Sandaun (formerly West Sepik) provinces, which are described Section 1.2 below. 5 shows the geographical location of the intervention area and the programme's outputs in these two provinces, which are referred to together as the Sepik region.

Under SO1, the programme activities in the evaluation scope centred on the sustainable development of value chains (VCs) for cocoa, vanilla and fisheries. Under SO2, they focused on supporting the establishment of climate resilient and efficient VC enablers (see Section 1.2). In addition, the evaluation assessed how far cross-cutting issues, especially gender equality and women's empowerment, and the environment and adaptation to climate change, were mainstreamed in the programme's design, implementation and monitoring and cross-cutting results have been achieved. The thematic scope also includes the programme's implementation modality as UN Joint Programme under the One UN approach. The latter involves five implementing partners: FAO (lead agency), United Nations Capital Development Fund (UNCDF), United Nations Development Programme (UNDP), International Telecommunication Union (ITU), International Labour Organization (ILO).

The main primary users of this evaluation report are: (i) the Management Group of the evaluation, consisting of the Department of National Planning and Monitoring (DNPM), the EU Delegation to PNG (EUD), and FAO (the lead agency of the consortium of UN agencies); (ii) members of the Programme Steering Committee (PSC), which includes national and provincial government stakeholders from East Sepik and Sandaun provinces and members from the private sector; (iii) the four abovementioned UN agencies (ILO, ITU, UNCDF, UNDP). Secondary users of the report include: (i) government staff who are indirectly engaged in the programme at the national and provincial levels; (ii) local government staff, especially at the district level, who have participated in the programme in a direct or indirect manner; (iii) the private and non-governmental sectors, especially operating in the Sepik region; (iv) grass-root organisations that have participated in the programme.

1.2 Description of EU-STREIT PNG

EU-STREIT PNG's intervention logic is based on the precept that simultaneously strengthening priority VCs (cocoa, vanilla, fisheries) and their enabling environment (legislative framework, financial services, training, locally-sources renewable energy, transport infrastructure) will increase farm incomes and economic opportunities for remote rural households in East Sepik and Sandaun provinces (Sepik region). On this basis, the EU-STREIT PNG programme was designed with a holistic, multi-sector approach to rural development in the Sepik region in which the overall objective is to increase sustainable and inclusive economic development in rural areas. To achieve this objective, the programme is structured around two Specific Objectives (SOs):

SO1: Increased economic returns and opportunities from selected VCs (cocoa, vanilla, fishery). To this end it foresaw the delivery of the following results (outputs):

- Output 1.1: Increased sustainable production and inclusiveness of the *Cocoa value chain*

¹ For the quantitative monitoring data used in this report, the cutoff date is 30 September 2025.

- Output 1.2: Increased sustainable production and inclusiveness of the *Vanilla value chain*
- Output 1.3: Increased sustainable production and inclusiveness of the *Fishery value chain* (coastal, riverine and aquaculture).

SO2: *Strengthened and improved efficiency of value chain enablers*, including the business environment and supporting sustainable, climate-proof transport and energy infrastructure development. It foresaw the delivery of the following results (outputs):

- Output 2.1: Conducive business, trade, policy and regulatory environment for sustainable rural agripreneurs and Micro, Small and Medium Enterprises (MSMEs) established, led by FAO.
- Output 2.2: Value chain support services strengthened and resilient to climate change impacts, led by UNCDF (*financial inclusion*) and ITU (*digital inclusion*).
- Output 2.3: Increased production of, and access to *renewable energy systems*, led by UNDP
- Output 2.4: Improved and climate-proof *rural transport infrastructure*, led by ILO.

The geographical scope of the programme is provided in 5 (Figure 3). The headline target for SO1 is to support 100,000 farmers and fisherfolk to develop these VCs of which 30 percent should be adult women and 60 percent youths (male and female). Compared to preliminary data from the 2024 PNG population census, which confirms the Sepik region had a population of almost 800,000 of which approximately two thirds were at least 15 years old, the programme was designed to target approximately almost 20 percent of the total population aged 15 years or older, the vast majority of which live in rural areas (90 percent). In addition, SO2 targets for enablers include the introduction of 264 financial access points, six renewable energy facilities (located in rural schools and health centres) and 264 km of rehabilitated rural roads, plus spot maintenance covering 312 km of rural roads. More details on targets at the sub-component level can be found in the logical framework (logframe) of the programme, together with achievements to 30 September 2025, is presented in Annex B. The reconstructed Theory of Change is provided in Annex C and discussed detailed in Section 2.2. The programme was implemented over six calendar years (2020-2025)² with a total budget of EUR 81.3 million, of which EUR 81.0 million would be provided by the EU and EUR 0.3 million by FAO. The Contribution Agreement was signed between the European Commission (Contracting Authority) and the five UN agencies (implementing partners).

The programme had a multi-tiered governance framework designed to ensure coordinated planning and delivery of activities and outputs. It included a Programme Steering Committee (PSC) responsible for high-level oversight and strategic guidance, a Technical Working Group (TWG) for inter-agency technical coordination and alignment, and a Programme Implementation and Management Unit (PIMU) responsible for day-to-day implementation of the programme under the coordination of FAO.

1.3 Country context

Papua New Guinea (PNG) is one of the most culturally and linguistically diverse nations in the world, which includes over 850 languages spoken by more than 1,000 ethnic groups that populate the mainland and over 600 islands. This has resulted in a highly complex socio-ethnic, political and governance framework.

The political and policy context of the current government of PNG is framed by a national development agenda that is guided by its long-term PNG Vision 2050. The latest Medium-Term Development Plan IV 2023-2027 (MTDP IV) provides details on the actions to be implemented to support the achievement of the PNG Vision. Key policies in the MTDP IV are to prioritise “strategic economic investments” in priority sectors, notably the development of commercial agriculture, fisheries, forestry and livestock development to advance economic and social development in rural areas. The latest National Agriculture Sector Plan (NASP) 2024-2033 has been aligned to the MTDP IV to “make agriculture the engine for socio-economic growth” through which the sector is expected to generate gross revenue of PGK³ 30 billion by 2033, which is equivalent to around EUR 6 billion. To achieve this, a key element in the MTDP IV and NASP is to support rural communities to transition from subsistence to commercial agriculture supported by processing and other value-added activities to develop VCs that are sustainable and empowering. The MTDP IV also recognises that the development of VC enabling infrastructure in the form of improved transport (roads, air, sea), electricity, and telecommunication infrastructure is essential to establish sustainable VCs.

The economic, institutional, and development context of PNG indicates the agriculture sector is the main driver of its rural economy as it supports the livelihoods of over 80 percent of the population and generates around 26 percent of the country’s annual Gross Domestic Product (according to the FAO’s 2025 Investment Proposal for Papua New Guinea). The abovementioned prioritisation of agriculture development is underpinned by

² Includes a one-year extension agreed in October 2023.

³ This report uses an exchange rate of 5 Papua New Guinean Kina (PGK) = 1 Euro (EUR).

government recognition that poverty rates in rural areas are high by global standards, resulting in high rates of food insecurity and malnutrition and stunting (ToR, p. 6). The EU-STREIT PNG programme's targeting of cocoa, vanilla and fisheries VCs demonstrate a strategic focus on supporting the government develop high-value commodities that are likely to increase smallholder income that is crucial to advancing the transition to commercial agriculture in the country by 2050.

The institutional and social context is characterised by several systemic barriers and high levels of poverty. The UN's Country Analysis of PNG confirms, for example, weak institutions and governance structures represent significant barriers to establishing institutional efficiency, policy enforcement, and sub-national public financial support and management that is needed to support the development of VCs and growth of the agribusiness sector. In addition, it highlights exclusion and inequality of vulnerable groups like women, youths, people with disabilities are another significant barrier to transforming the agriculture sector. In terms of poverty rates, it was estimated in 2005 that approximately as much as 37.1 and 62.6 percent of the population lived below the poverty line in East Sepik and Sandaun provinces respectively (Gibson et al., 2005). The vast majority of this population live in remote rural areas where there are limited, or no, public services.

The environmental and climate context in PNG confirms a high proportion of the population is highly vulnerable to climate change and the degradation of the natural environment and its ecosystem services. For example, the United Nations Sustainable Development Cooperation Framework 2024-2028 confirms the nation's environment is under threat from deforestation and other human activities, and its diverse, rugged geography makes communities susceptible to a range of natural disasters. For these reasons, the Government of PNG (GoPNG) includes Climate Change and Natural Environment Protection as a priority in the MTDP IV.

1.4 Mid-term evaluation of EU-STREIT PNG

The mid-term evaluation (MTE) of EU-STREIT PNG was conducted between December 2022 and February 2023, comprising two field surveys that covered a total of 34 sites and 82 informants in East Sepik and Sandaun provinces. In line with EU procedures, its objectives were to assess the programme's performance to provide conclusions, lessons learned and recommendations primarily to improve its efficiency, effectiveness and sustainability but also to highlight key issues to be considered in future EU-funded programmes. The final report was approved in July 2023 with the following main recommendations:

- *Capacity building and training:* Develop a coordinated plan for producers, local administrations, service providers, and organisations; harmonise training methods; ensure labs are secure and operational; integrate resource centres into provincial/district plans; promote gender equality and women's economic empowerment in all training.
- *Financial services access:* Expand district-level access via providers like Digicel, MiBank and MamaBank; share lessons to inform national and sub-national financial policies; ensure women and marginalised groups benefit from financial inclusion.
- *Renewable energy:* Train at least two beneficiaries per solar site in operation and maintenance; engage private sector, academia, and institutions to support renewable energy transition; encourage participation of women in technical roles.
- *Information management systems:* Transfer systems tasks to institutions (Cocoa Board, National Fisheries Authority (NFA)); ensure database compatibility; link systems to training and experience-sharing; include gender-disaggregated data to inform decision-making.
- *Rural transport and road network:* Support provincial road inventories; integrate into the Rural Transport Information Management System (RuTIMS); build operational capacity; encourage knowledge exchange with M&E and communications teams; ensure transport interventions consider women's mobility and economic access.
- *Value chain governance:* Integrate technical assistance with local governance; improve access to innovation, climate-smart techniques, post-harvest processing, storage, market access; actively support women's participation and economic empowerment in VCs.

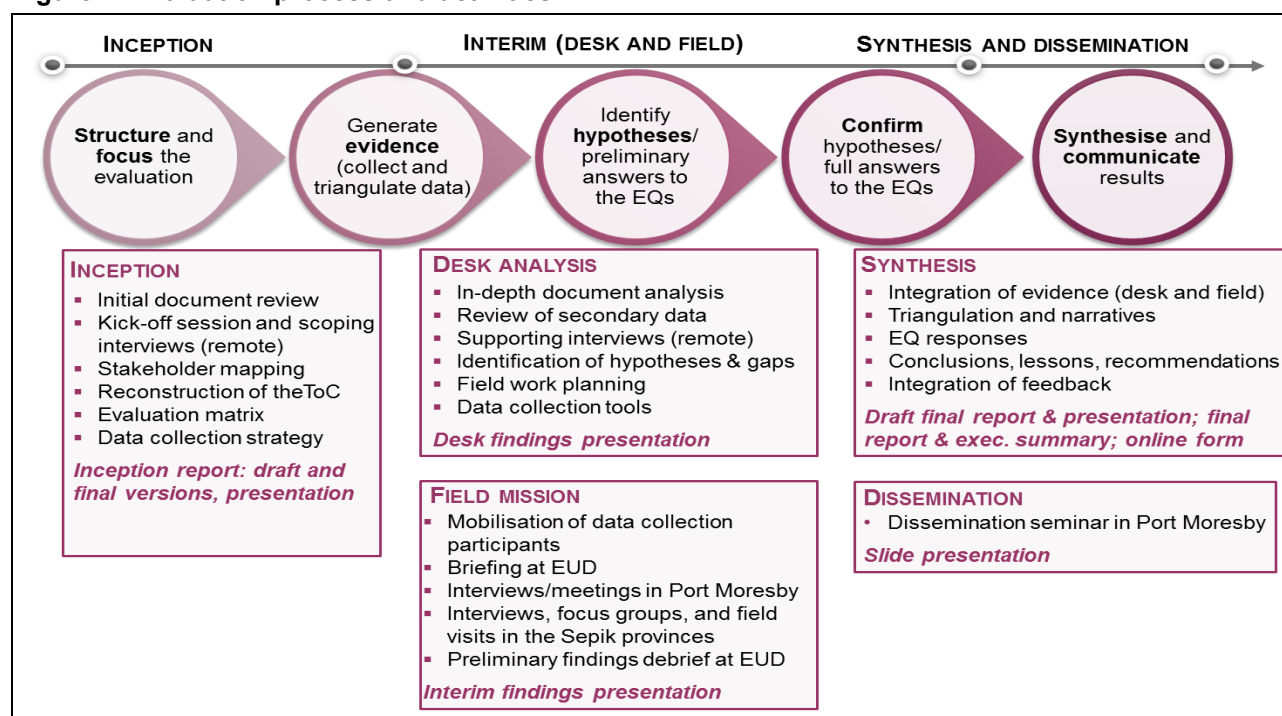
The evaluation took into account these recommendations to support its analysis carried out in the Evidence Matrix in Annex E to and to aid the triangulation of findings and the development of the conclusions and recommendations in this report (see Section 4.1).

2 Methodology of the evaluation

2.1 Evaluation process and activities

The evaluation process was structured in the five phases: inception phase, desk review, field mission, synthesis, and dissemination. Figure 1 provides an overview of the completed evaluation process including the specific activities conducted by the evaluation team (ET) in each phase.

Figure 1: Evaluation process and activities



2.2 Overall evaluation approach

This report presents the responses to the nine Evaluation Questions (EQs) formulated in the ToR. The EQs cover the OECD-DAC evaluation criteria of relevance, coherence, effectiveness, efficiency and sustainability, as well as the EU-specific criterion of EU added value. Each EQ has been informed through a set of specific and measurable indicators, which are grouped under several 'Judgement Criteria' (JCs) per EQ. The EQs, JCs and indicators were agreed with the Management and Reference Groups of the evaluation in the inception phase and are hierarchically organised in an evaluation matrix. This matrix is displayed in Annex D and has guided all data collection and analysis throughout the evaluation process.

The main text in Section 3 of this report presents the responses to the nine high-level EQs, while the detailed factual evidence collected under the indicators and synthesised at JC level is presented in Annex E (the completed evaluation matrix or 'evidence matrix'). Annex E is presented in report format to enhance readability, rather than in the original table format of the matrix. It contains numbered key findings at JC level, which are referenced in the main text and, at the end of each JC, an 'evidence log' that rates the strength of evidence presented under the different indicators.

To answer the nine EQs, the ET applied a mixed methods approach based on the reconstructed Theory of Change (ToC) of EU-STREIT PNG. The ToC, presented in Annex C, was reconstructed by the ET in the inception phase based on: (i) an assessment of the detailed logframe of EU-STREIT PNG (Annex B); (ii) a rapid assessment of progress reports; (iii) inception interviews with key stakeholders, and (iv) the ToR, in particular the nine EQs (Annex C shows where they have been addressed within the ToC diagram). During the field mission, the ToC was discussed with the EU-STREIT team in Wewak and there was general agreement that it was a satisfactory reconstruction. Overall, it was decided despite some cosmetic changes that could be made, it is accurate and holds true. In the absence of a comprehensive programme level ToC, as only summary ToCs for individual VCs were provided by the PIMU, this exercise could not fully assess design coherence at the overall programme level. However, design related issues were examined in the analysis of the three VCs (see Section 3.2 and Annex E).

The ToC emphasises the policy context and key barriers that restrict VC development in the Sepik region. It maps the causal pathways from targeted inputs (including policy dialogue, funding, technical assistance and physical investments) to outputs structured around five pillars (policy support, knowledge and capacities, access to resources, production, and strengthened processes). These outputs are expected to generate immediate and intermediate outcomes aligned with the programme’s SOs, which in turn contribute to longer term outcomes (SO1 and SO2) such as increased economic returns and improved nutrition (especially for children) and efficient and well-maintained enablers such as climate-proofed roads in the Sepik region. Ultimately, the ToC articulates how these pathways contribute to broader development impact, in particular reduced rural poverty, improved food security and nutrition, a rural transition to renewable energy, and enhanced climate resilience, aligned with national and global priorities. Annex D also presents the main assumptions that underpin the progression of the causal linkages and pathways foreseen in the results chain.

The mixed-methods design for evidence generation sought to minimise information gaps and ensure the evidence would be systematically triangulated. It relied on a wide range of information sources, methods of data collection, and types of analysis. In accordance with the ToR, the ET reviewed and analysed secondary information from both qualitative (documentary) and quantitative (data) sources and collected qualitative primary data (in PNG and online). Table 1 provides an overview of the methods of data collection and analysis employed, including the main types of information sources consulted for the evaluation. Annex H, Annex F and Annex G include the full bibliography, list of organisations consulted and field sites visited respectively.

Table 1: Methods of data collection and analysis used, and main information sources consulted

Method	Main information sources consulted
Secondary data (qualitative and quantitative)	
Structured document review ⁴	<i>EU-STREIT PNG:</i> Description of action; contribution and financing agreements (with UN agencies and service providers); baseline and progress reports; monitoring reports; internal learning/lessons/assessment reports; technical studies such as value chain analyses and feasibility assessments; guidelines, operations manuals, and training materials; minutes of meetings of governance committees/groups <i>Other:</i> National and provincial strategies, policies, and plans; strategy documents of UN agencies; websites of other projects; third-party studies. Please refer to Annex H (bibliography) for the full list of documents consulted.
Statistical and financial analysis of existing quantitative data	STREITMIS and other monitoring data on outcomes, outputs, sub-outputs, and activities; budget and expenditure data from UN agencies contracts and service providers; third-party data such as market and price information.
Primary data (qualitative)	
Semi-structured interviews with key informants (in-person and online)	EU Delegation; UN agencies; government and administration at national, provincial and district levels; statutory bodies; research centres; private sector (VC actors such as input suppliers, fermenters, processors, exporters; financial service providers – FSPs, etc.) Please refer to Annex F for the complete list of organisations consulted.
Focus group discussions	Members of VC groups (cocoa and vanilla farmers, fisherfolk); users of VC enabling services (clients of FSPs, staff of schools and health centres hosting ICT resource centres and solar power systems, members of Road Maintenance Groups – RMGs).
Direct observations	VC activities and assets (cocoa blocks, vanilla gardens, processing equipment, fishponds and fishing equipment); service centres and infrastructure of VC enablers (banking access points, ICT resource centres, solar power system, rehabilitated/maintained roads). Please refer to Annex G for the list of field locations visited.

2.3 Primary data collection

The ET conducted more than two dozen online interviews throughout all evaluation phases and collected data in PNG between 10 November and 3 December 2025 during the field phase. This included interviews with national-level stakeholders in Port Moresby mainly at the beginning (10-11 November 2025) and end (1-3 December 2025) of the mission, as well as intensive field visits in East Sepik and Sandaun provinces from 12 to 29 November 2025.

⁴ The ET’s use of artificial intelligence (AI) assisted tools was restricted to non-substantive tasks, incl. support to the organisation and refinement of text, and complied with data protection and confidentiality requirements. AI tools were not used to generate analytical content, findings or recommendations, which were developed exclusively by the ET.

Field sites were sampled in several steps. First, significant efforts were made to maximise ET exposure to intervention type clusters and geographic spread to optimise the available time in the field. Second, the ET and the PIMU agreed on the total number of sites that could be visited based on the available person days of the ET in the field, number of available vehicles and travel distances. Finally, the PIMU, with guidance of the ET, proposed the selection of specific sites within districts considering desired coverage of all outputs, logistics, and security. Table 2 summarises the distribution of VC groups and enablers by programme output, province and district compared to the number of visited by the ET (provided in brackets). The last column shows that a total of 66 VC groups and enablers were visited by the ET during the field mission, indicating the sample size was equivalent to 6.3 per cent of the total VC groups and enablers supported by EU-STREIT PNG to 30/09/2025. The exact locations visited are listed and shown on a map in Annex G. Overall, the sample is reasonably representative as it covers all programme outputs (except rural airstrips⁵) and is sufficiently large and geographically diverse.

Table 2: Number of VC groups and enablers supported by the programme and visited by the evaluation team between 12/11/2025 and 29/11/2025

Programme output	Number of groups and enablers in the programme										Visited by the ET	
	East Sepik						Sandaun				Total (programme)	Total (sample)
	Ambunti/ Drekier	Angoram	Maprik	Wewak	Wosera Gawi	Yangoru Saussia	Aitape Lumi	Nuku	Teleformin	Vanimo Green		
Component 1 (SO1)												
1.1 Cocoa groups	31	40	26	57	28	52	59	31	7	32	363	14
1.2 Vanilla groups	16	10	12	17	4	24	5	6		9	103	9
1.3 Fisheries groups: aquaculture	17	65	20	69	22	38	29	15	3	28	188	4
1.3 Fisheries groups: coastal											74	2
1.3 Fisheries groups: riverine											44	3
Total VC groups											772	32
Component 2 (SO2)												
2.2 Bank access points	8	6	33	91	11	15	13	4	0	33	214	8
2.2 ICT resource centres	1	2	1	3	1	2	5	1		5	21	9
2.3 Solar energy systems *				3		1	1			4	9	4
2.4 Rehabilitated roads	2	1	2	2	1	1		2		2	13	12
2.4 Rehabilitated airstrips	1	2							2		5	0
2.4 Cleared waterways	2	11									13	1
Total VC enablers											275	34
Total VC groups & enablers											1,047	66

Source: ET and PIMU. The numbers in the last column are consistent with the list of field sites visited in Annex G.

* In addition, site inspections were made to a selection of small PV systems provided to all ten district offices and selected households and also to communities with thermal solar drying units for cocoa and vanilla.

2.4 Limitations and mitigation measures applied

The evaluation encountered several limitations, which in most cases it managed to mitigate in an efficient and effective manner:

- **Data gaps:** During the mission, the evaluation was able to address most – but not all – the data gaps it had identified during the desk review. To mitigate this, the different team members followed up with the PIMU after the mission. A few data gaps remain (see the evidence logs in Annex E). The most significant ones are (i) the lack of baseline data on the specific target groups/beneficiaries participating for almost all indicators (see the analysis under JC6.3) and (ii) expenditure by programme output. Both limited the feasibility of specific quantitative analyses, such as estimating the income changes of farmers and fisherfolk in EQ 2 and conducting cost-efficiency analysis in EQ 7. The ET mitigated these gaps by putting stronger emphasis on qualitative evidence while also

⁵ The airstrips were not visited due to their remote locations and time constraints of the ET, but they were studied through analysis of contracts and existing photographic evidence.

exploring ‘second-best’ quantitative sources (estimates reported by beneficiaries, data from service provider contracts, etc.).

- *Problems of insecurity in rural areas during the mission.* The ET mitigated this limitation by: (i) working in close coordination with FAO and the UN Department of Safety and Security to identify a safe and realistic itinerary to safe zones where farmer and fisheries groups could be interviewed in a secure environment and which would completely avoid returning to hotels beyond 6pm; (ii) ensuring all ET members carried out field trips with a minimum of two cars from the EU-STREIT PNG programme and/or hired by FAO from reputable security companies; (iii) following UN Safe rules when confronting flashpoints and feuds (i.e. abandon travel and return to a safe zone).
- *Poor condition of national roads, cancellation of national flights and remoteness of beneficiary communities.* To mitigate the limitations of poor roads, the evaluation allocated more time to road journeys than originally planned and organised to stay in the field at safe sites where journeys were more than three hours one-way. Due to a three-day flight cancellation of the Wewak-Vanimo route for some ET members was mitigated by replanning their itinerary so that a shorter, more intensive set of sites visits could be conducted to all roads planned. In the case of the inability to visit remote locations, especially the five airstrips, this was mitigated by requesting before-and-after photographic evidence and video material, as well as holding interviews with the civil aviation authority

3 Findings

3.1 EQ 1 – Relevance [and targeting]

To what extent were the programme objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?

Strategic and policy alignment (JC 1.1)

Overall EU-STREIT PNG demonstrates high relevance at the strategic and policy alignment level. Relevance of the selected VCs and the programme’s geographic targeting and scaling potential was, however, found to be mixed, revealing some design weaknesses in the theory of change, notably assumptions that focusing primarily on institutional constraints at the provincial level would be sufficient to deliver economic transformation and improved food security and nutrition in the Sepik region.

At the level of programme objectives, the evidence confirms that EU-STREIT PNG has remained strongly aligned with national, EU and UN policy frameworks throughout the implementation period. In particular it directly addresses their shared priorities of delivering inclusive economic growth and improved nutrition through the development of the agriculture and fisheries sectors to reduce economic dependency on extractive industries. The programme’s objectives correspond closely with PNG’s Vision 2050, the National Development Strategic Plan (2010–2030) and the latest MTDP IV (2023–2027), all of which emphasise investment in agriculture, fisheries, micro small and medium-sized enterprises (MSMEs), rural infrastructure and development of human capital, especially in rural areas. The programme’s focus on sustainable VCs and enabling services also aligns with the EU–PNG Multiannual Indicative Programme (2021–2027) and current initiatives like the EU’s Global Gateway initiative launched at the end of 2021. As such, the programme is relevant to the EU’s own evolving strategic framework that is moving away from isolated interventions into wider international partnerships and initiatives.

The implementation of the programme through the One UN approach is also highly relevant to both the UN and major donors like the EU who need reassurance that UN agencies can shift from long-standing concerns about duplication, competition for funding and inefficient delivery into coordinated, multi-sectoral implementation that draws on their mandates and technical expertise to address the barriers and needs of rural communities in the Sepik region. Moreover, the programme objectives are highly relevant to FAO’s mandate on agricultural transformation, UNCDF’s focus on financial inclusion, ITU’s priorities on digital connectivity, UNDP’s commitment to inclusive growth and renewable energy, and ILO’s emphasis on decent work and employment creation through labour-based methods, which includes improving safe, inclusive access to markets and basic services for rural populations. Taken together, the evaluation found this multi-sector approach has enhanced the relevance of EU-STREIT PNG as a coordinated response to supporting the Sepik region diversify its economy and reduce its marginalisation.

However, despite the programme’s strong alignment at the strategic level, **Finding 1** in Annex E highlights the programme’s design provides little information on its longer-term financial and institution embedding in the

government's development plan through which the National Executive Council (NEC) could formally institutionalise and scale it at the national and subnational levels. Consequently, although the programme aligns with several Strategic Priority Areas (SPAs) and Deliberate Intervention Programmes (DIPs) in the country's MTDPs III and IV, in practice, these linkages are not set out in the Financing and Contribution Agreements, to show how EU-STREIT PNG will support the transition to a market economy in rural areas like the Sepik region. The evaluation found this situation has contributed to constraining efforts to mobilise co-funding, advance institutional ownership of the programme and stimulate systematic planning which is currently not evident in the exit and post-closure period of the programme.

The relevance of EU-STREIT PNG has also been influenced by the configuration of the One UN approach. On the one hand, One UN has ensured strong strategic alignment at the policy level and support to developing the upstream and midstream segments of the cocoa and vanilla VCs. On the other hand, it has largely overlooked the downstream segment of these VCs (development of markets and trade), which are yet crucial to the rural transformation of the Sepik region. As reflected in [Finding 2](#), the ET considers the absence of the United Nations Conference on Trade and Development (UNCTAD) from the design phase of the One UN approach represents a gap in guiding the programme's capacity to address crucial downstream market and trade dimensions, regulatory issues and export requirements of buyers, especially in Oceania, Asia, Europe and North America. This oversight is partly rooted in the assumptions of the original ToC that prioritising supply-side improvements (production, basic processing, and infrastructure) would translate into market integration, when in fact dedicated trade expertise to oversee quality, competitiveness and manage risk (notably commodity price volatility and shifting market conditions) is of equal importance to PNG.

This gap is particularly significant in the light of PNG's policy emphasis on increasing private-sector-led growth and export diversification under Vision 2050 and MTDP III and currently MTDP IV. As a result, although EU-STREIT PNG helps lay the foundations for value chain development, the lack of systematic engagement with trade policy, market analysis and instruments promoting private sector investment, has limited the programme's visibility as a key initiative in the economic transformation agenda of GoPNG. In this sense, the relevance of the programme at the strategic level has not been matched by the design of relevant mechanisms that are needed to translate policy alignment into sustained market-driven outcomes.

Suitability of chosen value chains (JC1.2)

[Finding 3](#) confirms that the suitability and relevance of the selected VCs varied considerably, reflecting differing levels of market readiness, institutional capacity and risk exposure. The cocoa VC was found to be the most relevant and suitable value chain, based on sustained favourable price trends since 2019, and PNG's comparative advantage by producing fine flavour cocoa, recognised by the International Cocoa Organization (ICCO), and which is sought after by premium and craft chocolate producers in Australia, New Zealand, Europe and North America, among others. In addition, the cocoa VC is highly relevant in EU-STREIT PNG because it has an active Cocoa Board that can regulate, provide extension services, and oversee alignment with national policies on commercial agriculture and export development among others.

By contrast, the relevance of the vanilla VC was less evident, even though PNG enjoys a comparative advantage in producing the majority of the world's Tahitensis variety, which provides potential access to niche markets. This is explained by the fact the country does not have a dedicated spice policy and effective regulatory framework in full operation, suffers from unstable international price volatility and experiences market concentration. As highlighted in [Finding 3](#), the lack of downstream market development and specialised trade guidance have contributed to reducing the programme's ability to address and mitigate the structural risks faced by vanilla producers. In this light, it appears vanilla is more relevant as a secondary, or niche value chain rather than a central pillar of the programme's theory of change.

[Finding 3](#) indicates that fisheries was the least suitable value chain, despite its alignment with food security and nutrition and decentralised development objectives. Moreover, the programme's relevance was undermined by insufficient analysis and assumptions in the ToC, a lack of adequate assessment on input supply and institutional capacity to sustain fisheries VCs in the Sepik region. In particular, the assumption that increased production would translate

into sustainable value chain development was not adequately assessed in the design phase or tested and/or revised in the implementation phase. Consequently, contextual constraints, notably weak extension services and limited markets identified by the evaluation team, confirm the relevance of including fisheries VCs in the programme was not founded on adequate diagnosis and reliable data.

Geographic focus (JC 1.3)

[Finding 4](#) confirms the geographic focus on the Sepik region was highly relevant from a needs-based perspective given the high levels of poverty, marginalisation and limited access of the rural population to markets and basic services in the region. In this sense, targeting these provinces was consistent with GoPNG's objectives and the EU and UN commitment to prioritising the poorest for support. However, the relevance of

the geographic focus in terms of change potential and strategic scaling was less evident, especially given the huge logistical constraints in the Sepik region. Moreover, the absence of vulnerability mapping and baseline analysis in the communities earmarked for support resulted in a lack of clarity on the rationale behind the programme's geographical targeting of value chain potential in the two provinces. This was particularly the case for the vanilla and fisheries communities, where barriers like an ineffective Spice Industry Board (SIB), and a lack of extension services, limit the prospects for sustainable VC development in the chosen intervention areas.

Finally, **Finding 5** highlights EU-STREIT PNG has established synergies with other EU and UN initiatives to directly support the development of all three VCs, especially cocoa and vanilla. In addition, there is evidence that the programme is contributing to the EU's Global Gateway initiative in PNG, by supporting the rehabilitation of the East Sepik Provincial Division of Agriculture and Livestock (ESP-DAL) Training and Office Complex in Wewak. There is also evidence provided by the programme that meetings, information exchange and study tours have taken place with other national public investment programmes, other EU-funded and World Bank and ACIAR⁶-led programmes supporting cocoa and vanilla VCs in PNG. However, the evaluation did not identify concrete evidence in the field that these inter-changes have evolved into a broader, system-wide response by DAL to mobilise resources to address key agricultural and rural development challenges (such as extension and marketing) in the Sepik and other regions of PNG.

3.2 EQ 2 – Effectiveness [SO1]

To what extent has the programme increased economic returns and opportunities for cocoa, vanilla and fisheries value chains actors?

The overriding finding under EQ 2 is that the programme has been most effective in the cocoa sector, where the strengthening of the cocoa value chain combined with a positive trend in cocoa prices between 2019-2025 has delivered increased economic returns, which in many cases has enabled households to reinvest in the expansion of cocoa production, as well as enhance their food security and nutrition, which in some cases has included fish farming. Conversely, slow expansion of resilient varieties of vanilla combined with a consistent decline in world prices has resulted in far lower economic returns than planned. Finally, the effectiveness of support to the fisheries sector has had only a marginal effect on improving the nutrition of coastal, riverine and aquaculture fisher groups, while design and implementation shortcomings have not resulted in the establishment of sustainable community-based management foreseen among riverine and coastal fisher groups who are dependent on selling the majority of their catches to sustain their livelihoods.

The programme engaged with 31,101 cocoa farmers, 6,514 vanilla farmers, 4,479 fish farmers (aquaculture), 3,617 riverine fishers and 4,867 coastal fishers. The evaluation was unable to fully triangulate how far the programme's support to the three VCs has increased economic returns for the end beneficiary groups and MSMEs, due to:

- The absence of clear baseline data on incomes in the PIMU's internal monitoring system (STREITMIS)
- Lack of adequate household/group survey information on changes in income from cocoa, vanilla and fish sales following training and provision of improved germplasm, inputs and equipment provided by EU-STREIT PNG
- Almost none of the focal group discussions conducted with these groups provided evidence that they carry out simple bookkeeping on key business indicators such as costs of production, gross sales and net profits/losses.

Considering the size of EU-STREIT PNG and its strategic relevance highlighted in the previous section this represents an important shortcoming in the programme's implementation and monitoring to facilitate learning and informed decision-making at all levels.

In response the evaluation conducted its own assessment on income changes relying on online research and anecdotal evidence from meetings with farmer and fisher groups).

Cocoa value chain (JC 2.1)

The results of this assessment confirm that the cocoa value chain has generated the highest and most stable economic returns of the three VCs supported by the programme. **Finding 6** under JC2.1 in Annex E, confirms that the combination of high international cocoa prices and the programme's support in rehabilitating cocoa production and improving fermentation and drying of cocoa beans has resulted in substantial income gains for participating smallholders.

⁶ Australian Centre for International Agricultural Research,

Indeed, evidence collected by the evaluation (under I2.1.1), shows the programme's production strategy was well focused on the needs of farmers, especially the need to rehabilitate ageing cocoa stands affected by Cocoa Pod Borer (CPB) through the introduction of high-yielding, CPB-resistant varieties, alongside improved husbandry techniques and climate smart practices. According to project records, on average, farmers planted or rehabilitated 100 cocoa trees per household each which has resulted in an increase in cocoa production from 15 kg on previously planted old diseased trees up to 30 kg on CPB tolerant varieties provided by the programme in 2021, given these trees are now coming into full production. Many farmers confirmed that they had witnessed a doubling in productivity which in the period 2023-2024 coincided with a sharp rise in international cocoa prices, thus amplifying their incomes and enabling many farmers to reinvest in cocoa production and other livelihood needs. For example, one female farmer stated income from cocoa sales had provided sufficient income to rehabilitate their household fishponds. Although yield estimates in project reports do not differentiate between new planting and rehabilitation, new planting of CPB tolerant clones provides higher yields compared to the rehabilitation of diseased trees.

Reference to Table 7 in Annex E, indicates average annual income from cocoa increased from USD 35 per household/ha to as much as USD 162 per household, representing a 361 percent increase over the period. Based on programme estimates, increased yields over the 4,960 ha rehabilitated to 30/09/2025 has resulted in an increase of 466 tonnes of cocoa produced in PNG. This is equivalent to around 1 percent of national cocoa production and valued at approximately USD 1.93 million at current prices (November 2025).

In terms of the number of direct beneficiaries, the evidence gathered by the evaluation (see I2.1.2) indicates that the programme has achieved substantial outreach. According to latest figures in the STREITMIS to 30/09/2025, 3.1 million cocoa seedlings have been distributed to 31,101 households, of which 17,742 lead farmers have been trained by FAO under the training of trainer's (ToT) approach covering nursery management, budding, husbandry and post-harvest handling, among others. The total area under improved cocoa production is now 4,960 ha (planting density of 625 trees/ha), which is equivalent to 78 percent of the target in the STREITMIS 6,400 ha. This has been aided by significant improvements in upstream support services, notably strengthening of lead farmers' capacity in the establishment of 294 budwood gardens and 681 nurseries, which has increased local availability of high-quality planting material, some of which is sold on to cluster group members. These developments provide strong indications that the majority of farmer groups supported by the programme have established the internal capacity to continue rehabilitating their cocoa blocks.

Nevertheless, focal group discussions reveal the ToT approach has mainly benefitted the lead farmers, with at least 80 percent of cluster groups interviewed stating they provide little or no training services following the sale of seedlings. The ToT extension strategy envisaged the lead farmers would provide independent training on a voluntary basis, but the ET found little evidence that this has happened, nor that the ToT approach has operated as a substitute for a formal extension service but supplements formal extension services in under-covered regions. The evaluation found that this situation is hampered by the lack of adequate monitoring by the PIMU of rehabilitation replication rates following the provision of the ToT exercises. This observation explains the moderate quality rating in the evidence log under I2.1.2.

Improvements in post-harvest handling also appear to have mainly benefitted lead farmers. To 30/09/2025 a total of 500 fermentaries⁷ including clean pipe dryers and eight larger solar combination dryers have been established and registered under the fermentation protocols of the Cocoa Board (CB). The vast majority of lead farmers who manage these facilities stated two important developments. First, bean quality and consistency have improved, although it was evident that they lacked humidity testers to ensure optimal bean quality control prior to sale. Second, a rise in their income from the purchase of wet beans from cluster group members and subsequent sale of dried beans to exporters. Moreover, the evaluation's analysis indicates that fermentary capacity in most cases appears to exceed current production levels. As a result, there is evidence that post-harvest infrastructure is unlikely to be a binding constraint on the projected rise in cocoa production as more trees come into fruition in 2026-2027 (I2.1.5).

However, extension support from DAL and the CB to oversee the development of upstream activities was found to be limited by a lack of adequate resources and significant logistical constraints. Additionally, digital extension tools like the Learning Management System (LMS) developed by the programme and handed over to Papua New Guinea University of Technology (UniTech), based in Lae in February 2024, was not fully operational until November 2025. This was due to an inter-agency payment required to make the website security compliant by the Department of Information and Communications Technology (DICT). At the time of the evaluation's field mission, the ITU confirmed that all training content had been uploaded to the national government's cloud to support that online training could through the LMS would restart in early 2026. As a result, the combination of this delay and the fact only five of the 21 ICTs established had an internet connection

⁷ A fermentary is a centralised location where farmers can ferment fresh cocoa beans after harvest to develop flavour. The fermentary also has drying facilities to produce dry cocoa bean ready for market.

has delayed access to the online training planned for cocoa farmers in some key areas planned in the final work plan, such as quality control to expand good practices in cocoa production, fermentation and marketing, all of which are crucial to attracting private sector-led development.

Evidence under I2.1.4 shows that significant groundwork has been carried out to support the development of midstream development of the value chain by supporting three private cocoa processing companies forge direct ties with cocoa farmer groups in East Sepik and Sandaun provinces. This support has mainly involved covering the cost of cocoa processing equipment needed to produce cocoa butter, liquor and powder in Wewak (Federice Estates), Vanimo (Wilyete Enterprise) and Port Moresby (Queen Emma). In the case of the latter, purchases of cocoa beans from seven cocoa producer groups in East Sepik, notably 175 tonnes in 2025, have facilitated the export of semi-processed cocoa products to buyers in Australia and New Zealand. Moreover, this development justified its decision to invest in the establishment of new, larger cocoa processing plant in which the programme is contributing PGK 10 million (USD 2.29 million) to purchase new processing machinery. Due to a combination of procurement problems and electrical power issues means none of the new processing plants supported are operational. However, once installed and commissioned in 2026, all three companies are projected to increase cocoa grinding capacity in PNG from 180 tonnes/year in 2025 to over 3,800 tonnes/year.

Current indications from Federice Estates and Queen Emma are that the programme's support to strengthening traceable supply chains is of high importance to the development of the VCs they are targeting with high-end chocolate companies in New Zealand and Australia respectively. This includes supporting the 363 farmer cluster groups establish GPS mapped fermentaries, develop micro-lot traceability systems, facilitating their participation in cocoa fairs and taking visiting chocolatiers to producer groups. Indeed, this support is reported to have raised considerable interest in PNG fine flavour cocoa, the most recent being chocolatiers from the UK who visited the programme in 2025.

In summary, the abovementioned positive upstream, mid and downstream developments in cocoa value chain demonstrate that the prospects for private sector-led economic transformation among cocoa farmers in the Sepik region appear to be positive. In contrast, **Finding 7** highlights institutional weaknesses in farmer group structures pose a serious threat to linking the farmer groups processors within the private sector. In particular, the programme has largely overlooked the fact that cocoa groups are registered as non-profit associations or business groups with the Investment Promotion Authority (IPA). They, therefore, lack not only the abovementioned bookkeeping records, but also formal membership lists, profit-sharing rules and the governance mechanisms that ensure transparency amongst membership to avoid potential disputes. These risks are compounded by upcoming changes to IPA rules and regulations from 2027, which will require all associations and business groups to meet minimum accounting and reporting standards. The evaluation did not identify a strategy is in place to address this issue, indicating very few farmer groups in the Sepik region are likely to meet these standards in the post-closure period of EU-STREIT PNG.

Vanilla value chain (JC 2.2)

In contrast to cocoa, support to the vanilla value chain has not translated into sustained economic returns as planned during the programme's design when international prices spiked in response to severe climatic events affecting vanilla production in Madagascar (I2.2.1). **Finding 8** highlights the main causes behind this outcome are primarily due to adverse global market conditions, notably a continuous decline in vanilla prices since 2019, and structural weaknesses in the value chain itself. Indeed, many farmers interviewed stated that the drop in vanilla prices had passed a tipping point, whereby gains from improved production and post-harvest practices supported by the programme had been wiped out by the latest drops in prices paid by aggregators in 2025. As a result, many farmers informed the evaluation that they had reduced/abandoned production despite programme support.

Evidence under I2.2.1 confirms that the programme showed limited ability to mitigate external price shocks, indicating weaknesses in its risk management capacity and that vanilla farmers in PNG are highly vulnerable to price volatility. As a result, the programme's achievements in exceeding targets on the distribution of vanilla cuttings (257 percent), the area planted with improved vanilla vines under environmentally sustainable and resilient intercropping systems (223 percent) and the number of beneficiary households (109 percent) were not matched by a significant improvement in productivity through which declining incomes could be softened (I2.2.2). Although global prices are beyond the programme's control, the strategy to sustainably increase vanilla production was not revised or adapted to accommodate this risk, which was already emerging in the inception phase of the programme.

Evidence suggests that weaknesses in training delivery and plant health management are key factors that have affected productivity rates for many farmers. For example, farmers in several locations reported fungal disease was a problem affecting vine development and attributed this problem to limited extension follow-up to prevent fungal growth. As such, the evaluation identified a second important gap in the programme's risk management capacity concerning the mitigation of biotic stresses.

Support on post-harvest handling indicates mixed results (I2.2.5). On the one hand, quality constraints were found to persist during the curing and conditioning of the vanilla vines. This appears to be primarily caused by decentralised curing and conditioning at farm level, where farmer's skills are uneven and difficult to oversee. On the other hand, the delivery of a total of 467 vanilla dryers and 15 solar-powered vacuum packers by 30/09/2025 has resulted in positive outcomes. First, farmers report the solar dryers have reduced vanilla drying times by as much as one month compared to open air sun-drying practices. In addition, farmers reported they could vacuum pack the vanilla for posting to international buyers. These opportunities have, however, been fewer than expected.

Unlike other vanilla-producing countries, the Sepik region lacks a specialised conditioning and aggregation function in the value chain to ensure quality. This, together with a weak Spice Industry Board (SIB) has restricted farmer groups from engaging in alternative VCs where the private sector is prepared to pay a premium for quality or invest in the development of the green vanilla bean market where it controls the curing and drying process, which is widely practised in other countries like Indonesia or Madagascar.

This is further emphasised with reference to the evidence under I2.2.4, which indicates the vast majority of vanilla farmers have enjoyed no meaningful improvement in market access. Instead, farmers interviewed confirmed that they continue to sell individually to the dominant aggregator of vanilla in the Sepik region (Papindo), while a small number sell to informal traders linked to the Indonesian market. In both cases farmers stated they have to accept whatever price is on offer, confirming the absence of functional aggregator and exporter services and a lack of healthy competition in the vanilla market in PNG.

Fisheries value chains (JC 2.3)

Finding 9 reveals that support to all three fisheries VCs has generated modest but tangible improvements in food security and nutrition. However, there is little evidence that individual beneficiaries have experienced any significant improvements in income from fish sales as the number of beneficiaries compared to the assets provided, such as boats and fishing gear, is high. In the case of riverine and coastal fisher groups (capture fisheries) both have suffered from major market-related challenges, whereas aquaculture is only focused on producing tilapia to supplement household diets that are protein-deficient.

Aquaculture interventions reached 4,479 households, by stocking 765 fishponds (95 percent of target). Fish farmers stated in most cases that the fishponds had increased household consumption of fish (I2.3.1) thanks to a typical pond producing around 270 fish meals every six months. However, due to the large number of beneficiaries per pond this results in only eleven fish meals per beneficiary family every six months.

Nutrition surveys indicate that access to a fishpond has translated into improved diets but resulted in a shift to low-input low-output systems, due to major problems in accessing industrial fish feed.

Riverine and coastal capture fisheries demonstrated clearer income potential. Beneficiary interviews indicate daily catches of 15 kg/day for riverine fishers and 25 kg/day for coastal fishers, generating cash income at local market prices. However, this does not reflect an increase in productivity as the additional catches are mainly due to the provision of new boats and fishing gear. The exception is the introduction of 12 Fish Aggregating Devices (FADs), where fisherfolk confirmed the attraction and concentration of fish around the FAD had improved fish catch weight, as well as reduced fishing in surrounding coastline area. However, large group sizes relative to assets provided significantly diluted benefits. For example, coastal groups averaged 68 members per boat, resulting in only 18 fishing days per member per year. This mismatch between group size and capital inputs limited income growth and reinvestment, constraining the transformative potential of capture fisheries into the sustainable community-based management model planned in the Financing Agreement.

Moreover, market access remains a critical constraint. No new market channels emerged for any of the fisheries VCs (I2.3.4). This was largely due to distance from major consumption centres such as Port Moresby and Lae, which also had their own supply of fresh fish. Riverine fisheries appear to have performed better, with smoked fish sold into inland markets such as Maprik, supported by FAO Thiaroye Processing Technique (FTT) smoking ovens. Meanwhile improvements in support services improved in selected areas, including the establishment of aquaculture training centres and hatcheries, but cold storage, block ice supply and digital financial services remain unreliable. For example, fish groups mentioned that the solar-powered freezers installed by the programme were unable to generate enough electricity on cloudy days and the batteries suffered from corroded connectors due to salty environment.

In summary, aquaculture has shown signs that it can be an effective measure to improve household nutrition on a low input – low output basis for inland beneficiaries with limited access to protein beyond hunting. However, the strategy for capture fisheries was not based on the value chain studies undertaken, nor on the introduction of improved technologies or techniques to sustainably increase incomes. As a result, there was a lack of clarity on the causal pathways (in the programme's ToC) through which the provision of fishing equipment would lead to sustained market integration and income gains, or on how key constraints like market access, pricing and quality would be addressed by catching more fish with this equipment. Moreover, this contrasts with the Financing and Contribution Agreements, which envisaged a comprehensive value chain

approach (including investments in improved fishing techniques, post-harvest handling, processing, storage, marketing, trade, enabling infrastructure, market transparency, certification, and environmental sustainability). Furthermore, none of the groups visited expressed that they had, nor intended to invest in the VC, which suggests the ‘root causes’ of issues within the VC had not been adequately identified or addressed.

3.3 EQ 3 – Effectiveness [SO2]⁸

To what extent has the programme strengthened and improved the efficiency of value chain enablers?

Overall, the programme has made a positive contribution to improving local-level access to key enablers in the Sepik region in line with, or above, the targets set in the design and/or inception phase of the programme. This includes: (i) the establishment of 21 ICT centres of which nine are equipped with large photovoltaic (PV) systems and five with internet access, benefitting over 5,700 students; (ii) establishment of 305 new rural banking access points; (iii) 38 small PV systems benefitting lead farmers and fisher households; (iv) 473 solar dryers for cocoa and vanilla groups; (v) 170 km of rehabilitated roads and 313 km of spot-maintained roads managed by local road maintenance groups (RMGs) and five rehabilitated airstrips. However, these achievements were generally not accompanied by adequate systemic reforms, and institutional embedding to underpin their sustainability and potential upscaling beyond the closure of EU-STREIT PNG.

Business, trade, policy and regulatory environment (JC 3.1)

Finding 10 in highlights that EU-STREIT PNG has made a positive contribution to advancing policy dialogue on the transaction barriers and lack of access to financial services in regions like the Sepik region that impede rural agripreneurs from delivering economic transformation prioritised in MTDP IV (I3.2.1). Moreover, through this policy dialogue UNCDF has been able to influence the delivery of important financial reforms that have resulted in agripreneurs and MSMEs gain easier and faster access to digitalised financial services.

At the policy level, UNCDF’s support to the Centre of Excellence in Financial Inclusion (CEFI) in developing the National Financial Inclusion Strategy (NFIS) has been instrumental in supporting the NFIS develop a coherent roadmap that has led to the strengthening of the national framework governing financial inclusion. To help CEFI implement and monitor the NFIS, UNCDF also supported it install and apply a national Financial Inclusion Dashboard. This achievement has legitimised EU-STREIT PNG’s activities dedicated to expanding digital financial services in the Sepik region and ensured they align closely with government priorities (I3.1.2). As such, the evaluation found sufficient evidence to confirm that these developments have introduced clearer guidance and more consistent regulatory practices, particularly in relation to how value chain actors interact with the banking sector.

In addition, regulatory adjustments to Know Your Customer (KYC) requirements have allowed community leaders to vouch for farmers lacking national identity documents. Consequently, UNCDF has played an important role in helping bring down a major barrier affecting smallholder farmers in the Sepik region from opening a bank account. Moreover, this reform is now being applied nationally, confirming EU-STREIT PNG has achieved national outreach that directly benefits rural populations across the country, rather than just in the Sepik region.

Several innovation-led pilot interventions were promoted by UNCDF and the predecessor institution of CEFI through the Agri-MSME Challenge Fund. These interventions support the introduction of tailored digital financial products that allow buyers to pay farmers electronically and to connect farmers with financial service providers, among others. In total, three innovation-led interventions gained funding and were implemented. In all three cases, these pilots successfully demonstrated how private sector actors can enter previously neglected rural markets to improve the efficiency and transparency of value chain transactions to deliver greater financial inclusion in the Sepik region (I3.2.1).

In terms of the immediate outcomes emerging from the establishment of new policy dialogue, digital platforms, tools and pilot initiatives, the evaluation identified important gaps in the programme’s monitoring. In particular, there are no specific indicators tracking changes in credit access, investment and MSME development and growth, which would also encourage farmer groups to address the current absence of book-keeping highlighted under EQ 2.

Finding 11 indicates that the effectiveness and efficiency gains delivered from the programme’s investment in 21 ICT resource centres have been constrained by the fact only five (24 percent) of them are fully operational. These relate to the five schools that had PV systems and internet installed under the guidance of UNDP and ITU respectively in 2024-2025 (see also JC 3.3 below). In these cases, the ET found strong evidence to

⁸ In this evaluation, the assessment of “effectiveness of value chain enablers” in EQ 3 focused on the extent to which EU-STREIT PNG’s support to value chain enablers resulted in a reduction in transaction costs, improved coordination, and improved access to public and private goods and services in both the wet and dry seasons.

indicate that the creation of an ICT resource centre can deliver significant co-benefits for remote communities. These include off grid autonomy, lower operating costs and increased access to online training and other services without incurring high transport costs to main conurbations. Nonetheless, 16 centres are still in the process of being equipped and/or awaiting a reliable internet connection from the National Information and Communication Technology Agency (NICTA). As a result, monitoring on their use and impact, including policy dialogue on their potential upscaling as part of the ITU's wider role in leading the "smart villages" initiative in PNG, is not reported. Similarly, the programme has funded the design of five MIS to support the application of DAL's E-agriculture strategy, which is designed to improve coordination, data quality, market access and service delivery through ICTs. However, only five of the ICT resource centres are currently connected to the internet. While it is acknowledged that ITU has successfully overseen the training of 1,244 people at the ICTs to September 2025, there is no evidence that this training was linked to developing the array of business skills needed to establish sustainable value chains.

In addition, the evaluation identified several structural weaknesses associated with the ICTs that is likely to reduce their efficiency as value chain enablers. In particular, only around 21 percent of the VC groups supported by the programme were found to be located within a 5 km radius of these centres (I3.1.3). Only some of the ICT centres have a business plan designed and adopted by the ICT management committees to recover operation and maintenance costs in the post-programme period, which is not what was planned in the Financing Agreement. Meetings with committee members of the ICT centres provide strong indications that the main beneficiaries will be teachers, students and health workers. This finding is further backed up by the fact UN agencies like UNICEF and WHO have stated that they would like to promote health and other campaigns from these centres once they are connected to the internet.

Finally, beyond financial inclusion, the programme's contribution to strengthening other areas of policy reform and the institutional enabling environment for value chain enablers was found to be limited. The most substantive output has been EU-STREIT PNG's support the revision of the PNG Spice Policy for the period 2025–2033, in which new initiatives such as the creation of the Spice Industry Authority are foreseen. However, this policy had not been officially endorsed at the time of the evaluation's field mission. In other cases, the evaluation identified little or no substantive evidence that the programme's support has improved the efficiency of the enablers. For example, despite the programme's support in creating the Greater Sepik Economic Secretariat Forum in 2022, it has not met as a coordination platform to date. Similarly, the platform to discuss energy policy, legislation and regulation was not active and despite the programme's support in developing a Gender in Agriculture and Fishery policy through funding of two of the four national consultations foreseen, stakeholders confirmed funding for the final two consultations had not been secured, (I3.1.1).

Value chain support services (JC 3.2)

Evidence prior to EU-STREIT PNG confirms financial service providers (FSPs) perceived rural areas like the Sepik region as high-risk, high-cost markets, resulting in very little investment in the expansion of financial services outside of major towns. However, **Finding 12** highlights the programme has had a clear and demonstrable effect on the capacity and incentives of FSPs to operate in rural areas where the programme has been active. This has been achieved by the signing of grant agreements and technical assistance that have supported FSPs de-risk their expansion into rural areas. The grant agreements involved underwriting exploratory costs, supporting experimentation with agent models, and reducing informational barriers about customers, locations, and products.

Stakeholder interviews confirm that de-risking up front expansion in rural areas represents a highly viable approach to enhancing farmer access to FSPs. For example, until 30/09/2025, the three FSPs established 305 new rural banking access points with support of the programme, resulting in more than 119,500 accounts being opened compared to the programme's target of 100,000 (I3.2.0a). Indeed, these figures not only provide strong evidence that EU-STREIT PNG has improved the geographic outreach of a critical value chain enabler but supported GoPNG kick start the economic transformation of the Sepik region in line with the national priorities in MTDPs III and IV.

Although most of access points were found in or close to small towns and villages, or along main and secondary roads, stakeholder interviews confirm that improved accessibility still delivered significant gains for users. In particular, both male and female stakeholders interviewed stated rural banking access points have generated significant cost savings compared to before opening the account. They consistently reported reduced travel and transaction costs, significant time savings and lower losses from hold ups that occur frequently on main roads (I3.2.0b). These benefits also triangulate with abovementioned observations provided under sub-component 2.1 to a meaningful improvement in the enabling environment.

Also significant in these developments is the fact the programme has supported the engagement of three quite different FSPs (MamaBank, CellMoni and Mibank). As such, the programme has been able to assess the performance of three different banking models, each of which were found to have their own distinct efficiency and sustainability trade-offs (also discussed in EQ 8). MamaBank's emphasis on physical staff-operated mini-

branches appear to facilitate higher account activity rates, but they serve fewer locations that require customers to usually travel longer distances. In contrast, agent-based models used by MiBank and CellMoni account for the majority of access points (around 80 percent) but suffered from high agent rotation, a larger number of dormant accounts than MamaBank, and inconsistent service reliability. These banking models demonstrate, therefore, that while EU-STREIT PNG was instrumental in expanding rapidly the supply of rural banking access points, gaps remain in the delivery of efficient rural banking services, particularly in agent-based systems where instability and unreliability prevail (I3.2.0a).

Apart from the rise in rural banking access points, the programme has also encouraged the FSPs and the wider financial ecosystem to increase the range of financial products and services in – and even beyond – the Sepik region (I3.2.1). The market entry and expansion of three FSPs (and large-scale onboarding of new clients) has widened the availability of financial products and services to users in the Sepik region. Moreover, EU-STREIT PNG has fostered innovation in the sector through several initiatives. The aforementioned Agri-MSME Challenge Fund supported companies in piloting platforms for digital financial and related services. For example, AgUnity piloted a digital supply chain platform for 600+ vanilla farmers, which enabled them to identify national and international buyers. In another example, PNG Agriculture Company enrolled over 1,500 cocoa farmers on a business service platform in which they could record financial transactions, learn how to open bank accounts, access financial literacy training and other services. Similarly, the data tech company Global Psytech was contracted by UNCDF to develop a psychometric credit decisioning system licensed under an agreement with the Credit Guarantee Corporation (CGC)⁹ to help financial institutions in PNG assess the creditworthiness of farmers and MSMEs. Interviews confirm this has improved smallholder access to credit without the normal requirements of collateral and formal records of income. In summary, these developments demonstrate that the programme has made a tangible contribution to establishing demand-driven financial services aligned to the needs of farmers and which support the development of a formal banking system in the Sepik region.

Finding 13 confirms, on the other hand, that persistent constraints still limit the extent to which newly opened accounts are used in practice. Evidence from FSP dashboards and UNCDF documents show that between 13-43 percent of accounts accessed through local agents such as shops, mobile money agents, etc. registered any activity within a 90-day period. Stakeholders confirmed that this is largely explained by the combination of behavioural and structural factors (I3.2.1). Interviews confirm an important behavioural barrier is the strong preference for cash transactions in the different VCs, especially among fisherfolk who operate almost exclusively within a cash-based economy for purchases and sales in local markets. Moreover, low financial and digital literacy makes it difficult to generate interest and trust in the products on offer; and end beneficiaries met in focus groups also expressed a high reluctance to pay bank fees. The major structural constraint to deeper digitisation of financial services in rural communities is the limited or unreliable network coverage in the Sepik region. As a result, many of the newly created access points and accounts do not function yet as effective enablers of value chain transactions, particularly for routine payments and savings.

An assessment of the ToC in Annex D, confirms the causal pathways between the above-mentioned constraints and barriers, the programme's inputs and the delivery of outputs were not fully addressed in the programme's design, nor in the ToC applied by the programme for VC enablers. Nevertheless, there is evidence that the programme has taken some credible steps to addressing some of these barriers, even if this did not result in the revision of the ToC. For example, UNCDF has extensively trained 4,500 farmers in financial literacy (I3.2.2). Focus group discussions suggest that this input has improved knowledge and confidence among participants. Similarly, the experience of MamaBank indicates that the integration of community-based approaches and financial literacy into its customer acquisition strategy is an effective measure to develop greater confidence with the banking sector. Nevertheless, for agent-based models that depend on a critical mass of banking clients, low active usage is resulting in instability of agent networks.

In terms of VC-specific change, the programme has witnessed improvements in how transactions are carried out in the cocoa and vanilla VCs, where conditions are more favourable for digitisation than in the fisheries VC. A small number of cases show that digital payments between cocoa buyers, fermenters, and producer groups can reduce security risks and speed up transactions (I3.2.3). However, these practices are not yet widespread and remain the exception rather than the norm. In the fisheries VC, transactions continue to rely almost entirely on cash, with little observable change (see also EQ 2). Access to credit granted by the three FSPs has increased slightly, but still fewer than five percent of account holders have taken out loans (I3.2.1).

Renewable energy (JC 3.3)

Finding 14 confirms the programme delivered nine large PV systems (20-100 Kw) to public institutions, as well as 38 smaller PV systems to households engaged in one of the three VCs and 473 thermal solar dryers for cocoa and vanilla producer groups. Overall, the larger PV systems established in six schools and three health

⁹ See Annex E, I3.2.1, point A (i) for a description of the system and its licensing arrangement.

centres generated substantial energy savings and operational benefits, compared to the smaller systems where efficiency gains were less evident, in part due to technical deficiencies that includes the inability of the PV kits to generate power on cloudy days and rapid rusting of connectors in sea air locations. In contrast, the thermal solar dryers have had a direct and tangible impact, including improvements in drying processes and times, the reduction of post-harvest losses, and tangible environmental benefits (see EQ 5).

In the case of the nine PV power systems delivered by UNDP to public facilities, all were found to be functioning smoothly, although one system was found to have a defective battery pack that has not been replaced by the supplier to date, resulting in a loss in charging capacity since 2023.¹⁰ The most significant outcome is that all nine public facilities are almost entirely energy self-sufficient, thanks to the battery energy storage systems (BESS) installed. Moreover, a synergy established between UNDP and ITU has facilitated the connection of five schools to the internet. This has enhanced energy connectivity in rural areas of the Sepik region in line with the current MTDP IV (especially SPA 2 / DIP 2.2). Similarly, the provision of Internet access at five schools has enabled them to operate as rural ICT centres outside school hours, while all three health centres are now able to provide emergency services at night.

The economic efficiency gains associated with these systems is not tracked in the STREITMIS. However, **Finding 14** confirms data collected by the evaluation team at the schools and health centres visited provide strong evidence that these gains are substantial. For example, schools reported that they were saving on average PGK 6,000 (USD 1,400) per month from the switch to the PV systems (I3.3.4). As a result, these savings were being reallocated to other operational priorities, including educational materials, facility maintenance, and investments to offset fluctuations in government subsidies. Similarly, staff at the health centres visited confirmed cost savings were being used to purchase essential medical supplies and bridge unreliable government transfers, among others.

The scale of service delivery also appears to be significant according to the evaluation team's data collected in the field. For example, the seven PV-equipped schools are currently serving 5,770 students annually and the two health centres well over 3,000 households (I3.3.1). This confirms the nine PV systems are largely serving or exceeding their intended direct beneficiary base. Digital dashboards were added to monitor the PV systems. From the public institutions' perspective, these positive developments provide strong indications that these PV systems deliver a strong return on investment (ROI). However, this cannot be triangulated with PIMU data, because the costs of the PV systems are not reported in the progress reports. In addition, it is too early to determine the effectiveness and efficiency of these facilities from a value chain perspective. As reported under JC3.1 above, only five schools have internet access and able to operate as an ICT to deliver online training using platforms like the LMS to support farmer/fisher groups and MSMEs develop their cocoa, vanilla and fisheries VCs.

In terms of caveats, the absence of long-term maintenance contracts with the system operators, together with the difficulty for the international supplier (with which a three-year maintenance contract was signed) to find suitably qualified local sub-contractors to provide this maintenance, were found to be the most evident. For example, the battery failure case cited above illustrates the lack of adequate maintenance and spare parts management are in place within PNG and with suppliers to respond to equipment faults and replacement needs in a timely manner. Consequently, this situation is likely to affect the capacity of the ICTs to remain fully operational over time within the schools and health centres where they are located. This finding represents, therefore, a potential threat to the ROI of the PV installations.

EU-STREIT PNG has missed opportunities to consolidate and upscale the demonstrated efficiencies that the PV systems deliver. In particular, the monitoring and communications strategy is not geared to identifying the abovementioned outcomes and benefits to promote learning at the institutional level of the potential high ROI that solar PV systems appear to generate when targeting key public services. As a result, the evaluation identified a general lack of policy dialogue at the national, provincial and local levels on the lessons learned and potential replication of the solar PV systems across other public facilities in the Sepik region and beyond. Moreover, the evaluation did not identify any public awareness campaigns or structured engagement with the provincial administrations of East Sepik and Sandaun to embed solar PV solutions into rural infrastructure planning. As a result, the efficiency gains evident at the site level have not translated into the system-wide efficiency improvements anticipated in the programme's design.

Finding 15 assesses renewable energy access for households engaged in the three VCs. Data in the STREITMIS, confirm 38 small PV systems have been installed to operate freezers to store fresh fish and vacuum sealers for vanilla. In addition, 473 thermal solar dryers for cocoa and vanilla have been installed. Overall, it indicates mixed results (I3.3.3). On the one hand the introduction of thermal solar drying units for cocoa and vanilla appear to be highly popular with producer groups and MSMEs, because they deliver direct efficiency gains in the form of reduced drying times, improving drying consistency, lower post-harvest losses,

¹⁰ At the time of writing, the issue was being addressed with the help of the three-year maintenance contract with the supplier.

and delivery of higher-value, export-grade beans and vines (see also EQ 2). On the other hand, producer groups, especially fisher groups, stated that the efficiency gains associated with the introduction of solar powered cold chain equipment were at most temporary, due to quality issues and the fact the PV systems provided do not generate energy on cloudy days.

There are important caveats in the programme's design and monitoring that are likely to limit efficiency gains at the site and system-wide levels. In particular, the programme's design and monitoring are not geared to systematically tracking key data on power usage, operational performance, maintenance conditions, or user outcomes for the PV systems delivered to the cocoa, vanilla and fisheries VC groups/MSMEs. Moreover, there is limited evidence on the quality of the training provided on the installation, operation, maintenance, and safety of the PV systems distributed, particularly for the larger 6 kW PV systems. According to the evaluation's interviews and focal group discussions, especially with fisheries groups, the efficiency improvements for this VC enabler are only evident from the solar dryers, which the evaluation also determined generate significant environmental benefits (see EQ 5). As a result, without adequate learning mechanisms in place, there is significant evidence from the field to suggest the ROI on small-scale PV systems is low, especially among coastal fisher groups who also face other challenges, such as rapid corrosion caused by sea salt.

In terms of coverage and equity, the scale of PV system deployment to VC actors is lower than planned, in part because not all the PV systems had been delivered at the time of the evaluation's field mission. Moreover, even if the projected total number of VC groups who are expected to have a PV-system by the end of the programme reaches its planned target of 500, the programme is overlooking the potential low ROI that the PV systems offer in their current format. As such, the evaluation believes it is unlikely the delivery of more small solar PV systems will result in any sustained efficiency gains in these VC enablers unless the equipment, training and monitoring are all improved first.

These weaknesses demonstrate that in the absence of adequate learning beyond target monitoring the programme's adaptive management capacity has been curtailed in some key areas. Consequently, despite strong alignment with the MTDP IV, the programme's ability to deliver change at scale is largely missing. Instead, the programme's approach to renewable energy deployment appears fragmented and target-driven, rather than strategically directed to work with GoPNG partners on developing energy policy and legislation in favour of renewables. Indeed, **Finding 15** highlights sequencing and responsibility for equipping ICT centres with PV systems was inconsistent across agencies. Similarly reference to sub-component 3.1 and the STREITMIS confirms progress in delivering energy reforms has been the main area where the programme has underperformed (30 percent).

Transport infrastructure (JC 3.4)

Finding 16 confirms EU-STREIT PNG's support on expanding climate-resilient transport infrastructure has delivered significant and tangible contributions to strengthening the efficiency of VC enablers. Emphasis on the rehabilitation and maintenance of rural roads, clearing of waterways¹¹, and upgrading of remote airstrips have directly addressed one of the main needs of farming and fishing communities in the Sepik region: reducing their isolation, which is exacerbated by growing seasonal inaccessibility caused by climate variability and change. Indeed, one lady interviewed by the evaluation team encapsulated the true meaning of the programme's transport infrastructure sub-component, "It gives us hope".

In total, 170 km of rural roads had been rehabilitated to 30/09/2025 (82 percent of 207 km targeted), plus maintenance of a further 313 km of roads (100 percent of 312 km targeted). Evidence collected from the rural roads inspected during the field mission shows that improvements in road condition have translated rapidly into several positive outcomes. These include reduced travel times, lower transport costs, and improved reliability of access, which in turn has contributed to enhancing safety and well-being as witnessed by the lady mentioned above. For example, the vast majority of local residents interviewed along the roads visited, confirmed new bus routes had sprung up quite quickly enabling them to reduce journeys to markets from several hours to less than half an hour in most cases. In the case of some fisher groups interviewed in Vanimo Green, new bus services were reported to be saving individuals not only time, but also around 60 percent of the cost associated with boat travel taken previously to reach markets in Vanimo town.

Finding 16 also confirms the improved efficiency gains from the rural roads programme are showing positive signs that an economic transition is emerging at the local level. For example, some of the cocoa farmers interviewed confirmed they have reduced opportunistic sales with more regular and organised commercial participation. This strengthening of the efficiency of the VCs at the producer level appears to be linked to the fact cocoa farmers can transport larger volumes of cocoa more frequently. As a result, there are greater incentives to aggregate cocoa locally between farmers to support more consistent engagement with buyers in the main market towns.

¹¹ The clearing of waterways replaced the original intention in the Financing Agreement to rehabilitate fishing jetties on cost grounds in 2022.

Investment in road transport delivers broader enabling effects that indirectly support value chain efficiency. These include improved access to health services, schools, banking and other public and private services that previously were out of reach, or very costly to access in terms of time and money. Figures on the total number of households that are benefitting from the direct and indirect benefits of access to the roads rehabilitated or maintained by the programme are not tracked in the STREITMIS. However, data collected by ILO indicate that around 112,000 people are using these roads in one form or another, indicating the returns in terms of access and efficiency are substantial.

Importantly, **Finding 16** also highlights that efficiency gains from this VC enabler are likely to continue for some time to come given their rehabilitation has included climate-proofing to enhance their resilience to weather and climatic events. For example, all roads inspected showed rehabilitation has included the establishment of drainage systems, culverts, gabions, retaining walls, and concrete causeways (see Table 20), to withstand heavy rainfall and reduce landslides, erosion and subsidence. These design features are likely, therefore, to enhance the potential longevity of value chain access, as well as reduce lifecycle costs, compared to conventional roads observed during the field mission that consistently revealed problems of gullying and premature surface degradation due to inadequate drainage and erosion control.

The clearing of 141 km of waterways across nine tributaries of the Sepik River together with the rehabilitation of five remote airstrips have also improved the efficiency of these VC enablers, although the programme conducts no monitoring on the number of cocoa, vanilla and fisheries groups that are directly benefitting from these enabling actions. According to data collected by the evaluation team, at least 72 communities are directly benefitting from the waterway clearings,¹² most of whom are engaged in riverine fishing. The exact number of fishing groups supported by the programme within these 72 communities is unknown, however, the reallocation of funds for the rehabilitation of three fishing jetties to waterway clearance appears to have been a cost-effective response for two reasons. First, the waterway clearance activities are serving a much larger number of communities than would have been the case had the jetties been built. Second, the potential costs of maintaining the cleared waterways are likely to be much lower than maintaining the jetties, meaning the efficiency gains of improving boat access to markets and services are likely to deliver a much higher return on each PGK spent compared to the jetties.

In the case of the five airstrips rehabilitated, the evaluation was unable to visit any of them due to logistical reasons and time constraints. However, the restored connectivity for highly isolated communities confirms important emergency access and ability to reach markets and services, which underscores the strategic importance of airstrips as enabling infrastructure in PNG. Nevertheless, there is no financial or monitoring data available to assess costs in relation to the total number of communities served and, more specifically, if any cocoa, vanilla or fishing communities are directly benefitting from these airstrips.

Finding 17 sheds further light on the programme's inability to transfer positive site-level outcomes into system-wide efficiency gains suggesting linkages between the programme and the Provincial Administrations have mainly focused on output delivery rather than using the transport infrastructure sub-component as an opportunity to advance learning on developing a rural transport plan designed to deliver high economic returns on investment on what the evaluation considers the most important VC enabler in the Sepik region.

The same finding also points to the fact that despite the programme's success in rehabilitating around 8.2 percent of the existing rural road network in the Sepik region, spatial analysis indicates that only 20 percent of VC groups supported by the programme fall within a radius of 5 km of these roads. This percentage falls to as little as 8 percent within a 1 km radius of these roads. While it is evident from the field visits that the geographic constraints and the remoteness of the Sepik region have had a bearing on the selection criteria for the rural roads prioritised for rehabilitation, or spot maintenance this finding represents a major shortcoming in the planning and monitoring of this sub-component by ILO and STREITMIS as the rehabilitation of alternative existing rural roads could have well improved market access to a wider circle of established VC groups.¹³

Finding 18 demonstrates that the programme's labour-intensive road maintenance approach, which mobilised local residents into Road Maintenance Groups (RMGs),¹⁴ is playing an important role in safeguarding and maximising efficiency gains from rural road investment at the local level. Moreover, this approach simultaneously generates paid employment for local residents, which significantly contributed to the consumption expenditures of concerned households with RMG staff and appears to be highly popular among youths and women as a source of economic income. Indeed, a total of 307 RMGs are reported to have been

¹² Selection of working groups and of tributaries to be cleared have been done here by the Ward Managers representing the concerned communities under the oversight of ILO inspectors.

¹³ The evaluation points out that unlike neighbouring Indonesia, the use of pack horses and donkeys are rarely used in the Sepik region or other rural areas of PNG.

¹⁴ RMGs can also be interpreted as a form of paid community labour to support vulnerable groups while supporting road improvement. It followed strict, well-documented hiring procedures and the work was frequently supervised and monitored by ILO inspectors to justify payment and clearly benefit the parallelly undertaken road improvement works with the help of hired civil engineering contractors.

established to 30/09/2025, which is almost double the number planned in STREITMIS (160). Evidence also indicates that the RMGs have strengthened community ownership of the road and, in some cases, this has resulted in joint approaches to maintenance between RMGs sharing the same road corridor.

However, the RMGs function primarily as an ILO-led initiative, rather than an initiative embedded in provincial policy and planning frameworks. Consequently, their ability to operate beyond the programme remains unclear. Furthermore, there is evidence from the roads already completed that routine maintenance by these RMGs has ceased and, in one case, early signs of road deterioration were observed during the evaluation's field mission. Also significant, is that regulations issued by the DoWH confirms RMGs can only exist if they establish themselves as a private business, which appears to be beyond the capacity of most RMGs interviewed. In summary, while labour-intensive maintenance mechanisms like the RMGs can safeguard efficiency gains in practice, their impact remains time-bound when they are not embedded within provincial and district contracting and financing systems, which currently only tender road maintenance to registered companies.

3.4 EQ 4 – Effectiveness [gender and youth]

How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?

Women and youth participation in the VCs (JC 4.1)

Finding 19 confirms EU-STREIT PNG has succeeded in engaging the participation of women and youths (aged 15-25) in all its main activities under Component 1. Between 2020 and 2024, female adults and youth accounted for 17.9 percent of all participants, while youths (males and females) accounted for 36.5 percent (Table 22). These results align with the target applied by the programme for youth (30 percent) but fall short of the target for adult women's participation across all three VC (also 30 percent). However, this target was established during the programme's design phase without a gender-specific baseline study or contextual feasibility assessment and was not addressed during the inception phase to determine whether this target was realistic and achievable. The ET found clear evidence that strong cultural norms persist in the Sepik region, particularly in remote rural areas where the programme operates. These norms continue to exclude most women from formal cooperative leadership and agricultural decision-making. Against this backdrop, the programme's achievement of a 17.9 percent adult women's participation rate is considered satisfactory. Moreover, when combined with youth participation, a group that is also highly excluded due to these cultural norms, over 54 percent of all participants in VC activities have been adult women and youths (female and male). This is considered highly satisfactory, especially as the number of women and youths who have participated in skills training events have averaged 18.7 and 34.7 percent respectively (Table 23).

The quality of women and youth participation has varied across VCs. Focal group discussions with farmers and fisherfolk indicate stronger and more consistent female engagement in fisheries VCs, especially the riverine VC. This appears to reflect, however, women's traditional role in processing (especially smoked fish) and selling fish in local markets. In contrast, women and youth participation in cocoa and vanilla was less evident, particularly within established cooperatives where leadership structures and decision-making processes remain male-dominated. Meanwhile, newly formed groups showed comparatively better inclusion than older institutions where male dominance is entrenched.

Evidence of low levels of access to ICTs, information, and financial services is also highlighted under **Finding 19** as major barrier that is holding back women and youth empowerment. Furthermore, women who did not have a mobile phone were more likely to rely on a male household member to access services, undermining their independent decision-making and diluting empowerment outcomes.

Decision-making, governance, and empowerment (JC 4.2)

Finding 20 shows that EU-STREIT PNG has achieved measurable but uneven progress in strengthening women's and youth's participation in decision-making roles in the cocoa, vanilla, and fisheries VCs. Quantitative leadership data to 30/09/2025 indicate clear disparities across VCs. Fisheries and many MSMEs demonstrate comparatively strong inclusion, with women holding 25 and 24 percent of managerial positions respectively, and youth holding over 40 percent of leadership roles in fisheries. By contrast, cocoa and vanilla governance structures remain heavily male-dominated with women occupying only 16 percent of leadership roles in cocoa groups and just 9 percent in vanilla. Given that most cooperative boards consist of four members, this implies that the majority of cocoa and vanilla committees operate with no female representation at all, while those that include women typically do so at a minimal level. Youth participation in cocoa leadership (40 percent) is relatively strong, suggesting that age-based inclusion has advanced further than gender inclusion in this VC. In addition, aggregated data from the MSME Maturity Assessment collected after the field mission indicates that across all supported groups, women's leadership representation has reached 23 percent

and youth 24 percent, demonstrating a positive upward trajectory of women's empowerment that suggests engaging women proactively in MSMEs may be a viable way to stimulate a positive shift in cultural norms at the community level.

Indeed, qualitative evidence gathered through interviews and field observations confirms that women's voice and confidence in decision-making have improved, particularly among those who participated in Gender Action Learning System (GALS) training. Women reported greater confidence in speaking during meetings, negotiating roles within cooperatives, engaging with buyers and government officials, and contributing to business planning. Indeed, this was observed in one community where an adult female was found to command significant respect due to her leadership skills in developing the cocoa VC. Government officials and NGO partners corroborated these observations, noting a visible "mindset transformation" around gender roles, including increased consultation within households and the emergence of women-led initiatives, especially in the vanilla sector.

At the institutional level, EU-STREIT PNG has delivered important formal empowerment outcomes that establish enabling conditions for longer-term governance transformation. These include technical and financial support to the development of the National Women and Youth in Agriculture Policy (NWAYAP), with DAL leading the drafting and consultation process to build institutional ownership (see also EQ 3) plus contributions to the review of the National Youth Policy approved in 2023 and the establishment of operational District Youth Councils (DYCs), notably the in Ambunti-Dreikikier DYC and similar progress in Nuku district, led by the Nuku District Development Authority. Stakeholders widely viewed the DYCs as significant breakthroughs that give youths a formal voice in agribusiness and policy dialogue, aligning with the National Youth Policy and MTDP IV. These are the first formal, institutionalised youth governance structures in the Sepik region, succeeding where multiple previous attempts have failed.

Finding 20 also underscores that structural barriers continue to constrain the depth and durability of governance gains. Customary land tenure norms restrict women's and youth's control over productive assets, limiting their economic independence and bargaining power within cooperatives regardless of training or representation. Evidence also points to data limitations in STREITMIS where leadership statistics are tracked but lack qualitative assessment to determine trends in empowerment and local power structures.

Overall, the programme has succeeded in initiating governance transformation from a low baseline, particularly in fisheries, MSMEs, and newly formed groups, but progress remains fragile and in need of structural reforms. In addition, improved monitoring, and targeted strategies to transform entrenched cooperative governance arrangements, gains in women's and youth's decision-making authority remain partial and reversible.

Individual, social and economic benefits of participation (JC 4.3)

Finding 21 and its accompanying evidence confirms EU-STREIT PNG has generated clear and meaningful benefits for women and youths in terms of human and social capital, while improvements in economic capital appear less evident, particularly for women. In terms of strengthening individual capabilities, women and youths reported substantial gains in human capital through the skills training provided in cocoa and vanilla production, fisheries processing technologies, and financial and digital literacy. Moreover, many women and youths stated, EU-STREIT PNG provided their first exposure to formal business practices. In some cases, this has resulted in a shift from subsistence activities to participation in the development of the VCs. Youths, meanwhile, stated specific initiatives like becoming agents of programme-supported FSPs (see also EQ 3) had supported them establish new entrepreneurial roles and income-generating opportunities within their communities (I4.3.1).

Social benefits are also evident in the form of newly created producer groups, lead farmer networks and women's groups. In all cases these collective initiatives are reported to have strengthened social capital by promoting group action, peer learning and improved bargaining power. The application of GALS is reported to have contributed to changes in household-level dynamics. For example, women interviewed stated they had increased confidence to speak in meetings and engage in family business decisions, which the evaluation was also able to corroborate in some of the focal group discussions realised in the field. At the community level, youths interviewed also stated that they had greater confidence to speak in meetings and voice opinions through structures such as the abovementioned DYC, signalling improved social inclusion and an increase in civic engagement.

Economic benefits for women participants were, however, more sporadic. Despite the gender mainstreaming conducted in line with the Gender and Youth Inclusion Strategy and Action Plan dedicated transformative economic empowerment was not evident, in part because a specific budget line was not established to employ a team of specialist staff to implement it. Instead, women and youths who reported increased economic capital through participation in the programme, appeared to come mainly from households with status, authority in the community, or from educated households. In these cases, income generated from the sale of cocoa, where income gains were highest (see EQ 2) was discussed with their adult male partner to ensure part of it was used to improve housing, pay school fees, acquire solar lighting and other household needs. Meanwhile, many

male and female youths stated they spent economic gains on motorbikes and mobile phones, which they considered were essential to support the development of their new-found economic activities (I4.3.2). Digital financial services provided allowed some participants, notably women, to save income and reduce immediate social pressures to provide cash to family members. Women demonstrated that they are also proactive in prioritising income for family needs linked to education, health, food security, housing and reinvestment in value chain activities (I4.3.3).

Nevertheless, **Finding 21** highlights women's economic empowerment has, in most cases, not kept pace with their skills acquisition. In particular, despite performing labour-intensive and quality-determining roles across all three VCs, women generally lack control over income from sales generated and managed by men. Customary land tenure and entrenched household norms further constrain women's ability to operate as autonomous economic actors. Thus, despite increased human and social capital, access to FSPs, and equipment, an unfilled gap in the programme has been its general lack of actions focusing on the cultural norms that prevail and which continue to largely control governance mechanisms and income flows.

3.5 EQ 5 – Effectiveness [environment and adaptation to climate change]

How effectively did the project identify and address environmental risks, and to what extent did it promote environmental sustainability and adaptation to climate change to reduce the vulnerability of the target population in East Sepik and Sandaun provinces?

Mainstreaming of environmental-climate considerations in programme design (JC 5.1)

Finding 22 confirms that environmental protection and climate resilience are fully embedded in the programme's objectives and have clear vertical and horizontal integration in the Financing Agreement's logical framework. Key environmental risks in the cocoa and vanilla VCs are addressed through the prioritisation of rehabilitation of existing cocoa and vanilla plots, to avoid expansion into forested areas to avoid deforestation and potential biodiversity loss. At the same time climate smart agricultural practices aim to strengthen climate resilience (I5.1.1). In fisheries VC, the programme's focus on community-based management of natural resources and improved fishing and processing technologies that reduce pressure on resources, lower post-harvest losses and contribute to ecosystem conservation (I5.1.1). Climate adaptation is also supported by the promotion of the e-Agriculture strategy (in particular the Agricultural Meteorological Advisory Monitoring and Services, AMAMAS, designed to support farm-level climate planning), the expansion of solar PV systems and rehabilitation of roads incorporating climate-proofing (I5.1.2; I5.1.3).

However, **Finding 23** highlights that the programme's ability to demonstrate environmental sustainability and adaptive outcomes has been limited due to gaps in environmental monitoring and baselines that have limited learning and environmental and climate data development, especially at the provincial level. Consequently, although progress reporting on output-level targets was evident in the STREITMIS, notably 12,888 ha of cocoa and 6,514 ha of vanilla are under climate-change adapted management to 30/09/2025 (I5.1.3), important outcome indicators are not. As a result, there is an absence of monitoring on soil health, biodiversity, water quality and fish stock status, among others to determine how far the VCs are sustainable and resilient to climate change. Similarly, climate vulnerability analysis appears to have relied on general assumptions, rather than building on a past vulnerability assessment conducted by the Climate Change and Development Authority (CCDA), UNDP and the Adaptation Fund in East Sepik in 2017, or through location-specific scientific assessments in the inception phase.

Climate change adaptation and mitigation in cocoa and vanilla value chains (JC 5.2)

Finding 24 confirms that climate change adaptation and mitigation were strongly integrated into the selection and development of the cocoa and vanilla VCs (I5.2.1; I5.2.2). All farmer groups are required to rehabilitate existing cocoa blocks and vanilla gardens ensuring the retention and improvement of local practices that directly support climate resilience. These include agro-forestry, inter-cropping, and improving local husbandry techniques, such as pruning to manage shade and ground cover management. The promotion of CPB-tolerant cocoa varieties and improved vanilla germplasm further strengthens adaptive capacity and resilience by encouraging farmers to test and adopt planting materials that are suited to local conditions, microclimates and pest pressures. Moreover, these actions have contributed to reducing environmental degradation, which is a key element in the establishment of sustainable and climate-resilient VCs.

In practice, the effectiveness of these measures in reducing vulnerability at farm level has been constrained by low levels of training replication, access to climate and soil data, and extension support (I5.2.2). Delays in populating data in the AMAMAS to establish agro-meteorological support has also reduced effectiveness. As a result, adoption of improved cocoa and vanilla planting materials has expanded significantly between 2021-2025 (see EQ 2), but this appears to have been driven more by income incentives than the establishment of resilient agricultural systems that incorporate broader climate-smart agricultural practices that include soil

health management, pest control, adaptive farm planning and alignment with external certification linkages (I5.2.2; I5.3.1).

Integration of sustainable use of natural resources in the VCs (JC 5.3)

Finding 25 points out EU-STREIT PNG's compliance with FAO's good agricultural practices (GAP) in the development of the cocoa and vanilla VCs, which in the case of the cocoa VC includes application of the CB's extension manual. This has contributed to improved farm management and productivity (I5.3.1), which the abovementioned "Fama Gaid Buk" has captured to promote sustainable production at the farm level. However, the absence of alignment with internationally recognised certification schemes has limited independent verification of natural resource use practices as well as incentives for farmers to adopt broader regenerative farming systems. The lack of baselines on soil health, biodiversity, and water resources, combined with uneven follow-up supervision, has also restricted learning and informed decision-making on the programme's ability to systematically address longer-term environmental risks and climate resilience beyond immediate production needs. As a result, it is unclear how far environmentally sustainable practices and monitoring are formally embedded, applied and enforced, especially within the vanilla VC.

In fisheries and aquaculture, **Finding 26** shows that environmental risks have been recognised through a food security and nutrition lens rather than an ecosystem sustainability perspective (I5.3.1). The fisheries component was designed primarily around food security objectives, which shaped implementation towards production increases rather than ecosystem management. Interventions have focussed heavily on the distribution of fishing gear and boats, FADs, solar-powered freezers, and aquaculture equipment, coupled with training on their use. This has enabled fisher groups to catch more fish to improve household nutrition and short-term incomes but largely overlooks the need to address risks and collect data associated with overfishing, habitat degradation, climate variability and upstream logging and mining. There is, therefore, an absence of important information on stock assessments, no-take zones, watershed protection measures, or multi-stakeholder governance mechanisms dedicated to reducing the vulnerability of coastal, riverine, and inland fishing communities to environmental and climate shocks.

The programme's effectiveness in identifying and mitigating deforestation as a priority environmental risk, and in translating this risk assessment into a coherent operational response is highlighted in **Finding 27**. By adopting a strict rehabilitation-only approach for cocoa and vanilla production (I5.3.2), EU-STREIT PNG upheld an important objective in CB's extension manual for cocoa block rehabilitation, namely avoid agricultural encroachment into secondary or primary forests. The reported rehabilitation of 6,196 ha of degraded cocoa blocks and 1,239 vanilla gardens, with no reported expansion into forested areas, constitutes conclusive evidence that the CB's extension strategy is both economically and environmentally viable. Moreover, the rehabilitation strategy also limits greenhouse gas emissions that would occur if converting forest land-use into agricultural use.

By contrast, **Finding 28** exposes a critical limitation in the programme's environmental and climate adaptation response (I5.3.3). While deforestation was effectively avoided, EU-STREIT PNG did not extend its environmental risk management to include active ecosystem restoration measures, such as nature-based solutions to establish cost-effective resilience building against flooding, erosion, coastal degradation, and biodiversity loss. This is particularly evident under the fisheries and transport infrastructure sub-components that have relied predominantly on equipment and engineering solutions that are not accompanied by actions such as habitat restoration, riparian replanting, or landscape-level interventions. As a result, the programme's contribution to environmental sustainability and climate adaptation has focused largely on preventive rather than regenerative solutions that are crucial to sustaining the ecosystem services that are crucial to sustaining all three VCs as well as reducing long-term vulnerability to growing climate variability and change.

Infrastructure works are climate-proof and apply environmental safeguards (JC 5.4)

Finding 29 validates the rehabilitation of rural roads and airstrips has taken place in accordance with national and ILO's environmental safeguards and climate-proofing guidelines (I5.4.1; I5.4.2). Approximately 90 percent of the 170 km of rehabilitated feeder roads completed, or in the process of completion to 30/09/2025 comply with national and international environmental standards, confirming 12 of the 13 rural roads constructed have systematically applied the ILO's Rural Road Environmental Safeguards Framework. Climate resilience measures, such as improved drainage, slope stabilisation, gabions, and reinforced culverts were all found to align implicitly with the Climate Change (Management) Act and the National Adaptation Plan, in particular their priorities of reducing exposure to flooding, erosion, and landslides. Similarly, airstrip rehabilitation complied fully with aviation safety standards and largely with the Environment Act by avoiding physical expansion, limiting ecological disturbance, and applying low-impact community maintenance provisions.

However, the ILO's approach to environmental safeguards and climate risk screening was applied in a programme-specific manner, rather than institutionalised at provincial or district levels (I5.4.3). The absence of the Conservation and Environment Protection Authority (CEPA) and CCDA in the PSC and TWGs also

prevented joint-screening to support capacity building in key areas, such as environmental impact categorisation, climate risk assessments, development of environmental and climate baselines and monitoring, among others. As a result, the programme has successfully delivered transport infrastructure that is more resilient to climate hazards, there is no tangible evidence that the provincial authorities have the capacity to systematically assess and effectively apply climate and environmental risk mitigation measures for transport infrastructure after the programme's closure.

Finding 30 reveals a similar pattern regarding the shift from fish jetty rehabilitation to river clearing. Although this approach has demonstrated higher value for money by delivering immediate functional benefits to a larger number of communities than jetties (see EQ 3), river clearing has been implemented as a one-off target-driven activity rather than part of a wider river basin management plan. As a result, opportunities to develop effective river governance measures to mitigate the causes of river blockages and sedimentation and promote nature-based solutions linked to waterway management have been missed. Consequently, EU-STREIT PNG's contribution to environmental sustainability and climate adaptation in riverine systems has been limited, indicating underlying vulnerability of riverine communities to the effects of climate change has not been addressed.

Climate change mitigation through the expansion of solar power (JC 5.5)

Finally, **Finding 31** confirms the programme has exceeded its renewable energy target by 254 percent, resulting in a reduction in carbon emissions. **Finding 31** highlights that the STREITMIS does not monitor these contributions. However, according to the evaluation's own rapid assessment, the nine PV systems have generated a total of 1,930 kWh over four years, which equates to an estimated 1,409 tCO₂e avoided over four years (based on displacement of diesel). This directly supports GoPNG's climate commitments as well as priorities in the MTDP IV (see also EQ 3). Another important emerging outcome identified by the evaluation's rapid assessment is that the programme's contribution to carbon emission reductions through its rehabilitation of 4,960 ha of cocoa blocks compared to the deployment of non-mechanical solar dryers for cocoa farmers (500 in total to 30/09/2025) shows 384,000 tCO₂e and 77,000 tCO₂e have been avoided over a four-year period to 30/09/2025¹⁵. This indicates an important outcome emerging from the introduction of the solar dryers is that play an important role in reducing carbon emissions. As a result, they represent a highly sustainable, renewable, and low-carbon alternative to conventional and improve smoke pipe dryers.

3.6 EQ 6 – Efficiency and coherence [governance / coordination / M&E]

To what extent was the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

Programme's governance structure ability to deliver coordinated management (JC 6.1)

According to **Finding 32**, the programme's governance structure was clear and appropriate at the strategic level. However, at the operational and technical levels many partners were involved causing difficulties to deliver coordinated planning, implementation, monitoring and reporting. It highlights the programme has a comprehensive multi-tier governance structure comprising the PSC, TWG and PIMU and confirms the PSC has clearly defined terms of reference set out in the Financing Agreement. The PSC was originally foreseen to be led by two co-chairs from the EUD and DNPM to provide strategic oversight, alignment with national and EU priorities and approve annual work plans, annual progress reports, and financial documents, among others. However, in the interests of enhancing the effectiveness of the PSC, adaptive measures have taken place during implementation (I6.1.1). Notable examples include the decision to include the UN Resident Coordinator as a third co-chair of the PSC in 2022 to facilitate oversight of One UN, the establishment of the TWG to improve technical coordination and adoption of the Acceleration Action Plan in August 2023 to intensify implementation rates.

However, at the operational level the governance structure has had to deal with the large number of implementing partners who have operated through a series of Memoranda of Understanding with the UN agencies rather than overriding operational guidance in the form of an operations manual or similar. In addition, the delayed or incomplete terms of reference for the TWG, PIMU and PTF have resulted in limited clarity on roles, responsibilities and coordination mechanisms to guide the planning, implementation and monitoring (I6.1.2).

In practice, the programme's governance structure has prioritised administrative compliance and target achievement which has limited integrated, cross-sector learning and decision making. The TWG has met

¹⁵ Calculation based on drying 1 tonne of cocoa/month over 48 months and 1.75 tonnes/month of firewood over 48 months.

frequently since 2023, but this has mainly been through sector group meetings. Similarly, the PIMU and the UN implementing agencies also meet regularly, to discuss their respective mandates and actions. This has resulted in a strong sector-based planning and implementation focus, which has limited the PIMU's ability to develop strong inter-sectoral integration across the VCs and enabling investments. Moreover, the governance structure's strong focus on supporting national and provincial administrations has resulted in very little coordination at the district level. Many stakeholders voiced concerns that has resulted in inadequate levels of coordination on some key aspects of the programme's implementation (I6.1.3). They include selection of intervention sites and beneficiaries, linking feeder roads to value chain development, identification of common socio-economic and environmental baselines, application of the grievance mechanism and the establishment of co-management arrangements at sub-provincial level to deliver integrated rural development at the local level in support of MTDP IV priorities.

Effectiveness of planning, implementation, monitoring and reporting (JC 6.2)

Finding 33 illustrates the programme's governance structure has been effective in bringing implementing partners together to agree on annual work plans, budgets, targets, provide updates on achieving their respective targets in the STREITMIS and discuss logistical issues, success stories and so forth. However, the effectiveness of the governance structure to deliver robust integrated rural development has been undermined by a combination of structural weaknesses. Stakeholders pointed out the low level of engagement of local government and the strong sector-target approach to implementation as key issues (I6.3.2). The evaluation found this has been reinforced further by the UN agencies own separate methods of operation, procurement, accounting and reporting as well as their different levels of accreditation and physical presence in PNG. As such, the image of the One UN approach from the inside appears quite fragmented, adopting a strong territorial approach to implementation, with cross-sector coordination mainly evident when agencies shared a mutual interest in achieving targets. Most significant is digitalisation and financial inclusion where ITU, UNDP UNCDF and FAO have collaborated extensively to deliver specific outputs.

Finding 34 points out that one of the strengths of the governance structure has been its ability to take decisions that have generally been acted upon by the PIMU and TWG's sector groups. As such, timely responses to implementation bottlenecks, logistical and compliance issues, and funding needs are evident, notably the adoption of the Accelerated Action Plan (AAP) and the strengthening of target monitoring of outputs through STREITMIS. Reference to implementation rates in STREITMIS confirms a significant intensification of implementation of EU-STREIT PNG in the period 204-2025.

The application of the AAP is a further example of reactive management to deliver on targets. Moreover, because procurement is fully controlled by each UN agency, the governance structure has had limited opportunity to apply proactive initiatives such as pooling procurement to achieve economies of scale and reduce the logistical constraints in PNG, or promote procurement capacity development within provincial administrations to promote the establishment of local supply agents. Thus, despite the intensification of activity since 2024, delays linked to agency specific rules, international tendering requirements and the non-accredited status of ITU in PNG have persisted and were clearly evident during the field mission.

The M&E system's contribution to guiding decision-making and learning (JC 6.3)

There is strong evidence that the M&E system established in STREITMIS has operated as an efficient and comprehensive mechanism for tracking delivery of output targets established in the programme's logical framework (**Finding 35**). In addition, the integration of the Targets and Achievements matrix in STREITMIS in response to the AAP in 2023, has enhanced sub-output monitoring to track the delivery of outputs more efficiently, as well as enhance accountability of implementing partners. Finding 35 goes on to say that this approach has gaps that have affected learning and adaptive management at outcome level. First, it highlights the absence of baselines linked to targeted households and communities that results in limited traceability between outputs and outcomes. Indeed, tracking of outcome indicators is largely absent in the STREITMIS. Consequently, the ability of the governance structure to assess how far actions are being coordinated adequately, or whether outputs are leading to income growth, employment quality, food security and nutrition, or improved linkages with the private sector engagement has not been systematically optimised. This situation has not been aided by the fact most of the outcome level analysis foreseen in the logical framework has been deferred to the final months before the programme's closure, indicating no interim outcome data was collected in advance of adopting the AAP.

Finding 36 confirms the M&E focus has also resulted in providing information largely for compliance driven communications and visibility. Their strategic use within coordination and governance processes was largely not evident, despite capturing and publishing success stories (I6.3.3). Consequently, M&E outputs have primarily informed reporting, work planning and communication products focused on achievements in the delivery of outputs such as the holding of events, workshops, visits, inaugurations and delivery of equipment and infrastructure. Synthesised analysis to influence policy dialogue, promote private sector investment or assess transformational change foreseen in the ToCs for the three VCs was not evident. As such, coordination

across implementing partners has relied heavily on M&E as a management and reporting tool, rather than as a learning instrument to assess and deliver transformational outcomes in the Sepik region.

3.7 EQ 7 – Efficiency [resources]

To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?

Funding levels were sufficient and used in line with annual work plan budgets (JC 7.1)

Evidence linked to **Finding 37** shows the One UN approach under the coordination of FAO demonstrated difficulties to meet planned budgets in the period 2020-2023, which stakeholders mentioned were due to a combination of factors including a non-specific baseline survey, government incapacity and staff rotation, the Covid-19 pandemic, and inadequate levels of coordination from the PIMU. As a result, expenditure rates underperformed in the period, averaging just 38 percent of planned annual expenditure (I7.1.1, Table 28). Between 2024-2025 One UN has demonstrated a much higher ability to manage and disburse significant financial resources, in line with UN accounting standards agreed in the Contribution Agreement. By 30/09/2025, cumulative expenditure had reached USD 76,694,879, equivalent to 85.7 percent of the total EU budget for the programme.

The finding also highlights a procedural limitation in how financial expenditure is reported. On the one hand, the annual work plans are required to present detailed budgets by output and sub-component in line with EU requests. On the other, the Contribution Agreement requires all expenditure reporting to apply internal UN accounting rules and budget lines, which are not shared externally. As a result, all reporting on expenditure is provided in aggregate terms. Finding 37, highlights that this means the programme's governance structure is unable to assess unit costs associated with the output and sub-output indicators tracked in STREITMIS. This structural limitation has restricted the programme's governance structure from assessing spending efficiency, compare planned versus actual expenditure at output level, or analyse value for money, despite the availability of robust output monitoring data. However, the evaluation, was able to obtain illustrative data on the cost structure of rural infrastructure contracts. They show a far higher percentage of total expenditure for the rural road sub-component went on pre-construction costs (design, procurement, delivery, etc.) than the 20 percent norm. Stakeholders confirm, however, that this is attributed to two main factors. First, design and supervision of road rehabilitation in the Sepik region is very costly due to challenging logistical constraints that include the absence of a road network and complex geography due to the Sepik River basin which is subject seasonal flooding and results in a high dependency on river and maritime transport. Second, the lack of a qualified local construction industry has necessitated extensive capacity building and intensive supervision by ILO to ensure contractors meet climate proofing social/employment standards.

Finding 38 shows that adaptive financial management was applied primarily in a reactive and operational manner rather than through a forward-looking lens to promote learning on cost analysis and ROI in the Sepik region. Nonetheless, the adoption of the AAP in August 2023 has resulted in a major refocus on implementing priority activities linked to STREITMIS targets, contributing directly to a major increase in expenditure between 2024 and the first nine months of 2025 (I7.1.1, Table 28). It also highlights other examples of reactive adaptive management that have accelerated implementation. They include FAO and ITU adjusting investments to expand the ICT centres from 11 to 21, and ITU assigning funds to support UNCDF's financial inclusion training.

Human resources were sufficient to implement the programme (JC 7.2)

The evidence linked to **Finding 39** shows the programme mobilised substantial human resources over time, evolving from a core team of 36 people, composed of 9 international and 27 national experts during inception phase, to a fully resourced PIMU composed of 69 experts (17 international by 2023). Since 2023 to date long-term staffing has stabilised around 67 long term staff on average (I7.2.1, Table 24). Finding 39 highlights that this stability, combined with low turnover among senior international staff and a wide composition of technical staff recruited by FAO, ILO, ITU, UNCDF and UNDP were important factors contributing to the acceleration of implementation. Moreover, reliance on a sizeable permanent national team appears to have been particularly important given the limited capacity and resources available in the Sepik region. Notwithstanding, the evidence underpinning **Finding 39** also points to some inefficiencies in staff deployment, notably the absence of long-term staff based in Maprik, a key market town and logistical hub for parts of East Sepik and Sandaun provinces, limited field coverage in an important catchment area for cocoa, vanilla and riverine groups.

In terms of quality, **Finding 40** confirms stakeholders consistently assessed the staff and technical assistance provided by the programme as competent, professional and hard working (I7.2.2 and I7.2.3). Strong performance was particularly evident among staff dedicated to the cocoa VC, digitalisation, financial inclusion, renewable energy and infrastructure supervision, with constructive working relationships reported between programme staff and provincial counterparts, as well as institutions like the CB. The targeted use of short-term

international consultants for specialised studies further strengthened technical delivery. The evaluation also identified a few gaps in specific competencies that constrained the programme's capacity to advance higher level transformation objectives. Under Component 1, the absence of a specialist in international trade, marketing and private sector engagement reduced the programme's ability to systematically address market access constraints and identify commercial investment incentives. Under Component 2, the absence of expertise in transport policy and regulatory was missing to embed mechanisms such as RMG, the Rural Transport Information Management System (RuTIMS) and solar PV systems within provincial planning, budgeting and regulatory frameworks. These gaps did not affect achievement of output targets but did reduce the extent to which human resources focused on outcome level change and sustainability issues.

Level of procurement efficiency (JC 7.3)

Procurement processes affected the programme's operational efficiency due to the application of four UN agency-specific procurement procedures (noting that UNCDF did not procure goods or services), combined with limited experience within the PIMU on anticipatory procurement planning (Finding 41). Indeed, this area was an area where adaptive management within the governance structure was reducing the programme's ability to foresee and manage delays arising from long tendering cycles and extended lead times between contract signature, mobilisation and commissioning. Procurement processes alone typically required 90 to 120 days before contract award, while mobilisation, shipping, installation and commissioning frequently took an equal or longer period, particularly for internationally sourced equipment (I7.3.1). These limitations were amplified by the absence of harmonised procurement under the One UN approach, limiting opportunities to pool demand, reduce transaction costs and achieve economies of scale (see also Finding 34). As a result, there were significant delays ranging from six months to three years to complete some of the road rehabilitation contracts.

Delays were most pronounced under the transport infrastructure sub-component, where road rehabilitation contracts often required two to three years to complete due to slow tendering, weak contractor performance, contract cancellations, retendering and local land related disruptions. Similar constraints affected ICT centres and renewable energy installations, where equipment was procured and commissioned on a site-by-site basis, prolonging delivery timelines (I7.3.2). By contrast, earlier procurement planning and tool development by ILO, including the use of RMGs and RuTIMS from 2021, demonstrates that proactive procurement preparation can improve tender efficiency as well as more effective contract supervision.

Finding 42 highlights that shortcomings in procurement quality assurance undermined efficiency and value for money. Field evidence and stakeholder interviews identified several cases where procured equipment was unsuitable, incomplete or incompatible with local operating conditions. In some cases, incompleteness or unsuitability resulting from non-adherence to technical specifications had to be corrected by the supplier at their own cost, confirming deviations from agreed Technical Support Services. For example, the supply of obsolete electrical equipment for one of the cocoa processors was in the process of being rectified by the supplier at his own cost (see also EQ2). In another example, coastal fisheries groups visited confirmed the cold chain systems supplied with solar PV installations do not function reliably in cloudy conditions or resist corrosion of connectors due to the sea air. Despite feedback from stakeholders that they generally accepted delays as a normal feature of PNG, quality-related shortcomings were perceived as more problematic by some stakeholders. These weaknesses affected delivery but also the enabling conditions for private sector engagement and raised concerns that parts of the programme's legacy may translate into idle assets and future waste rather than sustainable value chain enablers.

3.8 EQ 8 – Sustainability

What are the financial, institutional, social, and environmental risks to sustaining project results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the project's achievements?

Readiness of governance mechanisms to sustain/scale up VCs in the Sepik region (JC 8.1)

According to Finding 43, the sustainability of EU-STREIT PNG's is subject to significant institutional and financial risks which have not been adequately addressed and mitigated in the programme's exit strategy. Moreover, the exit strategy is outdated, mainly procedural focused and has gaps, in particular the absence of formats to develop a comprehensive set of handover agreements that cover the systems and responsibilities to be put in place to sustain main activities under the sub-components. As a result, critical questions regarding post-closure oversight, operation and maintenance of shared assets, and the institutional ownership of value chain enablers remain.

Institutional sustainability risks are, according to Finding 44, compounded by limited operational readiness and coordination capacity at provincial and district levels. This is not aided by the fact the evaluation estimates

overall progress in implementing the exit plan is around 70 per cent to 30/09/2025, indicating the programme is still entrenched in implementation mode and has placed little emphasis on strengthening district administrations. Capacity at the provincial administration level is more evident, but this has not evolved into a fully functioning public service capable of tracking the performance of the programme's main actions, or promoting systematic upscaling of the VCs (18.1.2). This appears to be compounded by weak vertical coordination between national, provincial and district actors. Areas such as data governance for the e-Agriculture strategy, planning and budgeting, and on maintenance of public transport infrastructure were all found to have sustainability issues. Without clearer mandates, performance frameworks and financed action plans, institutional capacity risks remain high.

Risks to the continuation and upscaling of the programme's financial inclusion sub-component appear to be limited for two of the three FSPs (Finding 45). However, outreach and sustainability of rural financial services ultimately depend on the extent to which effective economic incentives for FSPs and behavioural incentives for users are in place. On the supply side, especially in the agent-based model, thin margins in deep rural areas are a common industry challenge for FSPs and often require viability gap funding or higher transaction volumes. The programme has mitigated some of these risks by supporting multiple operational models and engaging FSPs on sustainability strategies, even if provincial and district governments are likely to play only a marginal role in reinforcing these outcomes. On the demand side, sustainability depends on how far VC actors and rural communities retain preferences for cash over digital payments and how digitally and financially literate they become.

The extent to which the financial conditions are in place to sustain the VCs (JC 8.2)

The most significant long-term risk to the programme's sustainability is financial, due to the absence of concrete, costed post-programme funding commitments to support the consolidation, maintenance and scaling of the VCs and their enablers (Finding 46). Despite stated willingness by national and provincial counterparts to sustain programme achievements, this appears to be mainly at the level of absorbing administrative costs, rather than in the form of action plans with allocated budgets and investment pathways aligned with relevant priorities in MTDP IV and provincial planning frameworks (18.2.1).

The extension phase has not been used to formally anchor EU-STREIT PNG within government investment programmes and despite linkages with three private-sector companies to grind cocoa, wider and deeper private sector cyclical investment in developing the cocoa and vanilla trade is not evident. In addition, critical services such as extension, inspection, quality control, marketing support, ICT operations, solar PV maintenance and rural infrastructure upkeep all face high post-closure risk due to a lack of earmarked funding in 2026. This is compounded by two things. First, limited mobilisation of private finance to promote private sector-led initiatives and MSME access to credit through which they could address post-closure action planning and resource mobilisation (18.2.3). Second, high dependency on programme resources limits ownership and innovation.

Finding 47 illustrates how institutional and regulatory misalignment concerning the lack of alignment between the RuTIMS and DWITS administrative procedures applied by the provincial administrations (18.2.2). This limits their integration into provincial plans and budgets, preventing the mobilisation of resources for routine maintenance and future investment. In parallel, the RMG model promoted by the programme is unlikely to receive funding following the introduction of new national regulations requiring road maintenance to be carried out exclusively by registered companies, thus excluding village-assembled RMGs from road maintenance and income generation. These gaps indicate that while technical tools and pilots are in place, insufficient attention has been given to embedding them within legally recognised institutions like DWITS to secure their ownership and use.

Integration of environmental and social safeguards in post-closure plans (JC 8.3)

Finding 48 highlights the programme's exit strategy partially integrates environmental and social safeguard principles for all three VCs. They include application of rehabilitation-based production, adoption of low-energy technologies such as solar dryers (see also JC5.5), and community-based management approaches. However, dialogue on a sustainability strategy and post-closure action plan in which the environmental and social safeguards could be integrated has not yet materialised. As a result, safeguard ownership by national and provincial institutions remains weak, with no evidence of formally adopted environmental or social management frameworks or financed mechanisms to apply them after closure (18.3.1). This gap is most pronounced in the capture fisheries value chain, where safeguards largely focus on equipment efficiency, with little attention to ecosystem-based management, habitat protection, water quality controls or waste management. The final workplan for the extension period (2025-2026) acknowledged this gap, stating key interventions remain to be completed during the extension period to ensure the long-term sustainability of the fisheries VCs. In response, the work plan includes the introduction of climate change adaptation training through, for example the use of FADs, fish traps, and promotion of early warning systems. Nonetheless, wider

ecosystem management (p.6) such as the protection of nursery areas, mangrove protection and restoration, or best practice exchange with Indonesia and other member of the Coral Triangle Initiative was not evident.

Similar risks apply to solar-powered ICT centres and RMGs, where the absence of long-term maintenance plans, a lack of adequate environmental management measures (on e-waste, keeping drains, culverts and bridges clear of sediment, debris and rubbish) and the need for legally recognised governance arrangements are all likely to undermine sustainability. The general lack of attention given to tracking environmental, climate and social indicators with dedicated baselines and targets aligned to national/provincial priorities and targets also remains an important gap that will have a bearing on the programme's sustainability unless this addressed in a sustainability strategy and handover agreement in the closure period.

Finally, **Finding 49** points to significant social and climate-related risks arising from the absence of systematic vulnerability risk assessments, preparedness mechanisms and locally resourced mitigation measures in the run up to the post closure period. Equally, gender equality, youth participation and human-rights-based approaches are only partially integrated in the exit strategy and there appears to be no evidence on how they will be governed, monitored or resourced after programme closure, leaving responsibilities and accountability unclear (I8.3.2). In addition, the absence of explicit measures addressing customary tenure, clan governance and the articulation of rights holders and duty bearers further weakens social sustainability, despite the constitutional relevance of these systems in PNG. Climate resilience risks are heightened by the lack of alignment with national climate risk assessments and CCDA frameworks, and by the absence of post-closure mechanisms such as a sustainability strategy in which climate-resilient resource management is addressed (I8.3.3).

Unless key aspects of climate action in the programme are systematically addressed (in accordance with the country's targets for climate-smart agriculture (CSA), renewable energy, and climate-proofed infrastructure) in a structured and aligned sustainability strategy, the likelihood that climatic shocks, environmental degradation and social exclusion will erode programme gains in the post-programme period remains highly likely. As such environmental risks to sustainability are considered by the evaluation to be moderate-substantial and merit, therefore, full attention by main stakeholders in the sustainability strategy that is to be prepared and adopted before the programme's closure.

3.9 EQ 9 – EU added value

To which extent has the Action added value over and beyond what could have been achieved by the Member States' acting on their own?

EU added value compared to Member State's added value in the agriculture sector (JC 9.1)

Evidence for this JC was collected from the document review, online research on the French and EUD websites in PNG and an interview with a senior representative from the French Embassy, the only EU Member State (MS) to have an active aid cooperation programme in PNG reveals. According to **Finding 50**, EU-STREIT PNG has acted as a coordination platform. The programme demonstrates the added value of EU programmes of this magnitude is that they leverage coordination functions that Member States cannot match.

In terms of size, the EU is able to mobilise large flagship programmes that can attract MS funding, rather than vice-versa. In the agriculture sector France has a total budget of less than EUR 10,000 that has been used to promote cocoa butter production in Central Province. This contrasts with EUR 81.3 million for EU-STREIT PNG. In addition, EU funding has shown it can leverage considerable MS co-funding. This has been demonstrated in the forestry sector, where the Forest Climate Change and Biodiversity (FCCB) initiative funded by the EU (EUR 54.7 million) has resulted in France agreeing to pledge approximately EUR 20 million to PNG's Forests, Nature and Climate initiative and which aims to complement the FCCB's main actions.

The assessment confirms that the EU, particularly through the development cooperation funds and the One UN framework, has greater political leverage than an individual MS like France. As a result, the EU can work with and engage national institutions, promote cross-sectoral reforms and cooperation in areas like e-agriculture and infrastructure development, and encourage alignment with national strategies, which has led to binding institutional or legislative reforms and commitments, as well as contributions to EU initiatives such as the Global Gateway and Team Europe (TE).

JC9.2 National and provincial perceptions of the EU's added value compared to MS

Finding 51 confirms that, at both national and provincial levels, the EU was widely perceived as adding value beyond France's support in PNG due to its Multi-annual Indicative Programme of EUR 177 million for 2021-2027 that covers various sectors including forestry, climate biodiversity, water, governance and civil society support among others. This compares with EUR 50 million for bilateral cooperation that mainly focuses on energy and green finance.

Stakeholders also consider the EU has greater political leverage to engage central institutions on cross-cutting reforms, standards and coordination across sectors, while at provincial level its added value is associated with scale, continuity and visibility, particularly in remote areas where bilateral projects are often smaller, shorter or more fragmented. However, this added value is sometimes perceived as being offset by the complexity of EU-funded delivery modalities. In addition, the EU is in a process of down-sizing and relocating staff to Fiji. As a result, stakeholders consider the EU's added value in PNG will decline over time, unless it uses its coordinating role to bring the MS together to develop cooperation through TEI where they have a competitive advantage, such as in science and technology, green technology/finance and environmental sustainability.

4 Conclusions and recommendations

4.1 Conclusions and corresponding recommendations

The subsequent set of textboxes presents the conclusions and corresponding recommendations by evaluation question (EQ) and criterion.¹⁶

<i>EQ 1: To what extent were the programme objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?</i>	
Conclusion (on relevance)	C1: The programme was highly relevant to the priorities of the PNG government, EU, and implementing partners, but its relevance to beneficiaries was mixed due to limited analysis, baselines, and qualitative data to address their needs, particularly around market integration and institutional capacity to provide reliable and effective planning, coordination and informed decision-making.
Rationale	EU-STREIT PNG was highly relevant in terms of alignment with strategic priorities, needs-based targeting and coherence with EU and UN policies and values, especially for cocoa and the enabling services under SO2. However, contextual factors linked to institutional resource and capacity gaps, weak trade integration, uneven value chain readiness and limited formal synergies with other donor-funded initiatives in PNG, reduced its relevance at the local level, especially beneficiaries participating in vanilla and capture fisheries VCs.
Recommendation(s)	Before closure R1a: Under the oversight of the PSC co-chairs, the PIMU should, within the next six months, prepare and secure the adoption of a comprehensive “STREIT Sustainability Strategy” to guide the handover and post-closure continuation of key programme activities and results. For each sub-component, the strategy should assign clear institutional ownership, assigning co-leads for each sub-component. The co-leaders are responsible for defining roles and responsibilities, resource requirements, and timelines for implementation of the strategy. A key element of the strategy should be the embedding of all main actions in the strategy in government policies, programmes, and budgets to support sustained delivery beyond programme closure. The recommended actions in the sustainability strategy are provided under R2-R10. Future programming and design phases R1b: The development of commodities should ensure the following actions are included in the design phase: ▪ An evidence-based theory of change is established, (mapping causal pathways between barriers, inputs, market demand, trade dynamics, value chain readiness). ▪ The logical framework integrates not only quantitative, but qualitative indicators to track transformational changes that are of strategic interest (market integration, trade policy, reinvestment levels, institutional capacity, synergies with government programmes).

¹⁶ Except for EQ 2, where conclusions and recommendations are presented for each value chain.

	- Key cross-cutting objectives are fully integrated, based on a gender and youth strategy informed by a baseline study and contextual analysis that includes a review of local dynamics including cultural norms, local knowledge, and community capacity. - Budgets are properly costed to cover not only implementation needs but also qualitative monitoring needs (household surveys, case studies, online applications), and specific funding to integrate cross-cutting objectives (gender equality, women's empowerment, environmental and social safeguards).
Priority level	R1a and R1b: Moderate (desirable action to reduce target-driven approaches).
Institution(s) responsible for R1	PIMU-DNPM (proposed co-leads), PSC members and their respective institutions

EQ 2: To what extent has the programme increased economic returns and opportunities for cocoa, value chains actors?

Conclusion – cocoa VC (on effectiveness)	C2: The programme's support to improve cocoa bean yields and quality, complemented by high international cocoa prices, has increased economic returns for cocoa farmers. However, improved market channels have not yet materialised, because the three companies engaged in developing the grinding segment of the value chain are not yet operational.
Rationale	Resilience of the value chain remains weak and linkages between producers, fermentaries and grinders/exporters has not been adequately strengthened so far to mitigate possible price decreases and ensure sustainability.
Recommendation(s)	Before closure R2a: For the cocoa VC the sustainability strategy should embed the following proposed steps in relevant programmes of the Cocoa Board under the framework of the "Cocoa Industry Development Strategy" to guide the transfer process and actions to be consolidated in the post-closure phase: - First, the programme, the CB, and the provincial administration should carry out a participatory, review of the organisational structure of cocoa farmer groups, in particular their relationship with fermentaries, to ensure a formal agreement is reached with the farmer groups on record keeping in line with IPA requirements, transparency and fairness regarding member rights and division of profits. - Second, the programme, the CB and the three processing companies should design and start populating a database to develop a low-cost traceability system for fermentaries that produce good quality cocoa beans, which can be continued by processors and the CB beyond the programme. - Third, the programme should oversee that Memorandums of Understanding (MoUs) are signed between selected fermentaries and all three processors (the buyers) to supply cocoa beans in accordance with their requirements regarding quantity, quality and taste profiles. - Fourth, in the handover agreement with CB and the provincial authorities, the steps to be taken to provide adequate extension and technical support for farmers and fermentary operators are set out and resources allocated to ensure the abovementioned transparency and quality controls are actively applied and monitored in line with the buyers' specifications. - Fifth, ensure the LMS includes interactive online training with cocoa producers that includes a joint review on market feedback, on trends in relation to quality, prices, buyer satisfaction, etc. on trade barriers, alternative markets, etc. Future programming and design phases R2b: Ensure the design of all programmes promoting commodity VCs is based on a sound feasibility study that includes market and trade analysis.
Priority level(s)	R2a: High (immediate action over the next six months) R2b: Moderate (integrate into the next MIP)

Institution(s) responsible for R2	R2a: FAO and CB (proposed co-leads), provincial administration/DAL, IPA, processors, producer groups, Unitech. R2b: EU, DNPM, DAL (proposed lead)
Conclusion – vanilla VC (on effectiveness)	C3: The programme has had limited impact on increasing economic returns for vanilla producers, because support has coincided with a sustained decline in international prices since 2020 and structural barriers in the VC persist. Nonetheless, vanilla offers potential to increase economic returns for farmers in the Sepik region, if these barriers are addressed.
Rationale:	The programme's effectiveness was limited by declining global prices that offset productivity gains, while structural weaknesses in market access, quality control, and group organisation limited the ability of farmers to secure stable returns.
Recommendation(s)	Before closure R3: The Sustainability Strategy should integrate the following steps into a relevant national programme that directly supports the implementation of the PNG Spice Industry Policy (foreseen for approval in early 2026). The ET suggests the AgriConnect programme (2024-2033), although the co-leads will take the final decision on this. The key steps to support the sustainability of the vanilla VC in the Sepik region are: - First, pilot a vanilla quality improvement strategy in coordination with DAL, SIB and a small selection of vanilla producer groups that already have an export buyer in place. The training programme should aim to clarify the requirements of the buyer and the vanilla market and provide guidance to farmers on choosing either: (i) to improve conditioning/curing by themselves according to market requirements, or (ii) to engage with a specialist 'conditioner' who can carry out curing/conditioning according to market requirements. In the case of the latter the programme could consider contacting Kamapim Limited in Madang Province and the Kutubu Vanilla Cooperative Society Ltd supporting smallholder vanilla farming in the Mubi Valley and Kutubu in Souther Highlands Province, which is reported to be buying green vanilla beans. - Second, based on a participatory approach engaging the programme, SIB, DAL, the private sector and producer groups, should design and start populating a low-cost traceability system for quality vanilla growers, which can be continued by the SIB and vanilla exporters beyond the programme. - Third, the programme should oversee that MoUs are signed between the SIB and the buyers engaged in outlining their requirements regarding quantity, quality and taste profiles. - Fourth, in the handover agreement with SIB and the provincial authorities, the steps to be taken to provide adequate extension and technical support for vanilla farmer groups should be set out and agree on the resources to be allocated to ensure quality controls are actively applied and monitored in line with the buyers' specifications. - Fifth, ensure the LMS includes interactive online training with vanilla producers to encourage joint review on market feedback, on trends in relation to quality, prices, buyer satisfaction, etc., trade barriers, alternative markets, etc. Future programming and design phases: See R2b
Priority level	High (immediate action over the next six months)
Institution(s) responsible for R3	FAO and SIB (proposed co-leads), provincial administration/DAL, existing private sector partners, UniTech, producer groups
Conclusion – fisheries VC (on effectiveness)	C4: The programme has only marginally increased economic returns and opportunities for fisheries VC actors. Similarly, tangible improvements in nutrition, especially among children, is not evident except in remote rural communities where low-input, low-output fishponds have provided households with access to fish for the first time. Overall, the programme has not addressed key barriers, in particular

	limited market access, to deliver sustained improvements in incomes, livelihoods, and nutrition, especially among capture fisheries groups.
Rationale	The programme's ToC was based on untested assumptions that the provision of productive assets and upstream support would translate into improved nutrition and incomes without sufficiently addressing binding constraints that prevent sustained improvements in income and nutrition from materialising.
Recommendation(s)	Before closure R4: It is recommended that the following steps to support the sustainability of the fisheries VCs in the Sepik region are embedded in programmes directly supporting the implementation of the National Fisheries Strategic Plan (2021-2030): ▪ First, identify viable market linkages and aggregation systems for fish products, supported by basic cold chain and transport solutions. ▪ Second, identify the following: – For aquaculture, an action plan to provide access to quality inputs (feed and fingerlings) and basic advisory services on fishpond management at strategically selected sites; these sites should be where demand is greatest and where the programme has had most success in developing hatcheries. – For riverine communities, a post-harvest handling and simple processing action plan for fisher groups who have most potential to sell into markets identified in the first step. – For coastal fisheries, a catch management and quality preservation plan for selected fisher groups who are well organised to meet the needs of one or more markets identified under the first step. ▪ Third, focusing only on capture fisheries, establish a pilot initiative based on the signing of forward purchasing agreements between a small number of selected buyers and organised riverine/coastal groups who can supply minimum volumes of fish according to the basic standards, requirements and timelines of the buyer (avoiding fixed quotas, prices and delivery dates). ▪ Fourth, identify a training programme to strengthen fisheries extension services and embed the above recommendations in the provincial administration's planning and budgeting to support it's the consolidation and scaling in PNG. A key area of training should engage business expertise to provide guidance on key issues such as developing the internal governance of the fisher group, emphasising the importance of routine maintenance, the opening of a bank account, carrying out book-keeping, upholding transparency, reinvestment levels, etc. ▪ Fifth, incorporate all four steps, including lessons learned and good practices into training and scaling initiatives through the LMS and other platforms. Future programming and design phases: None
Priority level	High (to avoid losing vital institutional memory before closure)
Institution(s) responsible for R4	FAO and provincial administrations (proposed co-leads), private sector, NFA, fisher cooperatives

EQ 3: To what extent has the programme strengthened and improved the efficiency of value chain enablers?

Conclusion – enablers (on effectiveness)	C5: EU-STREIT PNG has made an important contribution to strengthening and improving the efficiency of value chain enablers at the community level through the rapid entry of rural financial services, renewable energy installations, and climate-resilient transport infrastructure. The main outcomes of this contribution have been, on the one hand, increased connectivity and access to basic services, finance, information and, on the other, important co-benefits, in particular a significant reduction in operating and logistical costs for previously isolated farming communities. However, these gains remain localised and uneven, in part due to limited advances in reforming the enabling environment, although an important
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	exception has been the financial inclusion sub-component, where the programme has directly facilitated the development of the National Financial Inclusion Strategy (NFIS) 2023-2027 and regulatory reforms that allow rural communities greater access to financial services and products.
Rationale	VC enablers played an important role in reducing operational and logistical costs for rural communities but limited systemic reforms and uneven implementation have made it harder to sustain these gains, except in financial inclusion where policy and regulatory progress was achieved.
Recommendation(s)	Before closure For the ICT sub-component, it is recommended the following steps to be included in the Sustainability Strategy should be fully embedded in DICT's Digital Government Plan (2023-2027) where the ICTs could be promoted in PNG as part of ITU's Smart Villages and Smart Islands Initiative. R5a (ICTs and PV systems): ▪ All 21 ICT centres have business plans adopted and ready to start implementation immediately after their internet connection has been established. These plans should include the identification of an IT specialist who can provide on-demand service. ▪ Assist the management committee of each of the nine PV systems installed in public facilities to adopt and apply a PV system operation and maintenance management plan as soon as possible. The plan should specify the names and numbers of two contact points that can be reached by phone on-demand and must include two electricians, and two spare part suppliers, plus if possible two e-waste disposal experts. ▪ Assist DICT/NICTA and UniTech to fully align the online training programmes foreseen under the LMS with the Digital Government Plan so that UniTech can be designated as a lead institution for online VC capacity building linked to the implementation of the respective policies and programmes promoting commodities like cocoa and vanilla. ▪ Ensure UniTech has the resources to develop and deliver the online training programmes proposed for the three VCs promoted by EU-STREIT PNG, so that it can promote itself as a VC training hub. To achieve this, it is recommended ITU provides these resources under its smart villages and islands initiative in coordination with DICT/NICTA. For the transport infrastructure, the following proposed steps should be fully embedded in the Provincial Road Maintenance and Feeder Road Strategy under the framework of the Connect PNG Development Programme (2020–2040): R5b (transport infrastructure): ▪ First and foremost, ensure the two Draft Provincial Transportation Master Plans developed under EU-STREIT PNG are integrated into the current Provincial Development Plans, so that they qualify for funding to cover first priority rural road maintenance and rehabilitation in the Sepik region ▪ Second carry out a communication campaign to inform voluntary members of the RMGs that they must either join a registered road maintenance company or establish their own if they wish to continue generating an income from road maintenance. The communication campaign should aim to: - Identify two groups that are most motivated and qualified to: (i) establish a community-based road maintenance company that incorporates RMG members; (ii) be taken on as sub-contractors for a private company that wishes to have its own RMGs in place to provide spot maintenance services for the provincial government. - Provide inputs to ILO and DoWH representatives in the Sepik region on the type of training courses required to: (i) establish a private spot maintenance company, (ii) become a sub-contractor; (iii) promote private companies to take on and train RMGs as part of its road management and maintenance services to demonstrate their commitment to generating local employment.

	- Engage UniTech, or another technical and vocational education and training centre, in the development and delivery of these training courses as part of a strategy to develop a VC enabler training hub to support all provinces apply the Provincial Road Maintenance and Feeder Road Strategy. ■ Third, in the event the second step is implemented, DoWH and DWITS should lead the updating of the provincial road maintenance policy in East Sepik and Sandun in which preference will be given to recruiting rural road maintenance services that prioritise local employment. Future programming and design phases: None
Priority level	R5a and R5b: High, R5c: Moderate
Institution(s) responsible for R5	For the ICTs and PV systems: DICT and ITU (proposed co-leads), NICTA, NEA, ICT management committees, provincial administrations, private sector, FAO, Unitech. For transport infrastructure: DoWH-DWITS and ILO (proposed co-leads), provincial administrations, RMGs, privates sector, UniTech, TVET centres

EQ 4: How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?

Conclusion – Gender and youth (on effectiveness)	C6: EU-STREIT PNG achieved significant advances in gender equality and youth empowerment, particularly in participation, skills development, and institutional frameworks. The programme delivered these advances in line with the Gender and Youth Inclusion Strategy and Action Plan and played an important role in establishing the first operational District Youth Councils in the Sepik region. In addition, it has made an important contribution in supporting DAL in the ongoing development of PNG's first National Women and Youth in Agriculture Policy. However, deep-rooted cultural norms, male-dominated cooperative governance, limited control over income and productive assets, and barriers limiting access to ICT and banking have constrained the translation of participation and skills gains into sustained decision-making power and economic benefits for adult women. This is particularly the case in the cocoa and vanilla VCs, with progress more evident in fisheries, MSMEs, and newly formed groups.
Rationale	The programme was effective in mainstreaming women and youth participation in skills development, strengthening of youth institutions and promoting agriculture policy reform. However, these gains have not fully translated into economic empowerment, nor decision-making powers for women, mainly because structural socio-cultural barriers remain steadfast in rural areas. As a result, sustaining and building on these gains is still required, but this is unlikely without continued external support and limited provincial government capacity and resources.
Recommendation(s)	Before closure R6a: The following steps to be included in the sustainability strategy should be embedded in the National Women and Youth in Agriculture Policy and focus on strengthening institutional sustainability and economic outcomes of gender and youth programming beyond the programme. Key steps are: ■ Formalising partnerships over the next nine months with provincial governments to ensure the implementation of the National Women and Youth in Agriculture Policy is embedded in provincial development plans from 2027 onwards. ■ Ensure the GALS knowledge is rolled out from 2027 in the provincial development plans, so that it systematically reaches communities through ToT approaches integrated into the extension services of the provincial administration.

	Future programming and design phases R6b: Ensure future programmes, transition from gender mainstreaming to include targeted interventions addressing women's and youth's differentiated livelihood needs and priorities. To achieve this, it is important to identify and address structural barriers to women's economic autonomy through income control interventions and women-led marketing groups.
Priority level	R6a and R6b: High
Institution(s) responsible for R6	R6a: DAL and PIMU (proposed co-leads), Provincial Community Development Departments of East Sepik and Sandaun, National Youth Development Authority, CSOs R6b: DNPM and DAL

EQ 5: How effectively did the project identify and address environmental risks, and to what extent did it promote environmental sustainability and adaptation to climate change to reduce the vulnerability of the target population in East Sepik and Sandaun provinces?

Conclusion – Environment and climate change (effectiveness)	C7: The programme has effectively identified and addressed key environmental and climate risks by embedding rehabilitation-based production, climate-smart practices, climate-proofed infrastructure, and solar energy solutions, contributing to reduced deforestation, lower carbon emissions, and improved resilience in Sepik and Sandaun provinces. However, weak environmental and climate monitoring, limited ecosystem-based adaptation measures, and insufficient institutionalisation of risk management have restricted the programme's capacity to learn and report on the outcomes of its environmental and climate actions.
Rationale	Lack of outcome monitoring and institutional capacity to demonstrate environmental and climate outcomes.
Recommendation(s)	Before closure R7: The Sustainability strategy should include the following priority action on the grounds it underpins the sustainability and resilience of the VCs and VC enablers: ▪ The programme should recruit an expert to assess the vulnerability and climate risk assessment conducted in 2017 by CCDA, UNDP and Adaptation Fund and develop risk maps for the two provincial administrations to guide the integration of climate resilience into its development planning for the VCs and road sub-components from 2027. ▪ The programme should coordinate with UniTech on developing an online training course on the application of environmental and climate risk management in provincial development planning tasks relating to VC development and enablers. Future programming and design phases: None
Priority level	High
Institution(s) responsible for R7	Provincial administrations and PIMU (proposed co-leads), DNPM, DAL, CEPA, CCDA, UniTech

EQ 6: To what extent was the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

Conclusion (on efficiency)	C8: The governance structure was appropriate at the strategic level but inefficient at operational levels, where fragmented roles, sector-based coordination and differing UN procedures limited One UN delivery. Coordination and M&E effectively tracked outputs and accelerated implementation but remained reactive and compliance driven, contributing little to joint learning or outcome level decision making.
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Rationale	The multi-partner governance structure and agency-specific procedures placed greater emphasis on target delivery and administrative compliance than on integrated coordination, outcome monitoring and joint learning, which limited the practical application of the One UN approach as a unified implementing partner.
Recommendation(s)	Before closure: None Future programming and design phases R8a: Future programmes in PNG should strengthen integrated coordination mechanisms by: ▪ Simplifying the multi-partner governance structure. ▪ Introducing clearer joint operational guidance that requires full cross-sector planning, joint-implementation and collective decision making. ▪ Ensuring these actions are fully integrated in UN Contribution Agreements to ensure the One UN delivers a “one approach” that includes pooled procurement opportunities. R8b: Future programmes that have explicit outcomes incorporated, should ensure their M&E systems are outcome-oriented, have baselines, and are tracked annually from mid-term to promote learning, joint-review and adaptive management to deliver transformational change (foreseen in the Theory of Change).
Priority level	R8a and R8b: Moderate
Institution(s) responsible for R8	DNPM, UN Country Representative

EQ 7: To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?

Conclusion (on efficiency)	C9: Overall, the programme mobilised sufficient financial and human resources and demonstrated capacity to disburse funds and deliver outputs from 2024 onwards, supported by stable staffing and targeted adaptive management. However, efficiency was constrained by a lack of internal analysis on cost-efficiency and ROI, reactive rather than forward looking adaptive management, and fragmented, rather than coordinated procurement plans. Moreover, this approach to procurement contributed to delays and, in some cases, resulted in incomplete or incompatible equipment that required additional resources to resolve.
Rationale	Staffing capacity and budgets were sufficient to accelerate spending and output delivery, especially from 2024, but lacked systematic cost and value for money analysis, proactive financial management and harmonised procurement procedures to deliver efficiently.
Recommendation(s)	Before closure: None Future programming and design phases R9a: Future programmes funded by donors and development banks in PNG should incorporate an integrated financial and results management framework in their design and implementation in order planned and actual expenditure to outputs and outcomes (at sub-component level). In this way annual analysis of unit costs, cost-efficiency and ROI can be conducted to support informed decision-making and adaptive management decisions R9b: The One UN agencies should establish a coordinated, inter-agency procurement approach to improve efficiency and value for money. Specifically, they should: ▪ Develop and implement joint procurement plans that identify opportunities for economies of scale, harmonised quality standards, shared post-sales services and guarantees, coordinated sourcing of spare parts, among others. ▪ Employ a qualified procurement specialist with demonstrated experience in international tendering to oversee and ensure compliance during joint procurement processes.

	- Initiate a structured inter-agency dialogue, led by senior management, to review and reform Contribution Agreements for One UN initiatives, with the aim of enabling pooled funding mechanisms and more flexible resource allocation to deliver improved services for donors like the EU. - Develop and apply shared procurement tools, framework agreements, joint market assessments, shared monitoring systems, and parallel common reporting formats in addition to internal reporting needs, among others.
Priority level	R9a: Moderate / R9b: High
Institution(s) responsible for R9	DNPM, EU, UN Country Representative

EQ 8: What are the financial, institutional, social, and environmental risks to sustaining project results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the project's achievements?

Conclusion (on sustainability – EQ 8)	C10: While there are positive localised results, sustainability remains uncertain in the absence of costed post-closure arrangements and clearly defined institutional ownership guided by a Sustainability Strategy integrating environmental, social and climate safeguard.
Rationale	Despite substantial expenditure and partial safeguard integration during implementation, the programme has not secured post-programme funding and support that is fully anchored in government programmes and risk-informed mechanisms to operate, maintain and scale results after closure.
Recommendation(s)	Before closure R10a: The PSC considers an extension to 31/12/2026 to facilitate the development and endorsement of the “STREIT Sustainability Strategy” recommended in R1. This extension is considered essential to enable an orderly and structured closure and transfer process takes place. Running parallel to the development of this strategy is the need to establish the following actions over the next ten months (to November 2026): - Identify, consult and finalise binding handover agreements that cover relevant points in R2-R7 and which include costed post-closure action plans, clear institutional mandates, governance arrangements and minimum funding commitments for operating and maintaining the VCs and enablers. In the specific case of the FSPs, this would be replaced with business continuity plans. - Strengthen capacity transfer by prioritising training on governance, financial management, O&M, data governance and safeguard compliance for provincial and district staff. - Recruit a short-term expert to oversee the coherence on the development of the Strategy and the handover agreements, paying particular attention to facilitating the implementation under R2, so forward purchasing agreements proposed with the cocoa processors are in place before closure. Future programming and design phases R10b: Secure time-bound institutional commitments from national and provincial authorities to fund the operation, and maintenance of priority VC enablers that directly support the four private sector-led initiatives consolidate road access, financial inclusion, ICT training and business services.
Priority level	R10a and R10b: High
Institution(s) responsible for R10	PIMU, provincial administrations and DNPM (proposed co-leads), DAL, NFA, CIFA, DoWH, NICTA/DICT, ENA, district administrations, NEC (to formally institutionalise the programme's main sub-components into national plans and programmes)

EQ 9: To which extent has the Action added value over and beyond what could have been achieved by the Member States' acting on their own?	
Conclusion (on EU added value – EQ 9)	C11: The EU's added value in PNG stems from its scale, integrated programmes, coordination capacity, and political leverage, which enable broader coverage, policy alignment, and co-funding with Member States. At both national and provincial levels, stakeholders recognize the EU's greater visibility, continuity, and influence across sectors, though its complex delivery and downsizing may reduce this advantage over time.
Rationale	The EU's larger scale, integrated approach, and convening power allow it to leverage more political and economic influence than individual Member States.
Recommendation(s)	Before closure: None Future programming and design phases R11: The EUD should explore developing its coordinating role to bring Member States together in PNG and surround countries to promote joint funding initiatives like TEI and provide grant funding to kick start TEI.
Priority level	Medium
Institution(s) responsible for R11	EU

4.2 Lessons learned

The following table summarises the main lessons learned from the evaluation, based on an analysis of what worked and what did not work in the different programme components and at overall programme level.

Table 3: Lessons learned

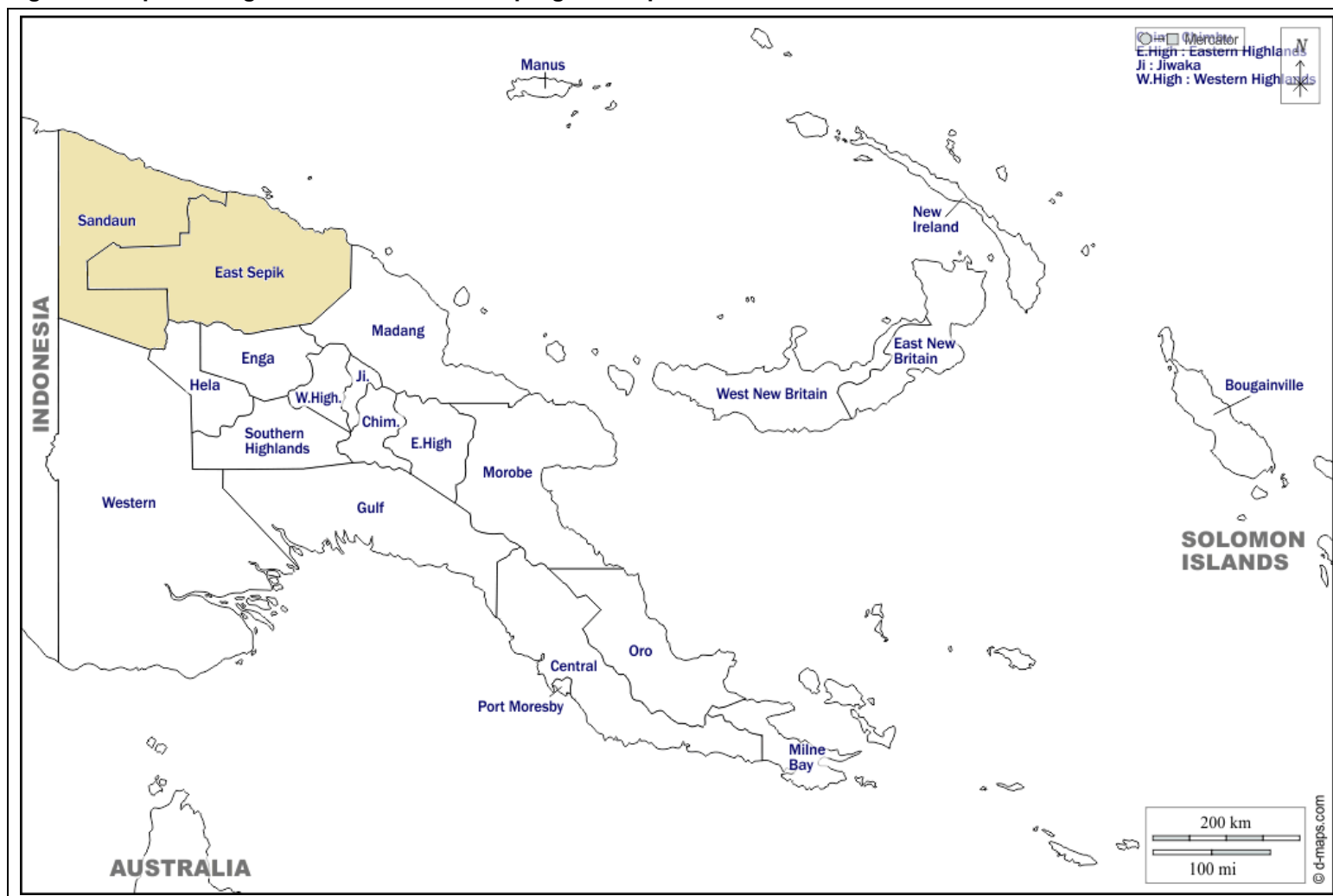
Number of lesson and underlying EQ	Lesson learned
L1 (from EQ 1)	Programmes are more likely to achieve lasting impact when their design aligns with existing systems and local capacities, and when their geographical scope, duration, and resources reflect logistical, institutional, and socio-cultural realities. Realistic planning is critical to ensuring sustainability and avoiding over-ambitious targets.
L2 (from EQ 2)	Value chain interventions only translate into sustained economic returns when production support in commodities like cocoa and vanilla is aligned with favourable market conditions, strong market linkages and a focus on quality.
L3 (from EQ 2)	Focusing capture fisheries interventions solely on household nutrition is insufficient, because lasting improvements in the livelihoods and nutrition of fisher households depend on addressing their economic needs, notably improved market access, reliable cold chains, price stability, and sustainable management of natural resources.
L4 (from EQ 3)	Strengthening financial inclusion in rural areas from a near-zero baseline typically requires external support to de-risk market entry and expansion of FSPs. This can be achieved through a combination of grant agreements, which guarantee time and resources for FSPs to explore and learn about new markets, as well as complementary actions aimed at reducing market barriers on the demand side.
L5 (from EQ 3)	Early and continuous alignment of infrastructure interventions with prevailing sectoral policies and administrative rulebooks enhances the likelihood of continuation and upscaling post programme.
L6 (from EQ 3)	Accompanying equipment supply (PV or ICT) with the build-up and training of local competences and skills along the whole system value chain from designer, installer, supplier and fitter increases the sustainability of maintenance and replication capacity.

Number of lesson and underlying EQ	Lesson learned
L7 (from EQ 3)	Rural transport investments for cocoa, vanilla and fisheries VCs require infrastructure selection to be explicitly driven by the spatial concentration of producer groups rather than by network coverage or administrative considerations alone.
L8 (from EQ 3)	Involving people from different villages served by a same rural road to join forces to maintain the road after rehabilitation helps create inter-village cooperation and alleviate risk of inter-village conflict.
L9 (from EQ 3)	Sustained value chain benefits from roads and airstrips depend on embedding maintenance arrangements and financing mechanisms within provincial administrative systems from the outset, because short-term efficiency gains tend to dissolve quickly without institutional support and guidance.
L10 (from EQ 4)	Participation alone is insufficient for empowerment. Complementing participation targets with deliberate interventions addressing income control, asset ownership, and transformation of household governance norms, coupled with dedicated budgets, specialist staff, and different programme architecture, helps ensure women's economic empowerment matches gains in skills and confidence.
L11 (from EQ 4)	Targeted, value chain-specific inclusion strategies that include developing access to new services, roles and decision-making are essential. Gender and youth outcomes are strongest where roles align with existing practices (e.g. fisheries) or where institutions are newly formed.
L12 (from EQ 5)	Future programmes that embed environmental and climate design, monitoring, and risk management within provincial and national institutional and policy frameworks are more likely than standalone programmes to develop the ownership they need to secure their long-term sustainability and upscaling of environmental and climate good practices.
L13 (from EQ 5)	Proactive programme approaches that prioritise regenerative farming, ecosystem restoration, and climate smart production systems offer more robust solutions to reducing environmental risks and long-term climate vulnerability than reactive, input driven interventions focused mainly on achieving targets
L14 (from EQ 6)	Clear and well-functioning strategic governance does not automatically translate into effective joint implementation unless binding joint-guidance and harmonised agency procedures and monitoring are in place and encourage proactive decision-making.
L15 (from EQ 6)	An output-focused M&E system strengthens accountability but results in over-emphasis on number crunching to satisfy reporting requirements, rather than the needs of local stakeholders and end beneficiaries who know what works and does not.
L16 (from EQ 7)	Accelerating implementation should be based on prior analysis of cost-efficiency, cost-effectiveness and ROI to ensure informed decisions are taken on optimising resources to deliver change and long-lasting impact.
L17 (from EQ 7)	Coordinated procurement planning is needed to enhance efficiency and translate EU funding into outcomes that benefit the target population in a timelier manner.
L18 (from EQ 8)	Without an integrated sustainability framework that embeds financial planning, safeguard enforcement and climate risk management, programme investments remain vulnerable to erosion once external support ends.
L19 (from EQ 8)	Private sector engagement remains difficult to mobilise when programmes prioritise asset delivery and public systems over the development of bankable partnerships, clear commercial incentives and risk-sharing mechanisms, thereby constraining economic transformation in the Sepik region.
L20 (from EQ 8)	FSPs face a trade-off when establishing bank access points. Access points in central locations that invest in ties with communities are more stable but are costly to scale, whereas access points in rural locations can be scaled rapidly at little cost to expand reach but require external financial support to remain economically viable.

5 Annexes

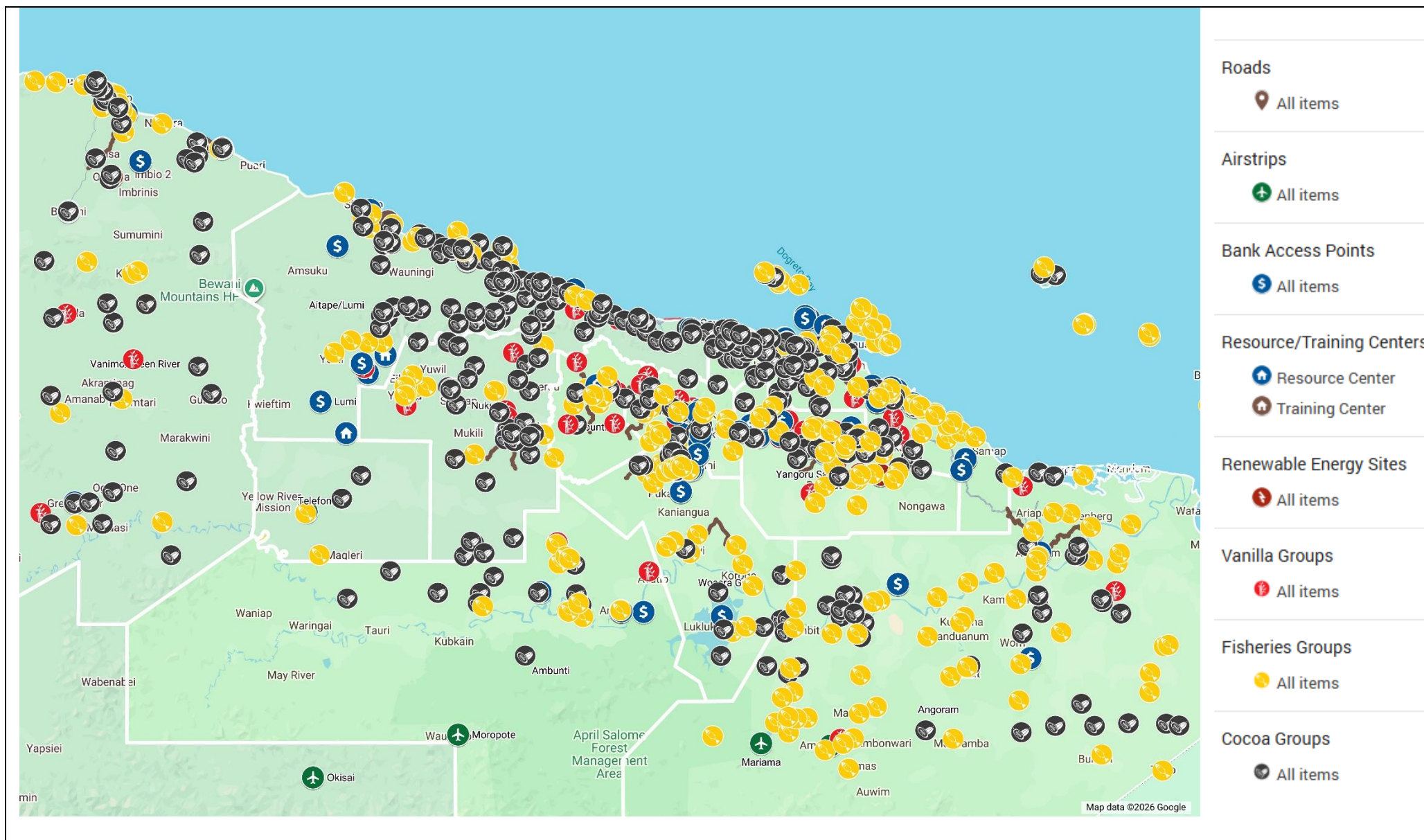
Annex A. Maps of the intervention areas and outputs

Figure 2: Map showing the location of the two programme provinces in PNG



Source: Evaluation team.

Figure 3: Map of programme outputs in East Sepik and Sandaun provinces



Source: STREITMIS (consulted 31 Jan 2026). Notes: Bank access points incomplete.

Annex B. Logframe with targets and achievements

Table 4: Logframe up to sub-output level (with targets and achievements until Sep 2025)

Impact (Overall Objective)	Outcomes (Specific Objectives)	Outputs	Sub-outputs	Units	Overall target	Overall achievement by 30/09/2025
Increased sustainable and inclusive economic development of rural areas						
	SO1: Increased economic returns from three selected value chain					
		1.1: Increased Sustainable Production and Inclusiveness of the Cocoa value chain				
			1.1.1 Cocoa Value Chain study updated and baseline data collected	Reports	1	2
			1.1.2 Cocoa budwood gardens and nurseries established and/or upgraded in strategic location	Gardens/nurseries	630	975
				Seedlings	4,000,000	3,100,139
			1.1.3 Cocoa blocks rehabilitated	Area (ha)	6,400	4,960
			1.1.4 Sustainable/improved climate-change adapted practices promoted	VC actors	10,000	12,888
			1.1.5 Fermentaries Enterprises improved and/or rehabilitated	Fermentaries	500	500
			1.1.6 Enhanced Market access and linkages of value chain actors at provincial/national level	Partnerships	300	363
			1.1.7 Women and youths engagement in and benefitting from cocoa value chain activities strengthened	Groups	120	55
				%	30%	15%
				%	40%	
			1.1.8 Capacity for adaptive research and cocoa demonstration facilities of regional technical institutions strengthened	Persons	200	252
				Centres	10	22
				Technologies	2	2
		1.2: Increased Sustainable Production and Inclusiveness of the Vanilla value chain				
			1.2.1 Vanilla Value Chain study conducted and baseline data collected	Reports	1	2
			1.2.2 Existing Vanilla block expanded/improved for farm families	Households (HHs)	6,000	5,844
			1.2.3 Sustainable/improved climate-change adapted practices promoted	VC actors	5,000	6,514
			1.2.4 Improved drying/curing, packaging and storage of Vanilla beans developed and promoted	Households	5,000	5,847
			1.2.5 Enhanced Market access and linkages of value chain actors at provincial/national level	Groups	100	96
			1.2.6 Women and youths engagement in and benefit from vanilla value chain activities strengthened	Groups	40	8
				%	35%	8%
				%	45%	
			1.2.7 Capacity for adaptive collaborative research and vanilla demonstration facilities of regional technical institutions strengthened	Persons	150	1,082
				Centres	4	22
				Technologies	2	2
		1.3: Increased Sustainable Production and Inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)				
			1.2.1 Fishery Value Chain study conducted and baseline data collected	Reports	4	4
			1.3.2 Fisheries information (FIS) and marketing system (MIS) established and related capacity built	MIS	1	1

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Impact (Overall Objective)	Outcomes (Specific Objectives)	Outputs	Sub-outputs	Units	Overall target	Overall achievement by 30/09/2025
			1.3.3 Smallholder aquaculture and fisher households supported for improved household income and food and nutrition security	Groups	6,400 HHs (320 groups)	7,649 HHs (210 groups)
			1.3.4 Enhanced post-harvest processing, market access and trading activities supported	Groups	100	34
			1.3.5 Climate proofing aquaculture systems, riverine and coastal capture fisheries supported	LoA's	1	1
			1.3.6 Nutrient-rich diets including fish and fish-based products promoted in fishers households for enhanced food and nutrition security especially for women of reproductive ages and children under 2 years in the Sepik	Assignments and campaigns	2	2
			1.3.7 Women and youth participation in fisheries Value Chain mainstreamed	Groups	129	-
				%	30%	-
				%	40%	-
SO2: Strengthened, climate resilient and more efficient value chain enablers						
		2.1: Conducive business, policy and regulatory environment for sustainable rural agripreneurs and MSME's established				
			2.1.1 Support for the uptake and implementation of relevant agricultural policies, legislations and development plans by the GoPNG promoted	??	7	3
			2.1.2 Implementation of E-agriculture and climate-smart strategy supported	Strategy	2	2
			2.1.3 Improved financial services ecosystem through policy and innovation led interventions	Policies/legislation	1	1
			2.1.4 Support provided at policy and strategy level to GoPNG on inclusion of food and agriculture in renewable energy development	Policies/legislation	1	1
		2.2: Value chain support services strengthen and resilient to climate change impacts				
			2.2.1 Enhanced access to financial services to rural communities through branchless banking and digital financial services	Access points	264	305
				Bank accounts	100,000	119,530
			2.2.2 Improved breadth and depth of appropriate financial products and services focused on the VCs	Products/service providers	3	3
			2.2.3 Digitalized payment flows in the VCs	Changes in no. and volume of digital payment transactions	20%	Number: 295,643
						Volume: USD 865,124
			2.2.4 Build capacity of VC actors on entrepreneurship, Financial and Digital Literacy strengthened	Stakeholders	500	1,500
			2.2.5 Expanded network coverage across the Sepik region for better data management and accessibility to agriculture knowledge and support services including mobile banking	KPIs	2	2
			2.2.6 Implementation of E-agriculture and climate-smart strategy supported	Solutions	1	6
				Databases	10	4
		2.3: Increased production of, and access to renewable energy systems				
			2.3.1 Feasibility of/investment options for renewable energy generation systems assessed	Reports	9	9
			2.3.2 Solar power based renewable energy generating systems established in public facilities in West and East Sepik	Facilities	6	9
			2.3.3 Electricity from renewable energy sources generated for the rural households in the programme area with programme support	kWh/fay	195	1,930

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Impact (Overall Objective)	Outcomes (Specific Objectives)	Outputs	Sub-outputs	Units	Overall target	Overall achievement by 30/09/2025
			2.3.4 Rural population, MSMEs, agripreneurs, female headed households and youths in the Sepik region supported to access programme generated electricity from renewable energy	Beneficiaries	550	517
			2.4: Improved and climate-proof rural transport infrastructure			
			2.4.1 Conduct feasibility studies for investments on road and air transport in the Sepik region	Reports	25	24
			2.4.2 Farm-to-market feeder roads and other access ways rehabilitated and climate proofed	Number of roads	13	9
				Km of roads	207	170
			2.4.3 Strengthened capacities of public and private sector stakeholders on road rehabilitation and maintenance works for increased employability among beneficiaries, especially for women and youth	Stakeholders	984	1,234
			2.4.4 Communities empowered to manage and maintain farm-to-market feeder roads	Km	312	312
				RMGs	160	307
			2.4.5 ICT Based PNG Rural Transport Information Management System (PNG RuTIMS) set up and used for road asset management	ICT technologies	1	1

Source: EU-STREIT PNG Logframe September 2025.

Annex C. Reconstructed Theory of Change

Figure 4: Reconstructed Theory of Change: context, barriers, and results chain

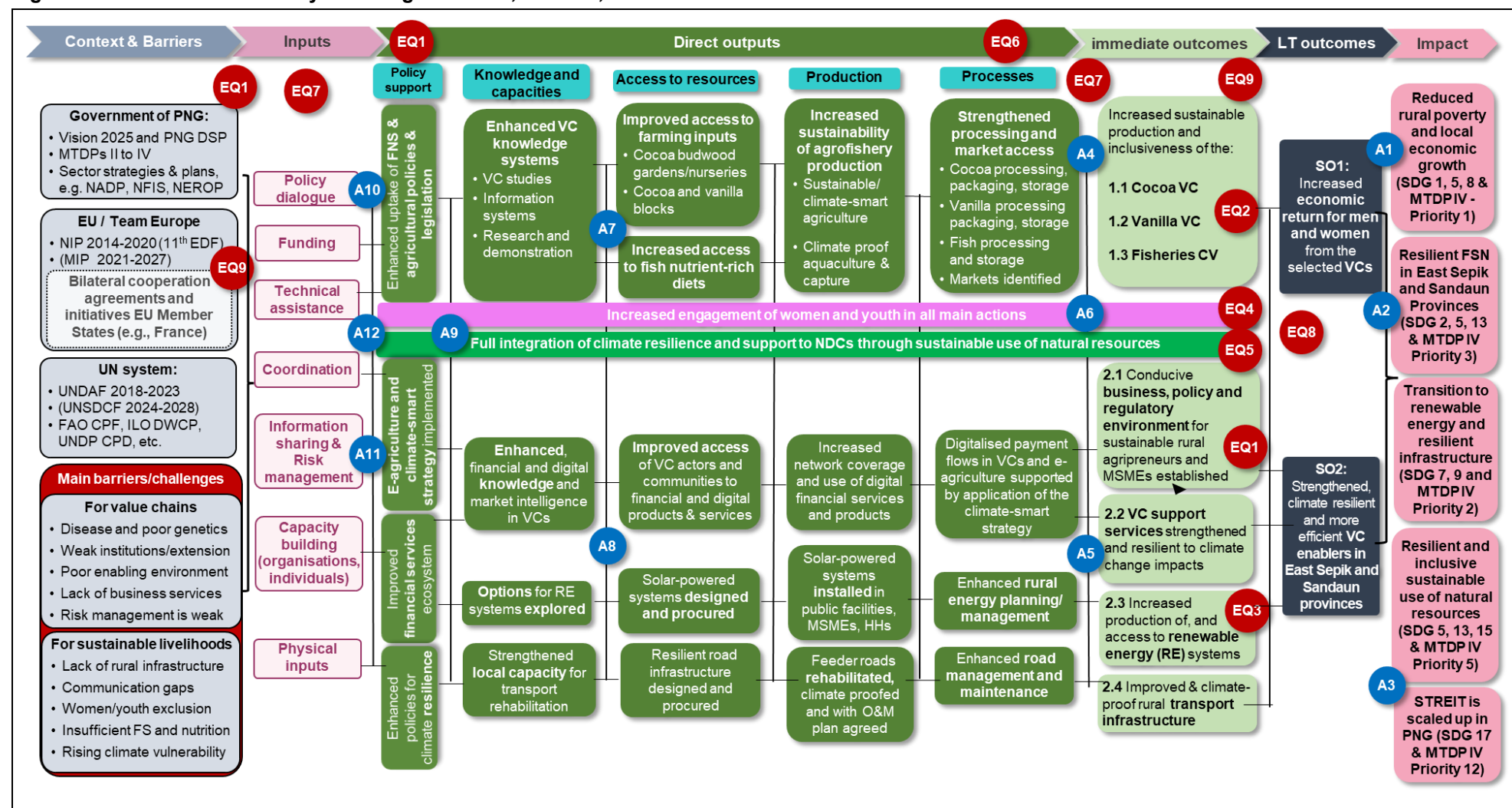


Figure 5: Reconstructed Theory of Change: assumptions

Long-Term Outcomes to Impact	
Assumption 1 (A1):	Adaptive capacity at all levels in PNG continues to improve and mitigate the effects of climate shocks, natural hazards, pandemics, social unrest.
Assumption 2 (A2):	Demand and prices paid for cocoa, vanilla, and fisheries products continues to grow to sustained rural incomes.
Assumption 3 (A3):	Economic, political and social stability improves and continues to support investment in the expansion of sustainable and resilient value chains and value chain enablers in the rural economy of PNG.
Immediate Outcomes to Long-Term Outcomes	
Assumption 4 (A4):	Local partners and their MSMEs continue to apply and promote sustainable, resilient and inclusive practices in the cocoa, vanilla and fisheries VCs (concerning production, processing, business development and management) from 2026 onwards.
Assumption 5 (A5):	National and subnational government, private and non-governmental partners continue to support and fund key services to develop the VCs, VC enablers and markets for the cocoa, vanilla and fisheries products (includes extension, financial services, rural infrastructure operation and maintenance, etc.)
Assumption 6 (A6):	Support for gender equality, inclusion of vulnerable groups (women, youths, the elderly, disabled) and the sustainable use of natural resources continues to grow and increase equitable benefit sharing (including ecosystem products and services)
Outputs to Immediate Outcomes	
Assumption 7 (A7):	Training and capacity-building activities focus on developing knowledge, attitudes and practices that support the shift from subsistence farming to more market-based development.
Assumption 8 (A8):	Infrastructure and technologies arrive on time, are of good quality and durable in order the costs of O&M remain manageable quality operational, maintained, and used effectively.
Assumption 9 (A9):	Policy and regulatory reforms are officially adopted, funded, implemented and enforced to create a positive enabling environment for agribusiness and development of MSMEs.
Inputs to Outputs	
Assumption 10 (A10):	Government, EU and UN implementing partners coordinate effectively on planning, funding, implementing, monitoring, reporting and communications of the STREIT Programme in line with the Financing Agreement and UN Joint Programme regulations.
Assumption 11 (A11):	Risk management and mitigation measures are applied in a timely and effective manner to avoid major delays in implementation due to staff rotation, complex procurement procedures, lack of technical expertise, slow disbursement of funds, etc.
Assumption 12 (A12):	Stakeholders and end beneficiaries demonstrate strong ownership of the programme from the start of operations and a willingness to apply cross-cutting objectives such as gender equality, inclusive approaches that promote the empowerment of vulnerable groups and sustainable use of natural resources.

Annex D. Evaluation matrix

Table 5: Evaluation matrix with EQs, JCs and indicators

Judgement criteria (JC)	Indicators
EQ 1: To what extent were the programme objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?	
Evaluation criterion: relevance [and targeting]	
JC1.1 Degree to which project objectives and targeted value chains align with PNG national development plans, sector policies, EU strategic objectives, and UN partner mandates	I1.1.1 Explicit citations in programme design to current national/EU/UN policy
	I1.1.2 High, medium or low match (expressed as a percentage) between programme objectives and planned outputs and current national and subnational policy objectives and priorities in the MTDP IV covering the agriculture sector in general and the development of sustainable and inclusive value chains for cocoa, vanilla and freshwater/sea fish in particular
	I1.1.3 High, medium, or low match between programme objectives and planned outputs and current national and subnational policy objectives and priorities in the MTDP IV covering the development of value chain enablers in particular, climate-proof rural transport infrastructure, including waterway clearing and access to supporting riverine fishing activities, construction of fish landing sites, rural banking access points, ICT centres and solar energy installations in schools and health centres.
JC1.2 Suitability of chosen value chains (i.e., cocoa, vanilla, fisheries) relative to PNG market potential, comparative advantage and willingness of producers, processors, distributors and buyers to engage in the development of these VCs	I1.2.1 Market demand and price trends of chosen value chains compared with other crops in PNG since the start of the programme in 2020 to end October 2025
	I1.2.2 Potential yields of cocoa (per ha), vanilla (per ha) and fisheries (catch by person/canoe) in the programme sites in East Sepik and Sandaun provinces compared to other provinces in PNG and with other countries producing these products at the smallholder/fisherfolk level
	I1.2.3 Percentage of stakeholders interviewed (producers, processors, distributors, buyers, etc.) who have already invested in the development of the value chain compared the percentage who are committed to investing in the value chain after the programme closes.
JC1.3 Degree to which the programme's geographic focus (provinces, districts) targets producers with greatest need, highest potential for change, or strategic importance for scaling	I1.3.1 Poverty and livelihood indicators in targeted vs non targeted areas
	I1.3.2 Percentage of stakeholders interviewed who believe the project design (focusing on 3 VCs and VC enablers) responded to their expressed needs, priorities, and capacities (includes smallholders, fishers, processors, schools, health posts, etc. interviewed).
	I1.3.3 Degree to which synergies with other projects/programme are supporting linkages with the implementation of wider development plans and initiatives (number of relevant programmes/projects in operation in 2025 in the sector compared to the number of synergies formally established)
EQ 2: To what extent has the programme increased economic returns and opportunities for cocoa, vanilla and fisheries value chains actors?	
Evaluation criterion: effectiveness [SO1]	
JC2.1 The degree to which sustainable production, reduction of post-harvest losses and inclusiveness have been advanced in the Cocoa value chain to	I2.1.1 Change in average annual household sales value and annual net income from cocoa production (from the start of STREIT in 2019 to October 2025)
	I2.1.2 Number of households producing cocoa and total area under improved cocoa production (by year 2019-2025)
	I2.1.3 Number and share of women and youth engaged in the cocoa value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)

Judgement criteria (JC)	Indicators
increase the income of participating smallholders	I2.1.4 Percentage of stakeholders interviewed who confirm that they have increased access to reliable new/improved market channels for cocoa by November 2025 compared to mid-term in 2022 (measured by number of new end products developed, number of end buyer contracts secured, number of new domestic and export markets developed)
	I2.1.5 Percentage of producer groups interviewed stating measurable improvements in access to support services by November 2025 compared to mid-term i.e. 2022 (e.g. improvements in reliability and quality of inputs delivered, access to extension service support, access to nurseries and improved genetic material, fermentation facilities, digital services, and local infrastructure that support revenue generation).
	I2.1.6 Percentage of smallholders who by November 2025 have fully integrated sustainable agronomic practices and post-harvest measures to enhance their resilience to abiotic and biotic stresses and financial shocks.
JC2.2 The degree to which sustainable production, reduction of post-harvest losses and inclusiveness have advanced in the Vanilla value chain to increase the income of participating smallholders	I2.2.1 Change in average annual household sales value and annual net income from vanilla production (from the start of the programme in 2019 to November 2025).
	I2.2.2 Number of households producing vanilla and total area under sustainable and resilient vanilla production practices (by year 2019-2025)
	I2.2.3 Number and share of women and youth engaged in the vanilla value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)
	I2.2.4 Percentage of stakeholders interviewed who confirm that they have increased access to reliable new/improved market channels for vanilla by November 2025 compared to mid-term i.e. 2022 (measured by number of new end products developed, number of new end buyer contracts secured, number of new domestic and export markets developed)
	I2.2.5 Percentage of producer groups stating measurable improvements in access to support services by November 2025 compared to mid-term i.e. 2022 (e.g. improvements in reliability and quality of inputs delivered, access to extension service support, access to nurseries and improved genetic material, curing facilities, digital services, and local infrastructure that support revenue generation)
	I2.2.6 Percentage of smallholders who have integrated sustainable agronomic practices and measures to reduce post-harvest losses between 2019-2025 and the percentage of farmers who found that these practices have increased their general well-being and resilience to abiotic and biotic stresses and financial shocks
JC2.3 The degree to which sustainable production and inclusiveness of the Fisheries value chain (coastal, riverine and aquaculture) have advanced food and nutrition security (FSN) and generated an income from excess supply	I2.3.1 Percentage of interviewees who report a positive change in (i) their FSN (males, women, children in the household) and (ii) average annual household sales value and annual net income from the coastal, riverine and aquaculture fisheries value chains (from the start of the programme in 2019 to November 2025).
	I2.3.2 Percentage of households producing fish products supported by the programme to November 2025 who use them for (i) FSN as the main purpose; (ii) increasing income from fish sales (by year 2019-2025)
	I2.3.3 Number and share of women and youth engaged in the fisheries value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)
	I2.3.4 Percentage of stakeholders interviewed who confirm that they have access to reliable new/improved market channels for fisheries by 2025 compared to mid-term (measured by number of new fish products developed, number of end buyer contracts secured (for fresh and seawater fish domestic and export markets).
	I2.3.5 Number of fisherfolk groups stating tangible improvements in support services in 2025 compared to mid-term i.e. 2022 (e.g. increase in extension services, reliable delivery of inputs, access to feeds, fingerling supply, cold chain, processing equipment, digital services, and local infrastructure that support revenue generation and safeguard FSN.
	I2.3.6 Percentage of fisherfolk who have adopted sustainable fisheries practices to date and the share who feel these practices have increased their general well-being and resilience to abiotic and biotic stresses

Judgement criteria (JC)	Indicators
EQ 3: To what extent has the programme strengthened and improved the efficiency of value chain enablers?	
Evaluation criterion: effectiveness [SO2]	
JC3.1 The degree to which a conducive business, trade, policy and regulatory environment exists to support rural agripreneurs and their MSMEs develop sustainable and resilient VCs in the programme area	I3.1.1 Number and type of public-private sector platforms established at the national, provincial and local levels where the programme has supported dialogue the development of sustainable and resilient cocoa, vanilla and fisheries VCs and their degree of functionality and inclusiveness
	I3.1.2 No. of knowledge transfer events, exchanges, visits at all levels (national, provincial, local) and how far they have resulted in institutional, policy, legal and regulatory changes, improvements in enforcement, etc. due to the programme's support
	I3.1.3 Number of local governments and beneficiary communities who are aware of, adopted and applying the expansion of ICT centres in support of the E-agriculture strategy supported by the programme
	I3.1.4 Number, spatial distribution and percentage of end beneficiaries who are using the expanded ICT network currently available in the programme's intervention area
JC3.2 The degree to which value chain support services are operating and resilient to climate change impacts in the programme area	I3.2.0a Number, spatial distribution, accessibility, and reliability of the financial services opened through the programme by year
	I3.2.0b Number of smallholders who state they have close access to new financial services (within one hour of their community), have accesses them at least once and who feel the financial services provided uphold key principles (inclusiveness, equality, accountability)
	I3.2.1 Number and type of financial products and services developed and percentage of smallholders and fisherfolk interviewed who use them (women and men) by November 2025 (e.g. includes number of AgUnity payments, and mobile money accounts opened annually between 2019-2025)
	I3.2.2 Number of programme-supported MSME focused training initiatives completed annually between 2019 and 2025 by the programme (e.g. on financial/business/management/ICT training)
	I3.2.3 Percentage of MSME and value chain stakeholders interviewed who are using ICT mobile applications developed between 2019 and 2025 (for example covering extension services, market information, value chain specific information, financial facilities available, etc.). Identify from interviewees the main lessons learned for scaling these initiatives
JC3.3 The degree to which smallholders and fisherfolk have access to renewable energy to support the development of their VC	I3.3.1 Percentage of solar systems installed in schools, health posts and VC processing centres that are (i) operating in a satisfactory manner and have a maintenance plan in place by November 2025. Include (ii) serving the number of people planned (annually between 2019 and 2025)
	I3.3.2 Percentage of operators and users of public facilities and VC processing facilities who state that they are satisfied/dissatisfied with the training provided to operate and maintain and/or use solar-powered services
	I3.3.3 Percentage of users of solar power who have increased the quality of cocoa and vanilla products through drying, processing, cooling
	I3.3.4 Percentage of solar energy users who state that their well-being and/or income have increased by November 2025 compared to before the programme started in 2019. Identify the main lessons for scaling the initiative.
JC3.4 The degree to which climate-proof transport infrastructure has been installed to support smallholders and fisherfolk develop their VC in the programme area	I3.4.1 Percentage of local and provincial institutions, contractors, and communities who have increased their capacity to plan, rehabilitate and maintain rural transport infrastructure in the programme area by November 2025 compared to mid-term in 2022. (includes capacity to develop and update technical specifications, norms, guidelines, etc. to ensure they are climate resilient)
	I3.4.2 Number and length (km) of rural roads and other access ways (airstrips, jetties, etc.) rehabilitated under the programme by November 2025 compared to planned outputs, and percentage of rural transport infrastructure visited that demonstrate climate-smart solutions have been fully integrated in their design and implementation to enhance their long-term resilience to extreme weather events
	I3.4.3 Number and duration of paid jobs created locally in rehabilitation and maintenance of transport infrastructure (by year 2019-2025)

Judgement criteria (JC)	Indicators
	I3.4.4 Number of local authorities and community organisations interviewed that have (i) adopted a rural transport maintenance plan, which includes agreement on the number of members who will be paid to support the maintenance work (by sex and number of youths engaged aged 15-25) and who have allocated funding to implement the plan from 2026. I3.4.5 End user perceptions of the quality and usefulness of the rural transport infrastructure installed in their communities to November 2025, compared to before the programme in 2019.
EQ 4: How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?	
Evaluation criterion: effectiveness [gender and youth]	
JC4.1 The extent to which women and youths (aged 15-25) are participating in the three VCs in the programme area	I4.1.1 Annual increase in the number of women and youths who participated in value chain activities by group (youth, adult, senior, disabled) compared to male groups (percent between 2019-2025)
	I4.1.2 Number of women and youths who were trained annually to apply new skills in the VC (percent of total women participants between 2019-2025)
	I4.1.3 Number of women and youths interviewed who stated that they are able to access information on inputs, financial services, and other services and communications through ICT services supported by the project (includes the number of women in possession of their own smart phone)
JC4.2 The extent to which women and youths are actively engaged in decision-making roles in value chain governance and VC enabling actions of the programme	I4.2.1 Annual increase in women and youths who took up decision-making roles supporting the governance of their VC and/or VC enabling actions (number/percent of women/youth leaders and committee board members compared to men between 2019-2025)
	I4.2.2 Percentage of women and youths interviewed who are satisfied compared to dissatisfied that men respect and value their views in committee decision making processes on developing sustainable and resilient VCs.
	I4.2.3 Percentage of women and youths interviewed who confirm that thanks to the programme's support they participate as a board member in formal decision-making platforms dedicated to the sustainable and resilient development of one or more VCs in their local community, district, or at the provincial level covering East Sepik and Sandaun provinces.
JC4.3 The extent to which women and youths are directly benefitting individually, socially and economically from the benefits of participation	I4.3.1 Percentage annual increase in the number of women and youths interviewed that increased their human, social and environmental capital through participation in VC activities supported by STREIT (2019-2025)
	I4.3.2 Percentage annual increase in the number of women and youths interviewed that increased their economic capital through participation in VC activities supported by STREIT (2019-2025)
	I4.3.3 Percentage of women and youths interviewed that are investing their increased income from participating in the VC in (i) education; (ii) health; (iii) food security and nutrition; (iv) housing improvements; (v) reinvestment in VC activities; and (vi) have money confiscated by male family members
EQ 5: How effectively did the project identify and address environmental risks, and to what extent did it promote environmental sustainability and adaptation to climate change to reduce the vulnerability of the target population in Sepik and Sandaun provinces?	
Evaluation criterion: effectiveness [environment and adaptation to climate change]	
JC5.1 The degree to which mainstreaming of environmental considerations and climate action is evident in the design of the project	I5.1.1 Evidence that Environmental Risk Analysis took place in the proposed programme area, was of satisfactory quality and appropriate, and realistic mitigation measures have been proposed/used to justify the project design
	I5.1.2 Evidence that climate vulnerability analysis took place in the proposed programme area, was of satisfactory quality and current and expected impacts of climate change on developing sustainable and resilient VC were identified, mapped and used to justify the project design

Judgement criteria (JC)	Indicators
	I5.1.3 Evidence that environmental and climate impact and mitigation have been integrated in the vertical and horizontal aspects of the logical framework and monitoring
JC5.2 The degree to which climate change adaptation and mitigation measures have been integrated in the cocoa and vanilla value chains	I5.2.1 Evidence that adaptation and mitigation to climate change were included in the selection criteria for the cocoa and vanilla VCs
	I5.2.2 Percentage of cocoa and vanilla farmers interviewed in their plots who are actively engaged in the application of climate smart agricultural practices
JC5.3 The degree to which the sustainable use of natural resources has been integrated in the VCs to enhance their sustainable development and climate resilience	I5.3.1 Percentage of planned farmers and fisherfolk in the programme area who have, between 2019 and 2025 (i) received sustainable agriculture certifications; (ii) expanded soil conservation and regenerative farming/fishing methods and technologies; (iii) expanded fish sanctuaries, no-take zones, catch quotas and other sustainable fisheries activities and plans in coastal and riverine areas; (iv) managing the water use and quality of aquaculture ponds; (v) number of platforms and Civil Society Organisations (CSOs) engaged in monitoring, reporting and verification of the VC's environmental and climate footprint, law enforcement governance structures, etc.
JC5.4 Infrastructure works are climate-proof and implemented with environmental safeguards	I5.4.1 Percentage of constructed/rehabilitated feeder roads visited in the field that comply with latest national and subnational environmental safeguards and standards and climate adaptation and mitigation measures
	I5.4.2 Percentage of constructed/rehabilitated airstrips that comply with the latest government environmental and climate-resilient standards
	I5.4.3 Environmental safeguards management framework has been developed and adopted each year between 2019-2025 at the provincial and local government levels (i.e. district and local-level governments)
JC5.5 The degree to which climate change mitigation has been promoted through the expansion of solar power in the programme area	I5.5.1 Estimated tCO ₂ eq saved through the introduction of sustainable and resilient cocoa and vanilla farms between 2019 to 2025 (based on data from FAO's Ex-Act tool)
	I5.5.2 No of producer groups and processors using renewable energy in VC activities (drying, processing, cold storage, lighting, etc.) by November 2025 compared to mid-term in 2022.
	I5.5.3 Percentage of cocoa and vanilla production promoted by the programme that is (i) supporting the rehabilitation of degraded lands compared to planned rehabilitation between 2019-2025; (ii) located in secondary or primary forested areas (not planned by the programme between 2019-2025).
	I5.5.4 land area planted to stabilise riverbanks and coastlines, reduce the effects of flooding and storm surges, reduce soil erosion, restore habitats and protect biodiversity (in hectares, tree types planted (native/exotic))
EQ 6: To what extent was the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?	
Evaluation criteria: efficiency and coherence [Action governance / coordination / M&E]	
JC6.1 The extent to which the project's governance structure was clear, appropriate and effective to deliver coordinated management over the programme's planning, implementation, monitoring and reporting	I6.1.1 Evidence of clearly defined ToR outlining (i) the roles and responsibilities of the PSC, the TWG, the PIMU and the PTF and (ii) the coordination mechanisms to be applied for programme planning, implementation monitoring, reporting and communications
	I6.1.2 Stakeholder views on the clarity and effectiveness of their roles and responsibilities in the programme's governance structure to deliver results
	I6.1.3 Evidence that meetings within the governance structure took place as planned and engaged all partners in the decisions taken on the programme's planning, implementation, monitoring, reporting and other duties (communications, visibility, grievance mechanism, etc.)
JC6.2 The extent to which the governance structure resulted in	I6.2.1 Evidence that inter-agency and inter-institutional coordination took place frequently to agree on annual work plans, programme implementation, internal monitoring and progress reporting

Judgement criteria (JC)	Indicators
effective and coordinated delivery of planning, implementation, monitoring reporting and other duties across implementing partners	16.2.2 Stakeholders views on the quality, timing and level of inclusiveness within the governance structure and with national and subnational counterparts to deliver the programme's intended outputs and outcomes 16.2.3 Number of priority decisions taken in PSC meetings that were subsequently implemented in a timely manner and as planned.
JC6.3 The extent to which the project's M&E system guided decision-making and learning within the governance structure to deliver the programme's objectives and results	16.3.1 Evidence that the M&E system had a results focus, contained baselines and targets and was updated at least on a quarterly basis 16.3.2 Stakeholders views on the level of use of M&E reports to guide planning and implementation of the programme's main activities 16.3.3 Stakeholder's views on the level of use of M&E data to develop an effective communication strategy designed to inform and influence change among different audiences (political, technical, farmers/fisherfolk, the general public)
EQ 7: To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?	
Evaluation criterion: efficiency	
JC7.1 The extent to which the programme's financial resources were sufficient and used in accordance with annual work plans and budgets	17.1.1 Amount of funds spent annually (in Euros) to deliver outputs in relation to planned budgets for the annual work plans 17.1.2 The level of cost-efficiency achieved to deliver outputs (measured by the project's ability to deliver outputs below, at, or above budget) 17.1.3 Evidence of adaptive financial management was applied in a timely manner to ensure budget allocations were increased/decreased to achieve results as planned
JC7.2 The extent to which human resources allocated and recruited (full and part-time from the UN agencies and PNG government staff) to implement the programme were adequate	17.2.1 The level of project staff assigned to implement the project was adequate to implement main outputs as planned 17.2.2 Evidence that the quality of the staff assigned to implement the programme matched the needs of counterpart institutions and targeted beneficiaries to deliver planned results 17.2.3 The number of stakeholders interviewed who consider the quality of the technical assistance/consultants recruited was satisfactory and were able to complete their tasks in a timely manner
JC7.3 The extent to which procurement of technical assistance, equipment and materials was conducted in a timely and efficient manner	17.3.1 Average length of time taken to fulfil procurement rules and procedures before staff, equipment, materials or other services were mobilised 17.3.2 Number of planned outputs and outcomes delivered on time compared to delayed outputs (over 3 months or more) 17.3.3 Views of stakeholders on the length of delays in procurement and its impact on achieving planned activities and outputs
EQ 8: What are the financial, institutional, social, and environmental risks to sustaining project results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the project's achievements?	
Evaluation criterion: sustainability	
JC8.1 The extent to which the institutional and governance mechanisms are in place to operate, maintain and scale up the VCs in East Sepik and Sandaun provinces	18.1.1 Evidence that the counterpart government agencies at the national and subnational levels have taken steps to guarantee the continuity of support services and address economic, environmental and social factors that are affecting the sustainability of the VCs 18.1.2 Evidence that the local mechanisms are in place and minimum staff and logistic capacity can be sustained to support the development of the VCs post programme closure 18.1.3 Number of counterpart institutions that have agreed with the programme the work plan and budget to continue the operation and maintenance of the VC enabler outputs delivered/in the process of finalisation
	18.2.1 Amount of funds allocated/mobilised to finance the operation, maintenance and scaling of the VCs for cocoa, vanilla and fisheries

Judgement criteria (JC)	Indicators
JC8.2 The extent to which the financial conditions are in place to sustain the programme's actions and results	I8.2.2 Level of willingness of the PNG government at the national and subnational levels to allocate public investment and/or blended finance to support the sustainability, resilience and upscaling of the VCs and VC enablers in PNG
	I8.2.3 Evidence that the producer groups, processors and other groups in the VCs or responsible for the VC enablers have established a post-closure action plan and mobilised their own funds to operate their committees, conduct monitoring, reporting and auditing and promote their products
JC8.3 The extent to which environmental and social safeguards have been integrated into the sustainability strategy and action plan for the post-closure period of the programme	I8.3.1 Evidence that environmental and social safeguards have been identified in the sustainability strategy and action plan
	I8.3.2 Stakeholder and end beneficiaries' views on the sustainability strategy and action plan post programme in particular its level of inclusiveness, knowledge transfer, promotion of gender equality and respect for basic human rights (in particular on access to ecosystem services)
	I8.3.3 Evidence of adequate vulnerability risk assessment and mitigation measures applied to ensure loss of life and number of people affected by climatic events in the VCs is prevented/goes down in the post closure period respectively
EQ 9: To which extent has the Action added value over and beyond what could have been achieved by the Member States' acting on their own?	
Evaluation criterion: EU added value	
JC9.1 The extent to which EU support added value compared to Member State-funded interventions in PNG in the agriculture and agribusiness sector	I9.1.1 Evidence of the EU's capacity to deliver improved coordination between MS-funded projects linked to VC development in the agriculture and fisheries sectors (2019-2025)
	I9.1.2 Extent to which EU actions delivered wider coverage of PNG's VC services for cocoa, vanilla and fisheries (in terms of inputs, technical assistance, actions) than through MS bilateral projects
	I9.1.3 Evidence that EU (especially the EEAS) has greater clout to leverage its political influence in delivering synergies between MS projects, mobilising Team Europe initiatives and promoting institutional, legislative and other reforms compared to MS bilateral projects in PNG
JC9.2 The extent to which national and provincial stakeholders view EU support to STREIT added value when compared to bilateral initiatives of the EU MS	I9.2.1 Stakeholder views on the EU's comparative advantage in providing resources, developing synergies and delivering results compared to the MS in PNG between 2019-2025
	I9.2.2 Stakeholder views on the added value of EU support to cross-cutting objectives on gender equality, women's empowerment, basic human rights, inclusion, etc. compared to the number of people who benefitted from bilateral cooperation of the MS in PNG between 2019-2025
	I9.3.3 Stakeholder views on the EU's ability to establish synergies with MS (and non-EU) projects compared to the bilateral programmes of the MS operating in the same sector between 2019-2025

Annex E. Completed evidence matrix for JCs and indicators

EQ 1: To what extent were the programme objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?

JC1.1 Degree to which programme objectives and targeted value chains align with PNG national development plans, sector policies, EU strategic objectives, and UN partner mandates

Finding 1

EU-STREIT PNG's objectives and targeted VCs and VC enablers continue to align strongly with GoPNG's current national policies, strategies and plans, as well as EU strategic objectives and its Global Gateway initiative as well as UN policy frameworks and mandates at the national and/or global level. However, the programme design provides no indications on the financial and institutional provisions to be considered in the exit and post closure period of the programme to support the long-term sustainability of the VCs and VC enablers.

The evidence analysed under indicators I1.1.1 to I1.1.3 confirms that EU-STREIT PNG continues to be highly relevant, directly supporting the implementation of prevailing policy frameworks and priorities of GoPNG, the EU and participating UN agencies, all of which focus on supporting PNG's transition to inclusive, sustainable and diversified economic growth that reduces dependency on the extractive industries. These include the EU–PNG Multi-annual Indicative Programme (2021–2027), the EU Global Gateway initiative, the UN's PNG-UNSDCF 2024–2028, PNG's Vision 2050, the National Development Strategic Plan (NDSP) 2010–2030, and several sector policies, strategies and plans, such as the National Agriculture Development Plan 2024–2033 and the National Fisheries Strategic Plan (NFSP) 2021–2030.

Under I1.1.2, the programme's SO1 and related outputs show a high level of alignment with the Medium-Term Development Plan IV (MTDP IV) 2023–2027, which prioritises the promotion of sectors where PNG has a competitive advantage, such as the development of sustainable value chains (VCs) covering agriculture and fisheries. Indeed, EU-STREIT PNG supports several Deliberate Intervention Programmes associated with key Strategic Priority Areas covering Strategic Economic Investment, Research and Food Security, Climate Change and Environmental Protection, Population, Youth and Women Empowerment, and Strategic Partnerships and Private Sector Development. Consequently, the evaluation found the EU-STREIT PNG directly contributes to implementing GoPNG's priorities in the MTDP IV to 2027.

Similarly, factual evidence gathered and analysed under I1.1.3 confirms the programme's SO2 continues to align strongly with the priorities of MTDP IV on developing value chain enablers in the 2023–2027 period. This includes directly supporting the implementation of Deliberate Intervention Programmes under Specific Areas 1 and 2 that are explicitly linked to financial inclusion, MSME development, climate-proof rural transport infrastructure, ICT connectivity, renewable energy and labour-intensive road rehabilitation and maintenance.

Despite these findings confirming EU-STREIT PNG's strong alignment with national, EU and UN policy frameworks, the evidence analysed under I1.1.1 to 1.1.3 confirms embedding of the programme in relevant SPAs/DIPs under the MTDPs is not evident. This precluded opportunities to implement EU-STREIT PNG through government programmes where opportunities for synergies and potential co-funding could have been identified to support implementation and earmark funding needs in the post programme period to consolidate, maintain and upscale the VCs and VC enablers. This situation indicates that the longer-term relevance of the programme was not clarified in the Theory of Change during the design and inception phases of EU-STREIT PNG.

Finding 2

The absence of UNCTAD in the One UN approach limited its participation to a small number of workshops. As a result, the programme did not harness its specialised services to provide guidance in key areas such as value addition, market access and trade policy development to optimise the programme's relevance as a major driver of economic transformation in PNG.

Evidence under I1.1.1–I1.1.3 confirms that the programme's relevance as a catalyst for long-term economic transformation of rural communities was strong in developing the upstream and middle stream needs to develop sustainable VCs, but weak on the downstream needs linked to trade, markets and research due to the absence of UNCTAD in the One UN approach. This situation limited the programme's access to specialised expertise in trade, value addition, global market systems development, which the evaluation

team considers is a key element in driving the economic transformation agenda forward in PNG's agriculture sector.

This situation resulted in concentrating EU-STREIT PNG's resources on the development of VCs and VC enablers at the provincial level rather than their development within the context of PNG's trade policy in which export competitiveness, investment in value addition, finance, technical assistance etc. were all addressed to guide the development of the VCs. UNCTAD's capacity and knowledge in these areas are not areas of expertise where the UN agencies currently involved in EU-STREIT PNG can provide in-depth analysis and guidance. Consequently, progress on developing downstream processing and marketing of cocoa and vanilla to develop alternative niche markets for PNG's cocoa or vanilla products has only partially been addressed.

This limitation is particularly relevant in the context of Vision 2050, and its supporting policies (NDSP 2010–2030 and MTDP IV), all of which highlight the importance of promoting private sector-led development to support the transformation of the agriculture and fisheries sectors to diversify the economy and deliver inclusive and sustainable growth in rural areas of PNG. In the absence of dedicated trade expertise, the structural trade and investment constraints that MSMEs face in provinces like the Sepik region have not been adequately addressed to enhance the relevance of the programme in delivering potential transformative, trade-led economic change in PNG. Selected activities under the UNCDF-led component did somewhat address trade and access to VC finance (see I3.2.1 further below), but not at a scale that could have compensated for the absence of UNCTAD's expertise.

Indicator 1.1.1 Explicit citations in programme design to current national / EU / UN policy

EU-STREIT PNG demonstrates a high level of alignment with:

- [EU-PNG Multi-annual Indicative Programme](#) 2021–2027 which includes the promotion of VCs in commodities like cocoa, vanilla and fisheries to advance trade.
- EU's [Global Gateway](#) initiative, which includes the designation of EU-STREIT PNG as the EU's first Global Gateway flagship programme in PNG in May 2025.
- Papua New Guinea's [Vision 2050](#), particularly the following pillars:
 - *Pillar 1: Human Capital Development, Gender, Youth and People Empowerment.* EU-STREIT PNG's promotion of inclusive participation in VCs and VC enablers under its cross-cutting themes on gender equality, youth participation and inclusion of vulnerable groups align with Pillar 1's emphasis on strengthening human capital and promoting more equitable participation in economic and social development.
 - *Pillar 2: Wealth Creation, Natural Resources and Growth Nodes.* The programme's focus on developing sustainable cocoa, vanilla and fisheries VCs, and supporting micro, small and medium-sized enterprises (MSMEs), aligns strongly with Pillar 2's objective of promoting wealth creation in the agriculture, fisheries and forestry sectors and private-sector-led growth in rural areas to reduce dependency on extractive industries.
 - *Pillar 3: Institutional Development and Service Delivery.* The programme's support to strengthening both national and sub-national agricultural services and VC enablers in the Sepik region is congruent with Pillar 3's commitment to improving governance capacity and service delivery throughout PNG.
 - *Pillar 5: Environmental Sustainability and Climate Change.* The programme's promotion of sustainable and climate-smart VCs and VC enablers like roads and airstrips that are climate-proofed aligns with Pillar 5's commitments to establishing environmentally sustainable and climate-resilient development that supports year-round access to markets and public services.
- [National Development Strategic Plan](#) (NDSP) 2010-2030, particularly concerning the following priority areas:
 - *Economic Growth and Diversification:* The programme's support to cocoa, vanilla and fisheries VCs together with its focus on establishing MSMEs directly contributes to the NDSP's objective of advancing private-sector-led growth, increasing rural incomes, and strengthening market integration, especially in marginalised provinces like the Sepik region.
 - *Agriculture, Fisheries and Rural Development.* The programme aligns strongly with the NDSP's commitment to develop agriculture, fisheries and forestry as key drivers of job creation, food security and rural development.
 - *Infrastructure Development and Service Delivery:* The programme's targeted investments in VC enablers like financial inclusion and digital connectivity, the development of ICTs, renewable

- energy and climate-proof road infrastructure all support the NDSP's aim to improve market access and reduce isolation of rural communities in PNG.
- *Environmental Sustainability and Climate Change*: EU-STREIT PNG's promotion of sustainable and climate-resilient VCs and VC enablers aligns with the NDSP's commitment to mainstreaming environmental sustainability in the abovementioned priority areas.
 - [Papua New Guinea UN Sustainable Development Cooperation Framework](#) (UNSDCF) 2024–2028. The programme's two main objectives align with the over-arching goal in the UNSDCF to promote sustainable economic transformation in PNG. More specifically, EU-STREIT PNG's supports this transformation through:
 - The promotion of cocoa, vanilla and fisheries VCs and VC enablers, integrating sustainable and climate resilient practices, to stimulate market participation, improve farm incomes and accelerate inclusive human development by expanding access to skills training, rural finance, digital connectivity, off grid renewable energy solutions and transport infrastructure.
 - Application of a multi-sector approach to economic transformation in the Sepik region by deploying five UN agencies to support the implementation of the programme through application of the One UN initiative in the Contribution Agreement signed between the EU and FAO in 2019.
 - [National Agriculture Development Plan](#) 2024–2033. The programme's objectives demonstrate high levels of alignment with all five of its investment programmes covering a total of 13 strategic Agricultural Priority Areas. They are: (i) commodity commercialisation, which includes cocoa and spices like vanilla, and which are to be implemented through market-driven agriculture production and downstream processing that included engagement of smallholders and MSMEs; (ii) agriculture infrastructure development, which the programme directly supports through the rehabilitation of cocoa plantations, feeder roads, marketing, processing and storage facilities; (iii) private sector participation in which the programme is supporting DAL implement the e-Agriculture Strategy, and funding processing equipment to stimulate private sector engagement in the development of sustainable cocoa VCs; (iv) research and development programme to support innovation and commercialisation of commodities, which the programme is supporting through training and technology upgrades in the National Agricultural research Institute; and (v) sector governance and management programme, which includes strengthening DAL's Provincial Administrations and development of the East Sepik Provincial Division of Agriculture and Livestock (ESP-DAL) Training and Office complex.
 - [National Fisheries Strategic Plan](#) (NFSP) 2021–2030. EU-STREIT's support to coastal, riverine and aquaculture fisheries groups in the Sepik region directly aligns with the NFSP's commitments to support (i) food security, income generation and decentralised fisheries development through community-based approaches and environmentally sustainable practices; (ii) the development of sustainable small-scale and artisanal fisheries, by strengthening VCs, and improving post-harvest handling and market access.
 - FAO [Country Programming Framework](#) 2022–2025 for PNG. Priority Area 3: Sustainable and inclusive economic development and job creation in rural areas, explicitly mentions that FAO will continue to take a leading role in implementing the EU-STREIT PNG programme, based on a coordinated approach with national and international partners (p.6).
 - [UNCDF Strategic Framework](#) 2022–2025. EU-STREIT PNG's efforts to link rural producers and small enterprises to digital financial services, enabling payments, savings, credit, and investment in remote areas aligns with the UNCDF's global mission to develop inclusive digital economies, strengthen financial systems and support local transformative finance in Least Developed Countries like PNG.
 - ITU [Strategic Plan](#) 2024–2027. EU STREIT PNG's promotion of digital access and establishment of ICT centres aligns fully with ITU's Strategic Plan's commitment to expanding inclusive access to affordable, high-quality telecommunications and ICT infrastructure and services, especially in remote rural areas like the Sepik region in PNG where digital connectivity is low.
 - [UNDP Country Programme Document for PNG](#) 2024–2028. The programme's objectives align fully with UNDP's commitment to support sustainable economic transformation and inclusive growth in PNG, which includes improving access to basic services like off-grid solar energy to power schools, health centres and ICTs.
 - ILO [Employment-Intensive Infrastructure Programme](#) (EIIP). The programme's commitments to rehabilitating and maintaining rural road, waterways and airstrip infrastructure in the Sepik region aligns strongly with the EIIP's mandate to:
 - Promote labour-intensive infrastructure construction and maintenance.

- Creation of inclusive local employment, especially in road rehabilitation and road management groups (RMGs) to support rural communities in provinces like the Sepik region secure new skills and income generating opportunities to advance market access and reduce poverty.

Alignment with other UN agency mandates, was however not explicitly evident. In particular, the evaluation found that the programme's level of alignment with the mandate of United Nations Conference on Trade and Development (UNCTAD) was low. This is despite the fact that it is the main UN body responsible for promoting inclusive and sustainable development of VCs through trade, investment, finance, and technology.

11.1.2 High, medium or low match (based on a ranking of 1-5) between programme objectives and planned outputs and current national and subnational policy objectives and priorities in the MTDP IV covering the agriculture sector in general and the development of sustainable and inclusive value chains for cocoa, vanilla and freshwater/sea fish in particular

The programme's SO1 and corresponding outputs demonstrate high levels of alignment with GoPNG's [Medium-Term Development Plan IV](#) (MTDP IV) 2023-2027. In particular, EU-STREIT PNG directly supports the implementation of several Deliberate Intervention Programmes under the following Strategic Priority Areas (SPAs):

- SPA 1 (Strategic Economic Investment) where the programme directly aligns with several DIPs, most notably the following:
 - DIP 1.1: Commercial Agriculture and Livestock Development, which directly relates to the programme's promotion of sustainable cocoa and vanilla VCs.
 - DIP 1.3: Fisheries and Marine Resources, which directly relates to the programme's support to the development of coastal, riverine and aquaculture VCs.
 - DIP 1.8: Trade and Investment, where Outputs 2.1.1 and 2.1.2 promote public-private sector platforms for the cocoa, vanilla and fisheries VCs and promotion of an e-agriculture strategy in the Sepik region.
- SPA 9 (Research, Science and Technology), in particular DIP 2.6: Food Security, where the programme's support to the development of fisheries VCs aims at supporting improvements in family nutrition, in particular increased access to protein through the consumption of fisheries products.
- SPA 10 (Climate Change and Environmental Protection), most notably:
 - DIP 10.1 – Climate Change Mitigation and Adaptation, which is partially addressed by the programme through its commitments to promoting climate smart agricultural practices for the cocoa and vanilla VCs.
 - DIP 10.2 – Environmental Protection and Sustainable Resource Management, which is also partially addressed by its commitments to supporting, for example, the rehabilitation of existing cocoa blocks, as opposed to expanding into forested areas.
- SPA 11 (Population, Youth and Women Empowerment):
 - DIP 11.2 – Gender Equality and Social Inclusion, which the programme supports explicitly by emphasising the application of inclusive approaches to developing the VCs.
 - DIP 11.4 – Community Development and Empowerment, which the programme promotes explicitly through its strong emphasis on promoting group-based skills training to develop the cocoa, vanilla and fisheries VCs.
- SPA 12 (Strategic Partnerships and Private Sector Development): DIP 12.3 – Private Sector Development. The programme fully aligns with this DIP through its promotion of private sector-led initiatives to raise incomes and improve livelihoods in the Sepik region.

11.1.3 High, medium, or low match (based on a ranking of 1-5) between programme objectives and planned outputs and current national and subnational policy objectives and priorities in the MTDP IV covering the development of value chain enablers in particular, climate-proof rural transport infrastructure, including waterway clearing and access to supporting riverine fishing activities, construction of fish landing sites, rural banking access points, ICT centres and solar energy installations in schools and health centres

The programme's SO2 and corresponding outputs demonstrate equally high levels of alignment with GoPNG's Medium-Term Development Plan IV (MTDP IV) 2023-2027 as reported under 11.1.2. In particular, EU-STREIT PNG directly supports the implementation of several Deliberate Intervention Programmes under the following Strategic Priority Areas (SPAs):

- SPA 1 (Strategic Economic Investment) where the programme directly aligns with several DIPs, most notably the following:
 - DIP 1.5: Banking and Financial Inclusion, where the programme's Output 2.1.3 is specifically dedicated to expanding the availability and accessibility of financial products and services for VC stakeholders in the Sepik region.
 - DIP 1.6: Micro, small and medium-sized enterprises (MSMEs), where the programme's Outputs 2.2.1 and 2.2.2 focus on increasing the number of MSMEs and agriculture-specific financial products for rural communities in the Sepik region and programme-supported MSME-focused training initiatives respectively.
- SPA 2 (Connect PNG Infrastructure) where EU-STREIT PNG aligns with:
 - DIP 2.1: Land Transport, which is consistent with the programme's Output 2.4 dedicated to improving climate-proof rural transport infrastructure
 - DIP 2.4: Telecommunication and ICT, which is consistent with the programme's Output 2.2 dedicated to strengthening VC support services, such as the increase in the number of ICT mobile and resilience to climate change impacts (Output 2.2.3)
 - DIP 2.5 – National Electrification Roll-Out.
- SPA 10 (Climate Change and Environmental Protection), most notably:
 - DIP 10.1 – Climate Change Mitigation and Adaptation, which is partially addressed by the programme's promotion of VC enablers like renewable energy and climate-proofed transport infrastructure
 - DIP 10.2 – Environmental Protection and Sustainable Resource Management, which is also partially addressed by the application of GoPNG and ILO construction codes for rural roads
- SPA 11 (Population, Youth and Women Empowerment):
 - DIP 11.2 – Gender Equality and Social Inclusion, which the programme supports explicitly by emphasising the application of inclusive approaches to improving VC enabling services and infrastructure.
 - DIP 11.4 – Community Development and Empowerment, which the programme promotes explicitly through its strong emphasis on promoting financial inclusion, digital inclusion and labour-intensive road rehabilitation and maintenance initiatives.

Evidence log summary for I1.1.1 to 1.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I1.1.1	Yes	Financing and Contribution Agreements, EU, GoPNG and UN national/global policy documents, key informant interviews	3
I1.1.2	Yes	Financing and Contribution Agreements, MTDP IV, key informant interviews	3
I1.1.3	Yes	Financing and Contribution Agreements, MTDP IV, key informant interviews	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC1.2 Suitability of chosen value chains (i.e., cocoa, vanilla, fisheries) relative to PNG market potential, comparative advantage and willingness of producers, processors, distributors and buyers to engage in the development of these VCs

Finding 3

Development of the cocoa VC shows the highest-level suitability in supporting PNG transition to market-led development whereas the suitability of the vanilla VC over the coffee VC is less evident, given vanilla farmers lack the support and guidance of the Spice Industry Board to develop alternative markets to Papindo, which is the main price setter of vanilla in PNG. The promotion of fisheries VCs to primarily improve food security and nutrition was found to be the least suitable

Cocoa: Price analysis shows the volatility of international commodity prices for PNG's cocoa farmers has worked in their favour. Indeed, international price trends show increased demand for cocoa from 2019 to October 2025 has been consistent with global supply constraints indicating the development of the cocoa VC is highly relevant to smallholders and processors in the Sepik region and this has stimulated a willingness to invest in the development of the VC. This situation appears to be aided by PNG's competitive advantage in producing cocoa varieties that produce fine flavour (ICCO), which was found to be of particular interest

to niche markets specialising in the production of high-end chocolate products in Europe, Oceania and North America.

The evaluation considers that the selection of the cocoa VC aligns with rising global market demand for quality cocoa, the opportunity to promote PNG's comparative advantage it has from the cocoa varieties it produces, and the interest of PNG processing companies to develop new markets through the establishment of short and inclusive VCs.

Vanilla: Price analysis shows the volatility of international prices for vanilla has not worked in their favour revealing the high-risk nature of developing the vanilla VC in PNG. This is despite the comparative advantage that PNG farmers enjoy from producing the majority of the world's Tahitensis vanilla variety, which is growing in demand internationally, especially from niche markets in Europe. In addition, the lack of application of a policy and regulatory framework for spices like vanilla to October 2025, confirms that the risks associated with the development of the vanilla VC make it questionable as to its suitability when compared to the coffee VC, which has a policy framework in place and the active support of the Coffee Industry Corporation. As a result, low levels of confidence in the value chain prevail, which make it highly sensitive to declines in world prices, thus explaining low levels of reinvestment by producers in the value chain to date. This situation provides further evidence that regular guidance and support from UN agencies like UNCTAD was needed in the design and implementation phases to clarify the steps needed to promote vanilla as a secondary or niche value chain, possibly with coffee also a parallel secondary VC than the one currently promoted in the ToC.

Fisheries: The inclusion of fisheries VCs to deliver sustained food security and nutrition (FSN) in the programme reveals a very low level of suitability for their inclusion in the programme. Insufficient identification and analysis of the gaps that currently impede the development of these VCs in the Greater Sepik region has resulted in very low levels of investment and downstream developments that are crucial to sustaining the VCs. There did not appear to be a clear strategy for targeting households suffering from poor nutrition. Coastal and riverine fishers had easy access to fish as a source of protein, but their priority was to sell the fish for income. Protein deficit households are more likely to be located inland where protein sources are limited to hunting. The introduction of aquaculture in these areas is reliant on purchasing expensive feeds which is not taking place. Fish farmers use local waste products as feed resulting in low fish yields, which limits the impact upon improving FSN.

Indicator 1.2.1 Market demand and price trends of chosen value chains compared with other crops in PNG since the start of the programme in 2020 to end October 2025

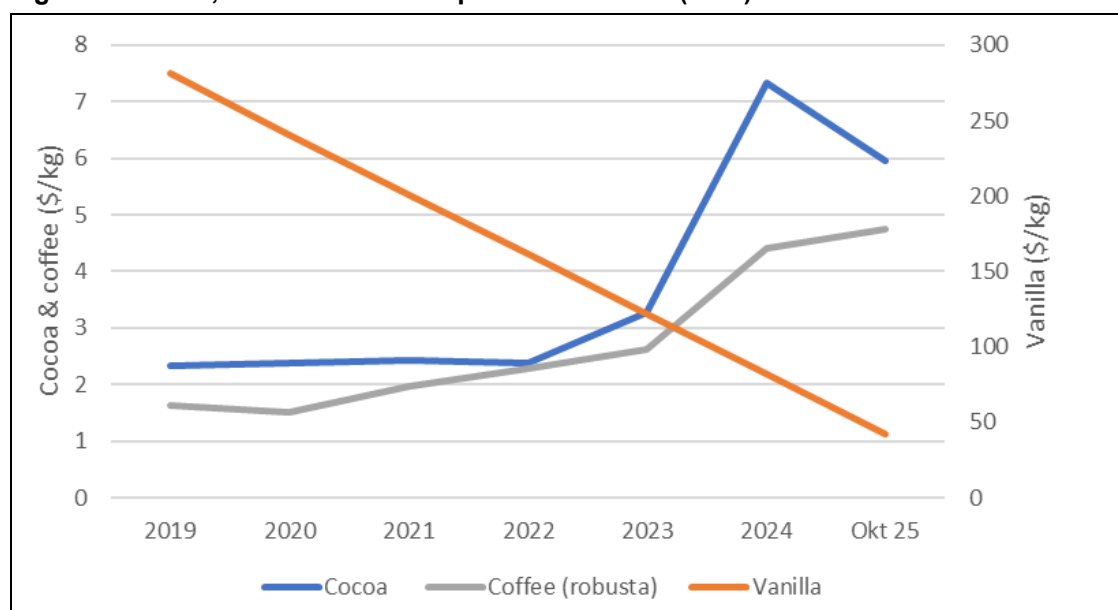
The evidence collected from a mix of national, World Bank and anecdotal evidence collected from interviews with end beneficiary farmer groups in the Sepik region confirms that the following commodities were initially identified as comparable cash crops to cocoa and vanilla in PNG: coffee, palm oil, rubber, black pepper, and copra. However, apart from coffee, all the other commodities identified are not suitable for comparison with cocoa and vanilla on the grounds that they are not produced in comparable quantities by smallholders targeted by EU-STREIT PNG (palm oil, rubber), are produced in small quantities (black pepper) or are heavily subsidised (copra). In addition, the evaluation found no published evidence from GoPNG, World Bank, FAOSTAT between 2019-2025, although UNCTAD has tracked prices between 1971-2020 (see Figure 6). To mitigate this, the evaluation collected prices from vanilla producers interviewed in the Sepik region given they are reported to produce almost 80 percent of vanilla production in PNG of which around 80 percent is the Tahitensis variety (FAO).

Figure 6 shows ICCO and International Coffee Organization (ICO) prices for cocoa and coffee, plus farm gate prices of vanilla confirmed by farmers interviewed in the Sepik region between 2019-2025.

Analysis of data in Figure 6 shows two important trends. First cocoa prices have largely mirrored coffee prices showing relative stable prices in the period 2019-2023 followed by sharp increases in global demand for both commodities from 2023 to October 2025. This is especially the case with cocoa which, despite showing signs that prices may have peaked in 2024 and are retracing lower, still remain well above global prices paid in 2019-2023. This trend was triangulated through focal group discussions with cocoa farmer groups in the Sepik region, with close to 100 percent of farmers confirming that cocoa is a commercially viable crop for smallholders. The evaluation identified several factors that support this view including, among others:

- Several bulk buyers for dried cocoa beans compete on price in PNG
- Ability of farmers to meet bulk buyer standards for dried cocoa thanks to training on developing budwood gardens, nurseries, and improved cocoa bean fermentaries and dryers
- Application of the regulatory framework for cocoa thanks to the strengthening of the Cocoa Board and its extension services.

Figure 6: Cocoa, vanilla and coffee prices 2019-2025 (USD)



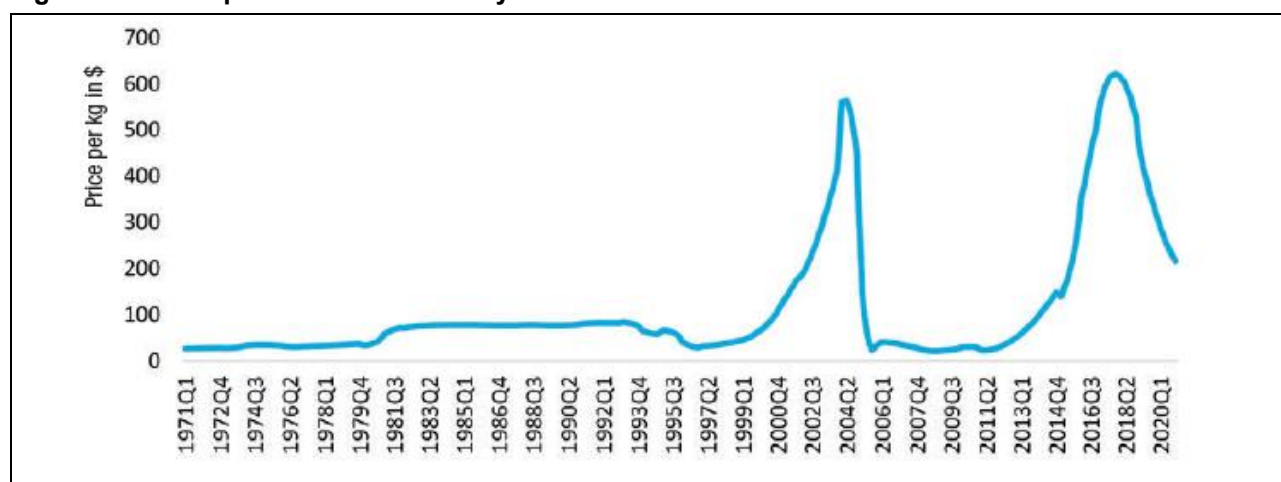
Sources: Cocoa and coffee: World Bank Pink Sheet based upon ICCO and ICO prices. Vanilla: vanilla farmers in East Sepik.¹⁷

Second, farm gate prices paid to vanilla farmers have dropped by almost 80 percent year-on-year between 2019-2025. This includes both grade 1 and 2 quality dried vanilla pods. Focal group discussions reveal the vast majority of farmers feel that vanilla is no longer a commercially viable crop and, in some cases, stated that they had lost interest in the crop. Evidence collected from farmers confirm a mix of reasons why prices have dropped to levels compared to other countries like Indonesia. This includes:

- The drop in world prices
- The lack of alternative VCs, which has caused high dependency on Papindo, by far the main buyer of vanilla operating in the Sepik region
- The lack of adequate support and extension to supervise the programme's support in production and processing of vanilla to develop alternative markets
- Lack of approval and application of a spice policy and regulatory framework in PNG to end of October 2025.

The most striking observation from Figure 7 is the fall in the vanilla price from USD 281/kg in 2019 to USD 42/kg in 2025 (farmer price in PNG). However, as seen in Figure 7, the price peak was an anomaly that has only occurred at one other time over the past 50 years, and the average vanilla price for the last 30 years has been around USD 60-100/kg (UNCTAD 2023).

Figure 7: Vanilla price over the last 50 years



Source: UNCTAD. 2023. Papua New Guinea Vanilla Export Guide.

¹⁷ Vanilla prices converted from PGK to USD at USD1 = PGK4.28 (Oanda 22 Nov 2025)

The global decline in vanilla prices is due to the post-cyclone recovery in Madagascar, increased supply from new planting in countries such as Indonesia and competition from cheap synthetic vanillin. Nonetheless, demand is expected to grow and prices improve over the medium term for quality grade vanilla.

By comparison, cocoa prices increased from USD 2.34/kg in 2019 to peak at USD 7.33/kg in 2024. This was due to adverse weather conditions and disease reducing cocoa production in Côte d'Ivoire and Ghana during 2023 and 2024. Production has recovered to some extent in West Africa and higher prices have increased new planting in Southeast Asia, even though the International Cocoa Organisation (ICCO) states a weakening global demand. Some analysts expect cocoa prices to fall between 12 and 21 percent in 2026 and fall a further four percent in 2027 (Pricepedia).

Although 95 percent of coffee species grown in PNG is Arabica, the predominant coffee grown in the Sepik region is Robusta. Poor weather reduced the production of robusta coffee in Vietnam and Brazil in 2023/24 leading to increased prices. However, a bumper harvest in Brazil in 2025 has increased supply and prices are expected to stabilise. Nonetheless, forecasts are for steady growth in demand for premium robusta coffee in the medium and long-term.

The price analysis of the VCs shows the volatility of international commodity prices and the risks of growing cash crops for the export market, which cannot be diverted for domestic consumption. However, export crops such as cocoa and vanilla have the potential to significantly increase incomes for smallholders, often in isolated locations, that could not be gained from producing for the domestic market which is made up of a small number of unconnected consumption centres. Analysis has also shown that even when prices drop, there is always a market for quality cocoa and vanilla if sold through the correct market channels.

In summary, the evidence available on vanilla production in PNG confirms that direct comparability with cocoa and coffee prices can only be made through rudimentary analysis of farm gate prices paid for vanilla by Papindo in PNG. This confirms that there is insufficient economic, market, trade and risk analysis on this commodity to determine how far PNG can develop a competitive advantage in vanilla exports.

11.2.2 Potential yields of cocoa (per ha), vanilla (per ha) and fisheries (catch by person/canoe) in the programme sites in East Sepik and Sandaun provinces compared to other provinces in PNG and with other countries producing these products at the smallholder/fisherfolk level

The evaluation collected data from programme reports and farmer groups interviewed as follows:

- Baseline yields reported for cocoa and vanilla in programme reports
- Increase in yields reported by farmers following training and extension support from EU-STREIT PNG
- Average yields of cocoa, vanilla and tilapia produced by farmer groups in Trinidad and Tobago, Indonesia and Timor Leste respectively.

However, it was not possible to identify reliable data on yields of these products in other provinces of PNG. The data collected is summarised in Table 6.

Table 6: Yields of cocoa, vanilla and tilapia

Value chain	Baseline yield (Sepik region)	Yield with programme support (Sepik region)	Yield other countries
Cocoa (<i>trinitario</i>)	0.15 kg/tree	0.30 kg/tree	0.75 kg/tree (Trinidad)
Vanilla (<i>tahitensis</i>)	0.15 kg/vine	0.50 kg/vine	1.44 kg/vine (Indonesia)
Aquaculture (<i>tilapia</i>)	n.a.	0.52 kg/m ²	0.43 kg/m ² (Timor Leste)

Source: EU STREIT Financial & Economic Analysis (Cocoa & vanilla), EU STREIT Assessment of Inland Fish Farming. Other country: cocoa (FAO), vanilla (FAO, 2009), aquaculture (WorldFish, 2023)

Overall, the data collected confirms smallholder yields of cocoa and vanilla have increased significantly by 100 and 330 percent in the Sepik region thanks to the support of the programme. However, yields of cocoa and vanilla remain significantly lower when compared to smallholders in other island states such as Trinidad and Tobago and Indonesia respectively.

11.2.3 Percentage of stakeholders interviewed (producers, processors, distributors, buyers, etc.) who have already invested in the development of the value chain compared the percentage who are committed to investing in the value chain after the programme closes

Data collected and triangulated through focal group discussions, household interviews and field observation on cocoa, vanilla and tilapia value chain development confirm the following facts.

Cocoa: The budwood gardens established by the programme provide a continuing source of budwood and training in bud-grafting, which has enabled an estimated 65 percent of cocoa farmers visited to continue the rehabilitation of their cocoa blocks as well as sell seedlings (10-50 seedlings) to other members of their cluster group. Profits from some of the cocoa fermentaries visited had funded the establishment of new fermentaries within the cluster groups. At the processor level, all three cocoa processors engaged in the development of cocoa VCs under the programme (Queen Emma, Federice Estates, and Wilyete) confirmed that they had used their own start-up capital to establish their processing plants in Port Moresby, Wewak and Vanimo respectively. Programme funding of equipment was complimentary to their investment, but considered an important incentive to invest in value chain development with Sepik cocoa producers in the Sepik region. At every segment of the value chain at least some of the beneficiaries confirmed that they had invested their own income in the development and expansion of their cocoa production.

Vanilla: Around 90 percent of vanilla producers interviewed confirmed that they had not invested in further development of the value chain, nor intended to do so in 2026. This was despite reports that the introduction of solar driers has cut drying times by around one month. The vast majority confirmed that the two main reasons for this were: (i) the continued decline in prices paid by Papindo; (ii) regular concerns about crop theft. In addition, several stakeholders mentioned delays in the approval of the National Spice Development Policy and launch of a dedicated action plan in 2025 has resulted in an important legislative gap compared to the vanilla value chain. However, one exception in East Sepik confirmed farmers had invested time and resources in the development of the value chain with private buyers. In this case, the provision of weighing machines and vacuum packaging of quality vanilla pods had enabled them to identify alternative markets to Papindo that paid higher prices.

Fisheries: Some of the aquaculture groups visited stated that they had invested time and resources in expanding aquaculture by digging of additional ponds within their cluster groups and using their own fingerlings to stock them. However, an estimated 90 percent of riverine and coastal fisherfolk interviewed stated that they had not invested the development of the fisheries value chain, despite the provision of new boats, fishing nets and cold chain equipment (cooler boxes, provision of 500-1000 litre solar-powered freezers, provided by the programme. The main reasons cited were:

- The absence of technical supervision and extension services following delivery of equipment
- Inadequate solar power generation on cloudy days and/or corrosion of connectors
- The lack of marketing studies and support to develop the downstream side of the value chain with the private sector
- Capacity and resource limitations of the NFA and its Provincial Fisheries Offices to provide follow-up and extension services to fisher groups in line with the National Fisheries Strategic Plan 2021–2030.

The remaining 10 percent of fisherfolk appear to reinvest in the value chain when they are directly supplying fish products to dedicated owners of small enterprises who are engaged in wholesale fish sales and have agreed to buy a range of fish species from selected fisheries groups and in exchange provide important services like the supply of block ice.

Evidence log summary for I1.2.1 to 1.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I1.2.1	Some	Poverty and livelihood indicators in the Logical Framework, Baseline Survey, Annual Reports and EU-STREIT PNG website	3
I1.2.2	Some	Yields of cocoa, vanilla and Tilapia taken from EU STREIT Financial & Economic Analysis of Cocoa & Vanilla, EU STREIT Assessment of Inland Fish Farming, FAO / WorldFish on yields in other countries for cocoa and vanilla / aquaculture	2
I1.2.3	No	Investment levels in the development of the three VCs taken from anecdotal evidence Financing and Contribution Agreements, MTDP IV, key informant interviews	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC1.3 Degree to which the programme's geographic focus (provinces, districts) targets producers with greatest need, highest potential for change, or strategic importance for scaling

Finding 4

The programme's geographic focus scores high on targeting smallholders and fisherfolk that suffer from high levels of poverty and marginalisation in the Sepik region and moderate on change potential and strategic scaling given only the cocoa VC provides concrete evidence that it is delivering measurable improvements in livelihoods and reinvestment in the VC at the local level.

As discussed in I1.3.1 and I1.3.2, the baseline survey indicates that from a needs-based perspective, the targeting of the Sepik region is highly justified, considering the high levels of rural poverty and exclusion from basic public services that prevail throughout this region. However, in terms of optimising the potential for change, the baseline survey did not lead to the production of vulnerability maps to guide the final selection of end beneficiaries, nor in-depth analysis on the structural barriers and policy gaps that continue to prevent vanilla producers and fisheries groups from developing robust VCs. Accordingly, cocoa producers had the highest potential to translate programme support into measurable livelihood improvements and reinvestment in the VC. This is substantiated by the increases in income, reinvestment and private sector investment reported by smallholders and cocoa processors, which provide strong indications that development of cocoa VCs can be sustained and scaled in the Sepik region.

By contrast, the potential for change and scaling through the targeting of vanilla and fisheries VC was far lower, evidenced by low levels of reinvestment among producers and fisherfolk alike and a general lack of engagement of the private sector in both VCs. Indeed, this situation raises the question whether the geographical focus on the Sepik region to promote these two VCs can be fully justified.

Finding 5

EU-STREIT PNG has established synergies with other EU and UN programmes and initiatives, but they have not led to a significant rise in coordinated action and complementary investments to address barriers or scale good practices.

I1.3.3 Evidence confirms that the promotion of the One UN approach has resulted in synergies with EU and UN programmes and initiatives, although synergies with national public investment programmes was only fully evident with the Cocoa Board. For example, the application of the One UN approach has enabled UN agencies like FAO to establish formal synergies with relevant programmes, such as its Geographical Indications (GI) programme, and facilitated the adoption and application of methodologies and tools from global initiatives, notably the One Crop initiative to support the development of the vanilla VC, and Hand-in-Hand to support the development of data-driven investment that supports agricultural transformation and reduction of rural poverty.

However, formal synergies supporting collaboration and coordination with relevant donor-funded initiatives, notably the FCCB which is co-led by PNG, the EU and France, or the World Bank's support to the PNG Agriculture Commercialisation and Diversification (PACD) project was far less evident, although collaboration to discuss FCCB's entry in the Sepiks did take place and PACD is reported to have provided inputs in the formulation of the latest Spice Industry Policy under government review. Similarly, evidence of directly coordinated information exchange, joint communications or technical and financial collaboration with national government programmes to develop synergies was limited, although the programme is directly supporting the CB implement its National Cocoa Development Plan for 2021–2030. This situation has reduced opportunities to establish coordinated responses to address key barriers in the agricultural sector associated with inadequate extension services, poor connectivity and lack of marketing strategies and deliver change in a coordinated and complementary manner in the Sepik region and elsewhere in PNG.

I1.3.1 Poverty and livelihood indicators in targeted vs non targeted areas

The programme's design was not based on a baseline survey to guide the targeting of smallholders on the basis of need, potential for change or strategic importance. Instead, the logical framework specified that baseline data should be collected at the start of the implementation phase. The baseline survey report, completed by the programme in 2021, provides evidence that the programme's intervention in the Sepik region is justified for the following reasons:

- The average household size is about six individuals who have average land holdings of just 1.6 ha.
- Up to 90 % of household diets rely on roots, tubers and vegetables, resulting in a low Household Dietary Diversity Score of 5.79 and a very low minimum dietary diversity score for women of reproductive age of 4.79.
- Less than half of all survey respondents had completed primary education

- The vast majority of cocoa and vanilla farmers suffer from the application of poor production and post harvesting handling practices that are not climate smart resulting in a lack of sustainable VCs for these commodities.
- Riverine and coastal fishing provide an important source of protein and income for fisherfolk, but persistent challenges exist in post-harvest handling practices that prevent the development of VCs, especially for Tuna and Red Emperor fish, which are the main fish species caught by coastal fisherfolk.
- Development of aquaculture in the Sepik region has been hampered by several challenges, including limited supply of fish feed and difficulty to access quality fingerlings that have resulted in 90 % of fishponds operating at artisanal level.
- Over 73 % of the population in the Sepik region have no access to electricity supplies, and only 15 % had access to reliable supplies.
- Over 60 % of the population in the Sepik region have no access to any form of ICT services to develop skills and knowledge.
- Over 70 % of respondents stated improved road access was a priority to improve trade and access to public services.
- Over 70 % of households have no access to financial services targeting low-income households.
- Over 70 % of respondents stated decision-making on how income is spent is done jointly between the male and female heads of the household, but only 10 % of respondents stated women have the upper hand in decision-making.

The collection of these baseline data did not lead, however, to the establishment of specific baselines foreseen in the logical framework. Interviews confirm this was because the programme intervened in many communities that were not surveyed. Instead, the programme has developed its own management information system (MIS) to track progress on outputs and outcomes in these communities without specific baselines. This has included the application of the Financial and Economic Model to assess the financial viability and economic impact of the VCs selected. Results of the Financial and Economic Model being conducted in the closure phase of the programme were not available during the field phase of the evaluation, so instead the evaluation team carried out rapid to assess I1.3.1.

I1.3.2 Percentage of stakeholders interviewed who believe the programme design (focusing on 3 VCs and VC enablers) responded to their expressed needs, priorities, and capacities (includes smallholders, fishers, processors, schools, health posts, etc. interviewed)

Evidence collected through structured interviews, focus group discussions and field observation indicates that:

- Over 80 percent of stakeholders consider the design of the EU-STREIT PNG programme responds to the needs of the main stakeholders at the public, private and farm levels who are responsible for the promotion and development of agriculture VCs. However, around 20 percent of stakeholders interviewed at the sub-provincial level confirmed that the programme only partially responded to their specific needs, notably in data management, but not in the development of effective extension services.
- Over 60 percent of stakeholders consider the design of the programme responds to the development of immediate livelihood needs of fisheries groups through the provision of equipment, training and development of VC enablers. However, a sizeable number of stakeholders indicated that the programme's design required stronger alignment with the NFP launched in 2021. In particular, these stakeholders highlighted gaps in aligning with policy priorities related to post-harvest handling standards, sustainable fisheries management, development of extension services and market development, which are central pillars of the policy, and identified as key barriers in the baseline survey published in 2021.
- Among cocoa smallholders, over 80 percent of farmers interviewed stated that the programme's focus on cocoa was well aligned with their priorities. Farmers consistently cited satisfaction with the rehabilitation of their cocoa blocks, access to improved planting material, fermentation and solar drying facilities and training as directly addressing long-standing challenges in developing the value chain. Similarly, bulk buyers and cocoa processors confirmed that the development of cocoa VCs responded to their interests to increase trade in dried cocoa beans and supply semi-processed cocoa products to niche markets.
- Vanilla producers acknowledged that technical support in pollination, cultivation, curing and drying responded to their production needs, but did not adequately address their organisational, extension and marketing needs to mitigate crop theft, crop loss due to disease and pests and price volatility.

11.3.3 Degree to which synergies with other programmes/programme are supporting linkages with the implementation of wider development plans and initiatives (number of relevant programmes/programmes in operation in 2025 in the sector compared to the number of synergies formally established)

Evidence indicates that EU-STREIT PNG has built on the lessons and good practices developed by former programmes promoting the development of the cocoa VC, notably the cocoa programmes of the Australian Centre for International Agricultural Research (ACIAR) and World Bank focusing on managing cocoa pod borer to establish more productive, sustainable and pest-resilient varieties and developing capacity in the CB.

At the strategic level, application of the One UN approach has formally established a synergy between the EU, the five UN agencies involved and their national counterparts. This has helped forge consistency with the abovementioned development priorities of GoPNG, and several UN agency programmes. This has resulted in the establishment of the following synergies:

- Technical assistance from the FAO Regional Office for Asia and the Pacific on the development of the establishment of a Geographical Indications (GI) framework and capacity development in DAL. This has resulted in the realisation of stakeholder consultation conferences to identify the GI legal and institutional framework that will enhance the marketability and quality recognition of products such as cocoa and vanilla produced in the Sepik and other regions.
- Adoption of FAO's Hand-in-Hand approach that has helped the programme adopt data-driven investment planning and focus on poverty reduction in highly marginalised communities in the Sepik region.
- Application of FAO's One Country One Priority Product (One Crop) initiative in 2025, which has guided financial and economic analysis to identify where the programme's resources can add most value to catalyse greater public and private sector investment in priority VCs, resulting in the selection of vanilla on the grounds that it is a high value crop that has the potential to improve rural livelihoods of farmers and the fact PNG is a main producer of the Tahitensis variety globally.

However, evidence of formal synergies with other EU-funded initiatives under the EU–PNG Multiannual Indicative Programme (2021–2027), was limited, notably with the Forest, Climate Change and Biodiversity (FCCB) Programme co-led by PNG, the EU and France. For example, interviews confirm opportunities to fund the development of climate smart cocoa and vanilla production linked to forest conservation was one area where a potential synergy was viable but had not been explored or reviewed to date.

At sector level, despite the programme's alignment with DAL and NFA-led initiatives supporting the implementation of the National Agriculture Development Plan, and the National Fisheries Strategic Plan, or the Department of Works and Highways "Connect PNG" initiative supporting infrastructure and electrification initiatives, the promotion of formal synergies are not evident in the programme's design and implementation. Instead, evidence indicates that collaboration and coordination with national programmes has been low, resulting in *ad hoc* arrangements rather than formalised partnership agreements. Conversely, at the provincial level, a key element of the programme is the establishment of close partnerships and synergies with the Provincial Administration of the East Sepik and Sandaun.

Finally, the establishment of synergies with programmes and projects funded by the development banks were not evident from the document review or key information interviews. This includes the World bank-funded PACD project, which has been running over the same timescale as EU-STREIT PNG (2020-2025) and which is designed to support value chain development and improve rural transportation in several regions in PNG excluding the Sepik region).

Evidence log summary for I1.3.1 to 1.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I1.3.1	Some	Poverty and livelihood indicators provided in the Logical Framework, Baseline Survey, Annual Reports and EU-STREIT PNG website	1
I1.3.2	No	Responses of stakeholders on the degree to which EU-STREIT PNG responds to their needs, priorities, and capacities	2
I1.3.3	Yes	Synergies with other projects/programmes identified through analysis of the Financing Agreement, GoPNG online documents and UN agency websites, especially FAO	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 2: To what extent has the programme increased economic returns and opportunities for cocoa, vanilla and fisheries value chains actors?

JC2.1 The degree to which sustainable production, reduction of post-harvest losses and inclusiveness have been advanced in the Cocoa value chain to increase the income of participating smallholders

Finding 6

There are strong indications that support to the cocoa value chain has sustainably improved cocoa production and post-harvest handling to increase incomes for participating households.

Farmers have been trained to produce their own CPB tolerant seedlings to increase yields. Fermenting and drying has been improved through training and the introduction of clean pipe dryers to improve the quality of dry beans. Higher yields and dry bean quality coupled with high prices have increased income for cocoa producers by 357 percent. In addition, in a small number of cases (seven cocoa producer groups) have started to sell cocoa directly to Paradise Foods (owner of the Queen Emma chocolate brand), notably 175 MT in 2025 to process cocoa powder, butter and liquor for export to buyers in Australia and New Zealand.

Finding 7

The institutional structure of the cocoa farmer groups poses a serious threat to the organisational sustainability of the groups and investments made by the programme in the value chain.

Further development of the cocoa value chain is centred upon developing new market linkages with cocoa processors and chocolatiers and will require increased management capability from the cocoa groups. After several discussions with groups and a review of IPA registration documents, it appears some of the fermentaries are not owned by the cocoa group but by a small number of individuals who buy wet bean off groups members. In these cases, the profit from sales to bulk buyers is not shared amongst the wider cocoa group members. As such, there is no benefit for farmers to sell their wet bean to the project supported fermentaries and the possible increased future income for the few fermentary owners could cause disputes amongst group membership.

I2.1.1 Change in average annual household sales value and annual net income from cocoa production (from the start of STREIT in 2019 to October 2025)

The evaluation team was unable to collect conclusive evidence from farmer groups on the percentage increase in income derived from cocoa, because they do not have book-keeping records. Instead, the team relied on triangulating anecdotal evidence on increases in average income from cocoa over the 2020-2025 during the focal group discussions realised. These interviews confirm that beneficiaries from every segment of the cocoa VCs have invested in development of the cocoa value chain. Evidence collected confirms:

- Lead farmers of the farmer groups that received training and provision of fermenting and drying equipment from EU-STREIT PNG experienced the biggest increase in net income from producing cocoa. In addition, lead farmers confirmed that they also generate revenue by charging cocoa farmers an annual fee of around PGK 100 to sell their beans through their fermentary-dryer facilities. In terms of the use of the profits generated from these facilities, lead farmers confirmed that around 20 percent is reinvested on average in the cocoa value chain (especially on expansion of new fermentaries and dryers with smoke pipes amongst cluster group members), with the remainder used to cover household needs.
- Wet cocoa bean producers stated that they had experienced a significant increase in income from cocoa thanks to the combination of having local access points to sell their wet beans and the reduction in transport costs associated with reaching bulk markets. This achievement is based on initial production levels of cocoa planted in the 2021-2023 period, suggesting farm income from cocoa is likely to increase in 2026-2030 if current prices remain stable.
- Lead farmers engaged in budwood garden and nursery development stated sales of grafted cocoa seedlings to members of their cluster groups had also contributed to increasing their income from cocoa. For example, sales of 50 seedlings generate on average PGK 250 is equivalent to approximately 14 percent of the monthly rural living income benchmark for PNG (Anker Research Institute, 2024).
- All three cocoa processors visited (Paradise Foods, Federice and Wilyete) confirmed that they had used their own start-up capital to establish their processing plants and that the programme's funding of new cocoa processing equipment to increase the production of cocoa butter, liquor and powder had been crucial to reduce upfront costs of investment.

Table 7 provides some financial analysis for the increase in cocoa production. Planting density is 625 cocoa trees/ha. Table 7 shows the average yield was 94 kg/ha in 2019 before the project, when farmers were harvesting the old 'German' cocoa varieties damaged by Cocoa Pod Borer (CPB). Based on programme estimates yields are now 188 kg/ha due to the introduction of CPB tolerant cocoa varieties by the project.

Table 7: Cocoa prices, yields and income (2019 and 2025)

Price/yield/income	2019	2025
Dry bean price (ICCO) USD/kg	2.34	5.39
Dry bean price (AgMark) USD/kg ¹⁸	1.80	4.15
Yield (kg/ha)	94 kg/year	188 kg/year
Income from cocoa (USD/ha/year)	169	780

Source: Prices: ICCO and AgMark Wewak. Yields: EU STREIT Financial & Economic Analysis.

Table 7 shows that income from cocoa has significantly increased from USD 169/ha to USD 780/ha, an increase of 361 percent due to yields doubling and prices increasing by 131 percent. Although yields have doubled, income would still have increased to USD 390/ha solely due to price increases and yields had remained the same. An increase in yields only would have increased income to USD 338/ha even if prices had remained at 2019 value. STREIT beneficiaries were provided with 100 improved cocoa seedlings which increased yields from 0.15 kg/ tree in 2019 to 0.30 kg/tree in 2025. This provides an average increase in income of USD 127 per beneficiary (increase from USD 35 to USD 162) when the increase in bean price is also included.

Programme M&E records state 3,100,139 cocoa seedlings (78 percent of target) have been planted over 4,960 ha. Extrapolated up, cocoa production will have increased by 466 tonnes/year due to yield increases, worth USD 1.93 million at current cocoa prices. The increase in production is about one percent of PNG cocoa production¹⁹.

12.1.2 Number of households producing cocoa and total area under improved cocoa production (by year 2019-2025)

According to M&E records the programme distributed 3,100,139 high-yielding seedlings to 31,101 households (100 seedlings per household) and trained 17,742 lead farmers (118 percent of target) who are expected to then train the remaining 13,359 farmers who received seedlings. No records are kept of the second-tier training and none of the farmers interviewed stated they had received the second-tier training. The total area planted with improved seedlings is 4,960 ha (78 percent of target).²⁰

Table 8: Number of households and area under improved cocoa production (data for lead farmers)

	Target	2020	2021	2022	2023	2024	2025	Total
No. households	15,000	192	5,378	7,643	2,835	1,694	-	17,742
Area (ha)	6,400	60	337	943	1,089	2,532	-	4,960

Source: EU-STREIT PNG M&E report to 30/09/2025.

12.1.3 Number and share of women and youth engaged in the cocoa value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)

The programme aimed for 30 percent of beneficiaries involved in and benefiting from cocoa value chain activities to be women and 40 percent of beneficiaries involved in and benefiting from cocoa value chain activities to be youth. Actual achievement is shown in Table 9. However, it must be noted that this is based on programme records for a total of 68,200 beneficiaries (total group members) which includes second tier beneficiaries that cannot be verified and who may not have received seedlings or training. Total female participation is 29 percent and total youth participation is 36 percent.

The target for the number of groups with women and youth in higher level managerial positions in the cocoa value chain was 120 out of 300 groups (40 percent). Actual achievement is 128 out of 363 groups (35 percent).

¹⁸ AgMark price was 77 percent of ICCO price on 17/11/2025. The same ratio was used to estimate 2019 AgMark price

¹⁹ Total PNG cocoa production is 45,000 tonnes.

²⁰ Planting density is 625 cocoa trees/ha.

Table 9: Number of women and youth engaged in the cocoa value chain (2020-2024)

Gender group	2020	2021	2022	2023	2024	2025	Total
Adult - male	12,735	10,928	5,403	1,222	1,082	-	31,370
Adult - female	4,494	4,790	2,000	598	332	-	12,214
Youth - male	30	13,212	2,970	614	557	-	17,383
Youth - female	10	5,662	990	391	180	-	7,233
Total beneficiaries	17,269	34,592	11,363	2,825	2,151		68,200

Source: EU STREIT M&E reports to 30/09/2025.

12.1.4 Percentage of stakeholders interviewed who confirm that they have increased access to reliable new/improved market channels for cocoa by November 2025 compared to mid-term in 2022 (measured by number of new end products developed, number of end buyer contracts secured, number of new domestic and export markets developed)

The dominant market channel for PNG cocoa is the bulk export of 45,000 tonnes of dry fermented beans, of which 78 percent is exported to grinders in Indonesia and Malaysia (International Trade Centre (ITC), 2024). Most of the cocoa is then re-exported for processing in to end-product in the United States. Exports of processed cocoa are tiny by comparison including cocoa paste (5 tonnes), cocoa butter (10 tonnes), cocoa powder (38 tonnes) and chocolate (10 tonnes) mainly to Australia and New Zealand (ITC, 2024).

Central to improving access to new market channels for PNG cocoa is the development of a 'grinding' segment in the PNG cocoa value chain to produce cocoa paste and butter for export to specialty chocolatiers in Australia/New Zealand, Europe and North America. In 2025 grinding capacity in PNG was limited to 180 tonnes/year. However, thanks to support from EU-STREIT PNG to expand grinding capacity in PNG, three companies are in the process of procuring and/or testing new processing equipment (e.g. roasters, grinders, mixers and butter presses) that should enable the country to increase its total annual grinding capacity to around 3,800 tonnes/year by end of 2026. They are:

- Paradise Foods based in Port Moresby, which owns the Queen Emma chocolate brand. Following direct purchasing agreements with seven cocoa producer groups in East Sepik, which included the supply of 175 MT in 2025 to facilitate the export of processed cocoa (powder, butter and liquor) to buyers in Australia and New Zealand.
- Federice Estates Chocolate Company, which is in the process of installing a cocoa processing plant in Wewak to export semi-processed cocoa products and chocolate.
- Wilyete Cocoa Processor, based in Vanimo and primarily focused on export of semi-processed cocoa products.

The programme has also supported these exporters meet buyers at international cocoa events and recently in October 2025, nine chocolatiers visited PNG as part of the ITC's United Kingdom Trade Partnership Programme. Nonetheless, visits to all three processors confirm equipment procurement delays, or difficulties in operating the machinery delivered. This situation has, therefore, delayed the start of all processing operations until 2026.

The cocoa value chain is regulated by the Cocoa Board. Buyers (exporters and processors) can only buy dry cocoa beans from fermentaries registered with the Cocoa Board, which provides a structure to the value chain and is a key access and leverage point in the value chain. Upstream, the programme has supported the development of dedicated supply chains to link cocoa farmers with cocoa processors through providing 363 farmer cluster/marketing groups with 500 dryers/fermentaries with a capacity of 0.5 tonnes/drying cycle and eight combination dryers with a capacity of one tonne/drying cycle to produce quality Fine Flavour cocoa beans and GPS mapping of the groups to facilitate traceability. However, to date, the vast majority of cocoa groups are only supplying the bulk market and it is expected much more work will be required before the groups are ready to supply specialty chocolatiers. Improvements may include categorisation of bean genetics and terroir, fermentation quality, drying and moisture levels, physical bean quality, flavour profile and aroma, traceability, ethical and sustainability certification, and consistency and volume of supply.

Cocoa trees planted under the programme are now coming into full production and it is expected incomes will continue to increase as the value chain further develops to access new markets. Currently, cocoa farmer groups are registered with the Investment Promotion Authority (IPA) as Non-Profit Associations or Business Groups. Beyond a certificate of registration with IPA there is no membership list or statements on distribution of profits amongst members, which could lead to mismanagement as turnovers increase. Some of the group fermentaries visited were owned by a small number of farmers who bought wet cocoa from other 'members' and kept the profit after drying and selling, to themselves. In 2026/27 there will also be changes to the annual

reporting requirements to IPA for which the cocoa groups will need to comply, or risk being struck off. These organisational weaknesses pose a serious threat to the sustainability of the groups and investments made by the programme into the value chain.

Another important step towards establishing the new market channel is an initiative by the Cocoa Board to seek approval for micro-lot export licenses so that fermentaries and processors can export one tonne lots of specialty cocoa beans and has the potential to include smaller cocoa entrepreneurs.

Whilst there has been plenty of activities to establish higher value market channels, these have yet to evolve into actual exports, and connection issues need to be resolved so the processing equipment can be commissioned.

12.1.5 Percentage of producer groups interviewed stating measurable improvements in access to support services by November 2025 compared to mid-term i.e. 2022 (e.g. improvements in reliability and quality of inputs delivered, access to extension service support, access to nurseries and improved genetic material, fermentation facilities, digital services, and local infrastructure that support revenue generation)

Table 10 shows the programme has established 294 budwood gardens (98 percent of target) mostly before the Mid-term Evaluation (MTE), upgraded/established 681 nurseries (227 percent of target) mostly after the MTE and trained 17,742 master trainers (118 percent of target) in budding mostly before the MTE, which ensures the local availability of high quality CPB resistant seedlings. Five hundred 0.5 tonne capacity fermentaries were established (100 percent of target) and the capacity of the fermentaries to ferment and dry wet cocoa beans is above current production levels.

Table 10: Access to inputs and services

Activity	Target	2020	2021	2022	2023	2024	2025	Total
Budwood gardens	300	92	159	26	8	5	4	294
Nurseries	330	-	5	157	20	93	406	681
Fermentaries	500	-	-	-	-	336	164	500
ToT training	15,000	192	5,378	7,643	2,835	1,694	-	17,742

Source: EU STREIT M&E reports Sep 2025.

The quality of the inputs provided by the project and the beneficiaries was good and the resulting facilities are of a good standard. The nurseries are able to propagate CPB tolerant seedlings with an acceptable survival rate and the fermentaries/dryers produce dry cocoa bean quality acceptable to the bulk buyers.

The project provided materials for the nurseries and dryers that were not locally available, such as shade netting and polybags and the steel clean pipes. Beneficiaries provided timber and labour to construct the nurseries and fermentaries/dryers. The cost-sharing appeared acceptable to the groups visited and whilst some groups had gone on to establish new fermentaries/dryers, most were expecting the project to continue providing the external inputs.

Extension support from the Department of Agriculture and Livestock (DAL) has been limited due to available financing and outreach. Support has only been provided by DAL in conjunction with project support and it is unlikely support will continue to be provided without project financial assistance. Public extension services are also constrained by organisational issues as local extension offices are not overseen by the provincial offices with which the project works. None of the groups visited had access to the Learning Management System (LMS) services provided by the programme, due to the continuing Department of Information and Communications Technology (DICT) compliance issue. According to ITU, however, access logs show that several groups have visited the LMS platform. If necessary, most farmers can access technical support through platforms such as YouTube on mobile phones.

Payments made from fermentaries to purchase wet bean from farmers continue to be made in cash, which is preferred by farmers, even though this poses a risk to the fermentaries which need to hold large amounts of cash to make these payments. Payments made from AgMark to the fermentaries are by bank transfer or cash, however, the fermentaries require cash to purchase the next cycle of wet bean from farmers.

Although all of the fermentaries visited were located close to roads, many farmers still had to carry their cocoa several kilometres by foot from their gardens to the fermentaries.

12.1.6 Percentage of smallholders who by November 2025 have fully integrated sustainable agronomic practices and post-harvest measures to enhance their resilience to abiotic and biotic stresses and financial shocks

The programme trained 12,888 farmers in sustainable agriculture i.e. integrated pest and disease management and climate smart practices (129 percent of target) covering an area of 4,960ha (78 percent of target). Agroforestry systems are considered environmentally sustainable and multi-storey and mixed cropping are traditional farming practices in PNG cocoa producing areas. Crop mixes include cash crops (e.g. cocoa, vanilla, coffee, coconut, betel nut) and food crops (e.g. banana, taro, cassava, sago) which provides resilience to possible threats such as pests/disease and falling prices through diversity.

Farmers received trained in propagation techniques (budding) to establish budwood gardens and seedling nurseries. Training in block management was provided which mainly covered weed control and pruning. Training was also accompanied with the provision of extension materials.

According to research reports, CPB can cause up to 90 percent crop losses in PNG (ACIAR, 2019) and the introduction of CPB tolerant varieties has had the biggest impact in reducing these losses. The establishment of budwood gardens and training provided by the project on budding has ensured the availability of CPB tolerant varieties will continue. The training provided was correctly pitched to the target audience covering a few key topics in a practical manner. However, in at least 50 percent of cocoa blocks visited, pruning and weed control had not been carried out and there was evidence of occasional fungal disease. Whilst propagating and planting CPB seedlings has been easily adopted by farmers, this needs to be accompanied by a package of integrated pest management (IPM) measures, such as pruning, weeding and sanitation, to ensure full effectiveness against CPB and it appears these on-going maintenance tasks are not being carried out by some farmers.

Fermentary operators were trained in fermentation and drying techniques to improve quality and flavour profiles. Fermenter operators visited were knowledgeable on rotating the fermentation boxes and the importance of the clean pipe in preventing smoke taint during drying. Whilst current skills are sufficient to supply the bulk market, more advanced training will be required to meet the buying requirements of specialty chocolatiers.

Evidence log summary for 12.1.1 to 2.1.6

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
12.1.1	No	EU-STREIT yield estimates, EU STREIT Financial & Economic Analysis, Cocoa Value Chain Report, secondary price data and beneficiary interviews	2
12.1.2	No	Programme monitoring reports on farmers trained and seedlings distributed, beneficiary interviews and direct observations	1
12.1.3	No	Programme monitoring reports (gender and age disaggregated)	1
12.1.4	No	Programme monitoring reports on fermentaries supported, Impacts and Lessons from the EU-STREIT PNG Programme – A Policy Brief, secondary trade data, beneficiary interviews and direct observations	3
12.1.5	No	Programme monitoring reports on budwood gardens, nurseries and fermentaries supported, Impacts and Lessons from the EU-STREIT PNG Programme – A Policy Brief, beneficiary interviews and direct observations	2
12.1.6	No	CPB research report, back-to-office and consultant mission reports, programme monitoring reports on farmers trained and direct observations of cocoa gardens	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC2.2 The degree to which sustainable production, reduction of post-harvest losses and inclusiveness have advanced in the Vanilla value chain to increase the income of participating smallholders

Finding 8

The strategy to support the vanilla value chain was not significantly revised even though the impact of the fall in the international price of vanilla was evident at the Mid-Term Evaluation and as such the underlying structural constraints in the value chain have not been addressed.

The fall in the international price of vanilla since 2019 has resulted in farmers reducing vanilla production and the structure of the vanilla value chain in PNG does not encourage improved quality, which could mitigate some of the effects of lower international vanilla prices. Quality remains an issue and is largely

determined during the curing process which takes several months. Development of specialised conditioners, aggregators and exporter segments of the vanilla value chain in the Sepik region is missing in the upgrading strategy.

12.2.1 Change in average annual household sales value and annual net income from vanilla production (from the start of the programme in 2019 to November 2025)

The fall in the international vanilla price is the main reason production has declined, and income decreased for vanilla farmers (see Figure 1). Structural challenges in the vanilla value chain are also preventing value chain actors adapting to the new market realities. The Spice Industry Board has been inactive over recent years and there is only one major company buying vanilla in PNG. The price of vanilla in Jayapura/Indonesia, over the border from Vanimo, is PGK 500/kg (USD 115/kg) compared to PGK 180/kg (USD 42/kg) in Vanimo, and it appears the exporters margin is considerably higher than the farmers', further exacerbating the fall in the international vanilla price and discouraging farmers to cultivate vanilla.

The evaluation team was unable to obtain conclusive evidence from the field phase to determine net increases in income from improved vanilla production and processing at the household level. This was mainly because (i) training and drying equipment had not been completed by November 2025, and also due to (ii) the relatively small levels of vanilla produced by the majority of farmers who sell this commodity on an *ad hoc* basis to Papindo/Intec and (iii) the lack of book-keeping records. However, the initial indications from producer interviewed are that incomes from vanilla sales have declined annually in line with the drop in prices paid by Papindo between 2019-2025 (see Figure 1). Most vanilla producers stated that prices were currently so low that it was not worth investing in the development of the value chain.

This evidence contrasts with FAO's Hand-in-Hand investment analysis that found targeted investment in VCs like vanilla can yield a per capita income of around PGK 1,500 (USD 434) per year.

12.2.2 Number of households producing vanilla and total area under sustainable and resilient vanilla production practices (by year 2019-2025)

According to M&E records the project distributed 771,464 cuttings (257 percent of target) to 6,514 households (109 percent of target) and trained 809 lead farmers (147 percent of target) who are expected to then train the remaining 5,705 farmers who received cuttings. No records are kept of the second-tier training and none of the farmers interviewed stated they had received the second-tier training. The total area planted with diverse and integrated cropping systems is 1,234 ha (223 percent of target).

12.2.3 Number and share of women and youth engaged in the vanilla value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)

The programme aimed for 35 percent of beneficiaries involved in and benefiting from vanilla value chain activities to be women and 45 percent of beneficiaries involved in and benefiting from vanilla value chain activities to be youth. Actual achievement is shown in Table 11. Total female participation is 24 percent and total youth participation is 27 percent.

The target for the number of groups with women and youth in higher level managerial positions in the vanilla value chain was 40, but the actual achievement is one woman who is leading a vanilla group near Wewak.

Table 11: Number of women and youth engaged in the vanilla value chain

Gender group	2020	2021	2022	2023	2024	2025	Total
Adult - male	500	1,009	1,332	709	143	13	3,706
Adult - female	142	322	292	184	78	9	1,027
Youth - male	120	405	295	337	53	22	1,232
Youth - female	68	174	148	131	17	11	549
Total beneficiaries	830	1,910	2,067	1,361	291	55	6,514

Source: EU STREIT M&E reports Sep 2025.

12.2.4 Percentage of stakeholders interviewed who confirm that they have increased access to reliable new/improved market channels for vanilla by November 2025 compared to mid-term i.e. 2022 (measured by number of new end products developed, number of new end buyer contracts secured, number of new domestic and export markets developed)

Farmers continue to sell their vanilla individually to Intec or informal street buyers who buy vanilla rejected by Intec and sell to Indonesian traders at the border for reduced prices. Intec Vanilla Niugini Limited is part of the Papindo group of companies which is PNG owned and operates supermarkets, a hotel and a property and construction business. Intec is the largest vanilla buyer and exporter in PNG supplying vanilla beans and extract to distributors, extractors and end-users in the international flavour and fragrance industry, mostly in Indonesia. Alternative market channels and supply chains have not emerged.

The provision of vacuum packers to groups was for the groups to export vanilla directly to overseas buyers. However, with a few one-off exceptions, this has not taken place as the groups find it difficult to meet the quality and volume requirements of international buyers. There is no interest from farmers to aggregate vanilla at group level, possibly due to issues of trust. As the curing and conditioning of vanilla is carried out by individual farmers and the production and marketing of vanilla is also carried out on an individual basis, the purpose of the groups is unclear, apart from shared access to the vanilla dryers.

12.2.5 Percentage of producer groups stating measurable improvements in access to support services by November 2025 compared to mid-term i.e. 2022 (e.g. improvements in reliability and quality of inputs delivered, access to extension service support, access to nurseries and improved genetic material, curing facilities, digital services, and local infrastructure that support revenue generation)

Farmers provided their own vanilla cuttings from their own gardens, and the programme provided fungal potion to treat the cuttings before planting in East Sepik. None of the farmers interviewed could explain the ingredients in the potion, so it is unlikely the treatment can be repeated. Farmer groups visited in Sandaun province did not receive the fungal potion and some also did not receive the training. Some farmer groups stated they were experiencing fungal disease after planting the treated cuttings and it appeared through field observations farmers were not maintaining the vanilla gardens to further prevent fungal disease. This is an important crop management requirement as the project did not support the use of chemical fungicides.

The programme has provided 467 vanilla dryers with a capacity to dry 5 kg of dry beans/drying cycle and 15 solar powered vacuum packers (96 percent of target) after the Mid-Term Evaluation. Farmers stated the dryers had improved the quality of the vanilla and reduced the drying time. The dryers and vacuum packers are imported but the dryers could be made locally.

Extension support from DAL is limited and the SIB is inactive at present. None of the groups visited had access to the Learning Management System (LMS) provided by the programme, due to the continuing DICT compliance issue. However, according to ITU, access logs show that several groups visited the LMS platform. Although the programme trained 809 Master Trainers (147 percent of target) in improved production techniques, the Training of Trainers (ToT) approach has not resulted in additional training of second-tier beneficiaries as there is no benefit for the Master Trainers to do this.

Vanilla farmers in PNG carry out their own curing and conditioning. Much of the quality is determined during the curing process and unless farmers are adequately skilled in the process, which can take several months, quality will suffer. To mitigate this, some farmers in other countries sell green beans to processors who specialise in the curing/conditioning process. This service or value chain segment has not been explored and piloted with a selection of vanilla groups by the programme in the Sepik region, indicating quality control during the curing process at the household level continues to be an unresolved issue.

Payments made from Intec are by bank transfer or in cash and payments made from informal street buyers are in cash. Robberies are a concern for vanilla farmers and traders due to the high value of vanilla, confirming a high need for digital financial services to mitigate this risk. Many vanilla farmers are located far from roads, however, as vanilla is a low volume crop, the introduction of vacuum packaging offers a highly viable method to carry it by foot to main markets while preserving quality.

12.2.6 Percentage of smallholders who have integrated sustainable agronomic practices and measures to reduce post-harvest losses between 2019-2025 and the percentage of farmers who found that these practices have increased their general well-being and resilience to abiotic and biotic stresses and financial shocks

According to programme monitoring reports, the total vanilla area planted with diverse and integrated cropping systems is 1,234 ha (223 percent of target). Agroforestry systems are considered environmentally sustainable and multi-storey and mixed cropping are traditional farming practices in PNG vanilla producing areas. Crop

mixes include cash crops (e.g. cocoa, vanilla, coffee, coconut, betel nut) and food crops (e.g. banana, taro, cassava, sago) which provides resilience to possible threats such as pest/disease and falling prices through diversity.

Farmers received training in propagating vanilla cuttings, and some farmers received training in treating the cuttings to prevent fungal disease. Other training included mulching, pruning, pollination, harvesting and pod curing and conditioning. However, in at least 50 percent of vanilla gardens visited, pruning and weed control had not been carried out and there was evidence of occasional fungal disease. If fungicides are not promoted by the project, farmers need to include a package of IPM measures, such as correct plant spacing, weeding and cover crop management. Although training was provided by the project, some farmers have not adopted the good practices.

Only small amounts of cured vanilla were available for inspection. Quality varied considerably, not only in pod size but also the standard of conditioning.

Evidence log summary for I2.2.1 to 2.2.6

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I 2.2.1	No	Project monitoring reports, EU STREIT Financial & Economic Analysis, Vanilla Value Chain Report, secondary data, beneficiary interviews on yields and direct observations.	3
I 2.2.2	No	Project monitoring reports on farmers trained, beneficiary interviews and direct observations of vanilla gardens	1
I 2.2.3	No	Project monitoring reports (gender and age disaggregated).	1
I 2.2.4	No	Value chain stakeholder interviews and direct observations.	3
I 2.2.5	No	Beneficiary interviews, desk research and direct observations.	2
I 2.2.6	No	Training reports, project monitoring reports and direct observations of vanilla gardens.	2

* 0 = no evidence, 1 = some evidence, 2 = sufficient evidence, 3 = conclusive evidence

JC2.3 The degree to which sustainable production and inclusiveness of the Fisheries value chain (coastal, riverine and aquaculture) have advanced food security and nutrition and generated an income from excess supply

Finding 9 All three fishery types have shown the potential to improve nutrition and increase incomes. However, the strategy for capture fisheries lacks coherence and is not based on the value chain assessments carried out by the project. Interventions are not based on in-depth assessments on how the value chain operates and could be improved to support fisher groups generate a stable income from their catches. This has not been aided by the absence of new technologies and techniques apart from the use of FADs for coastal fisheries and smoking ovens for river fish. Low input-low aquaculture has produced nearly two fish meals per month per beneficiary. Riverine fishers catch 5 kg of fish day worth USD 12 for 60 days of the year, and coastal fishers catch 8 kg of fish day worth USD 28 for 18 days of the year. Although daily catches for capture fisheries are good, the number of days each group member has access to the boats is limited. The group membership has been too big for the inputs provided, such as boats, outboard motors and fishing/aquaculture equipment, to have a significant impact on nutrition or income for individual members and further investment has not taken place. The programme's focus on providing equipment and training to improve fish catches has not included the establishment of sustainable resource management mechanisms and actions that were foreseen in the Financing Agreement to ensure any increases in catches are managed and controlled. All the capture fishers interviewed were fishing previously, using the same type of equipment and techniques supported by the project, so are now doing more of the same thing and there has been little behavioural change or improvements as expected in the Theory of Change. If the main constraint was farmers could not access additional boats and gear the project should addressed the root causes, rather than just supplying the boats and gear.

12.3.1 Percentage of interviewees who report a positive change in (i) their FSN (males, women, children in the household) and (ii) average annual household sales value and annual net income from the coastal, riverine and aquaculture fisheries value chains (from the start of the programme in 2019 to November 2025)

Aquaculture: According to M&E records, the project has supported the stocking of 765 fishponds (95 percent of target) belonging to 192 groups with 129,072 fingerlings (161 percent of target) and trained 4,479 fish farmers in tilapia aquaculture. At a stocking rate of 4 fingerlings/m² total pond coverage is 32,268 m², or an average 42 m²/pond. On a low input system which doesn't use concentrate feeds and a survival rate of 3 fish/m², a pond would produce 126 fish weighing 300g every six months, the equivalent of 270 meals²¹. If there are about 5 beneficiary households per pond (765 ponds/4,479 fish farmers) and an average five persons per household, that is roughly eleven family fish meals every six months.

Although most fish farmers interviewed were fish farming for home consumption, some mentioned they could sell fish for PGK 3/fish, which would produce an income of PGK 378 (USD 88) every six months or PGK 76 (USD 18) per beneficiary household if there are five beneficiary households per pond.

Riverine: According to M&E records, the project provided 196 canoes and nets to all 44 groups with 3,617 members (average 82 members per group) and 2,253 fishers received training. Ten 40 HP outboard engines were also provided for use with existing boats. Twenty-nine of the 44 groups also received a boat with a 40 HP outboard engine with nets each. The additional equipment has enabled the groups to catch more fish. If all 196 canoes fished all 365 days of the year and each canoe is manned by three persons, each of the 3,617 members would get nearly 60 days fishing a year.

Based upon beneficiary interviews average daily catches are about 15kg/day which is 5kg/fisher and sells for PGK 10/kg (USD 2.40/kg) fresh. Some groups also smoked surplus fish for sale in markets such as Maprik.

Coastal: The project provided 80 (21 foot) boats with 40 HP outboard engines to 71 groups with a total of 4,867 members (average 68 members per group) and 846 fishers received training. The additional equipment has enabled the groups to catch more fish. If all 80 boats fished all 365 days of the year and each boat is manned by three persons, each of the 4,867 members would get 18 days fishing a year.

Based upon beneficiary interviews average daily catches are about 25kg/day which is just over 8kg/fisher and sells for an average PGK 15/kg (USD 3.50/kg) across all fish types.

All three fishery types have proven viable to increase nutrition and, in selected cases, income also. However, the group membership has been too big for the inputs provided, such as boats and fingerlings, to have a significant impact on nutrition or income for individual members.

Overall, the evaluation team found it very challenging to collect conclusive evidence on changes in diets and incomes from fish sales due to the lack of household surveys on nutrition rates and the absence of book-keeping records on fish catches and sales. Anecdotal evidence indicates that any increase in incomes from the sale of fresh or smoked coastal, riverine and aquaculture fish species have not resulted in sustained increases in income. Stakeholders confirm that this is primarily because the barriers identified in the baseline survey in 2021 have not been adequately addressed at the national and provincial levels. As a result, reinvestment in these VCs was generally very low or not evident at all. Two exceptions are: (i) fisheries groups in Aitape who are reported to be directly supporting the development of a private sector-led value chain, which could not be triangulated through focal group meetings due to security issues; (ii) digging of additional fishponds and stocking them with their own locally produced fingerlings to avoid sourcing them from hatcheries.

12.3.2 Percentage of households producing fish products supported by the programme to Nov 2025 who use them for (i) FSN as the main purpose; (ii) increasing income from fish sales (2019-2025)

Table 12 shows there are 7,578 fisheries beneficiaries (118 percent of target) covering all fishery types.

Table 12: Number of households under improved fisheries production

	Target	2020	2021	2022	2023	2024	2025	Total
No. households	6,400	0	51	2,516	4,543	348	120	7,578

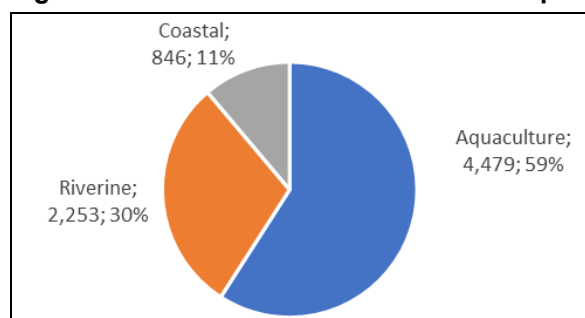
Source: EU STREIT M&E reports Sep 2025.

Figure 8 shows that 59 percent of fishery beneficiaries practice aquaculture and 41 percent practice capture fisheries. Based upon beneficiary interviews, all riverine and coastal fishers (3,099 fishers) fished primarily to sell fish and consume fish that were either too small or could not be sold. Meanwhile, with the exception of an aquaculture group producing Tilapia fingerlings for sale, all of the aquaculture initiatives (4,479 fishers) visited

²¹ Fish portion size is 140g for a single meal.

produce fish for home consumption. However, a majority of the beneficiaries stated that if production increased, they would like to sell to local markets.

Figure 8: Number of households under improved fisheries production by fisheries type



Source: EU STREIT M&E reports, 30/09/2025.

12.3.3 Number and share of women and youth engaged in the fisheries value chain and the share of women who occupy decision-making roles (number and percentage share of women and youths by year 2019-2025)

The target was for 30 percent of beneficiaries involved in and benefiting from fisheries value chain activities to be women and 40 percent of beneficiaries involved in and benefiting from fisheries value chain activities to be youth. Actual achievement is shown in Table 13. Total female participation is 39 percent and total youth participation is 48 percent.

The target for the number of groups with women and youth in higher level managerial positions in the fisheries value chain was 29 groups and actual achievement is 45 groups.

Table 13: Number of women and youth engaged in the fisheries value chain

Gender group	2020	2021	2022	2023	2024	2025	Total
Adult - male	-	28	819	1,505	76	35	2,463
Adult - female	-	23	509	852	79	44	1,507
Youth - male	-		740	1,275	124	28	2,167
Youth - female	-		448	911	69	13	1,441
Total	-	51	2,516	4,543	348	120	7,649

Source: EU STREIT M&E reports Sep 2025.

12.3.4 Percentage of stakeholders interviewed who confirm that they have access to reliable new/improved market channels for fisheries by 2025 compared to mid-term (measured by number of new fish products developed, number of end buyer contracts secured (for fresh and seawater fish domestic and export markets))

None of the aquaculture or coastal fisher groups interviewed had accessed new or improved market channels. Larger consumption centres such as Port Moresby, Lae and Arawa are located far away from Wewak or Vanimo, which poses logistical challenges for transporting fresh produce. The larger towns are also situated on the coast, so have their own local supply of fish.

Riverine fish are smoked and sold to traders in established inland markets such as Maprik, which is a more viable market channel and the use of FTT stoves has improved the quality of smoked fish for this end-market.

12.3.5 Number of fisherfolk groups stating tangible improvements in support services in 2025 compared to mid-term i.e. 2022 (e.g. increase in extension services, reliable delivery of inputs, access to feeds, fingerling supply, cold chain, processing equipment, digital services, and local infrastructure that support revenue generation and safeguard FSN)

Aquaculture: Three aquaculture training centres have been established in Kubalia, Arop and Maprik and three tilapia hatcheries established in Pasy, Aitape and Hambuku/Yanguru, providing access to training and fingerlings. Concentrate fish feeds are not always available as they are imported and expensive. However, as most tilapia farming is small-scale based on low input-low output production, local foods (kitchen waste, crop residue) can be used and farmers breed their own replacement fingerlings. As production is primarily for home consumption, cold chain and local infrastructure are not constraints. If production was to become

commercialised freezer storage would be necessary, as fish are harvested in bulk at the end of production cycles.

Coastal: Coastal fisher groups interviewed stated they did not have linkages to Fisheries Extension Officers. Fishing gear is available from shops in Wewak and Vanimo and boats can be repaired locally. Fisher groups had been trained in outboard engine maintenance and repair. The programme has provided a reefer container to the West Sepik Investment Ltd in Vanimo and ice-making plants to a fishing group in Wewak and a fish trader in Aitape. Although 23 solar-powered freezers have been provided to fishing groups, many are not working, or only work when there is sunshine to charge them.

Riverine: The programme provided a reefer container to the District Administration to operate at Maprik market, which has not yet been commissioned. Seven FTT fish smoking ovens were distributed to seven groups to smoke fish for sale in main markets such as Maprik.

All of the fisher groups interviewed used cash rather than digital money as their customers, such as housewives buying individual fish, did not use digital money platforms and preferred using cash. Similarly, the fishers needed to buy inputs for the next fishing expedition, such as outboard fuel and ice, with cash, because very few stakeholders use digital forms of finance. In addition, none of the fishers interviewed had used the ICT resource centres to access the LMS, which has not yet been launched publicly.

12.3.6 Percentage of fisherfolk who have adopted sustainable fisheries practices to date and the share who feel these practices have increased their general well-being and resilience to abiotic and biotic stresses

Aquaculture is a new skill for many of the beneficiaries interviewed. However, support to capture fisheries has mainly been the provision of more equipment that fishers are already familiar with. The provision of boats, outboard motors and fishing gear has the potential to increase coastal and riverine fish catches, which in the case of coastal fisher groups has enabled fishers to extend their fishing grounds offshore. Although this is designed to reduce overfishing of inshore artisanal fish stocks, other external pressures on stocks pose a real threat to sustainable fisheries. For example, fishing groups interviewed in Sandaun province stated that overall fish catches had decreased over recent years due to the impact of commercial tuna fleets fishing closer to the shore. In a second example in East Sepik, coastal fisheries groups interviewed stated certain fish species had to be caught further out to sea although they did not attribute this to the effects of climate change.

However, workshops have been held to raise awareness on climate resilience and sustainable fishing. This has included training on marine habitats, coastal-zone management and information on how climate change is affecting sea-level rise and movements of fish stocks in recent years. In addition, training on the application of twelve Fish Aggregating Devices (FADs) to coastal fishing groups in East Sepik (7 groups) and Sandaun (4 groups) has been applied to help mitigate these effects and promote sustainable practices. Interviews confirmed the FADs did attract fish from other areas and that catches had improved, although two FADs were reported to have disappeared or not be working in East Sepik.

Measures to mitigate the threats to the sustainability of coastal fisheries, such as the expansion of commercial fisheries into coastal zones, or socio-economic pressures on small-scale fishers associated with limited markets and climate change threats, were not systematically identified and applied. As a result, the isolated promotion of FADs appears to have been insufficient to address the abovementioned challenges facing coastal fishing groups and, which are resulting in very low levels of investment in the VC.

Riverine fisheries are most at risk from overfishing as river boundaries are fixed compared to the open sea and the groups interviewed (Bataipuna Women's Group, Haii Entrepreneurs Fishing Group) had not received any training on sustainable fishing practices or management.

Evidence log summary for I2.3.1 to 2.3.6

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence ¹
I 2.3.1	No	Value chain reports, beneficiary interviews on fish catches and direct observations	2
I 2.3.2	No	Project monitoring reports on farmers trained by fishery type and beneficiary interviews	3
I 2.3.3	No	Project monitoring reports (gender and age disaggregated).	2
I 2.3.4	No	Beneficiary interviews on marketing and direct observations	2
I 2.3.5	No	Mission reports, project monitoring reports, beneficiary interviews on support services and direct observations	2
I 2.3.6	No	Beneficiary interviews on fishing practices and direct observations	1

EQ 3: To what extent has the programme strengthened and improved the efficiency of value chain enablers?

JC3.1 The degree to which a conducive business, trade, policy and regulatory environment exists to support rural agripreneurs and their MSMEs develop sustainable and resilient VCs in the programme area

Finding 10

There is clear evidence that STREIT has improved the financial services ecosystem through upstream policy and innovation-led work that extended beyond the Sepik region. The programme has effectively promoted tangible changes in the short run (through platforms, support facilities, pilot initiatives, and light regulatory change) which, together with policy dialogue, encourage stakeholders to engage in longer-term change. These activities, and the programme's success in identifying the right partners, have contributed to a more conducive environment for financial inclusion (in the Sepik region and country-wide) in several dimensions.

At the policy level, UNCDF engaged in several activities with impact at the national level. It supported the Centre of Excellence in Financial Inclusion (CEFI) in developing the National Financial Inclusion Strategy (NFIS) (I3.1.2). By providing a roadmap for PNG to accelerate financial inclusion – setting overall goals and strategic objectives, developing specific actions, identifying strategic partners –, the NFIS has enhanced the policy environment for financial inclusion in the Sepik provinces and elsewhere in PNG. It also helped programme activities to be endorsed by key national partners.

In terms of information and knowledge management, the programme recently developed a Financial Inclusion Dashboard, which aims to help CEFI implement and monitor the NFIS (I3.1.2). While the first feedback on the dashboard is encouraging, it remains to be seen whether CEFI can manage and will continue using the system after programme support has been phased out. UNCDF, in close coordination with ITU, also promoted knowledge by leading evidence-based policy dialogues with a broad range of public and private sector stakeholders (I3.1.1). The dialogues can be credited for (i) their integrative approach of bringing together the digital and financial sector, (ii) highlighting 'business cases' for public and private investment in enhanced digital connectivity and financial services in the Sepik region, and (iii) producing a Call for Action that has been accepted and partially implemented by the relevant stakeholders, for example, the setting up of internet solutions using very-small-aperture terminal (VSAT) in remote areas to enhance access to financial services.

In the regulatory environment, UNCDF managed to lighten the 'Know Your Customer' requirements for smallholder farmers in the Sepik region and elsewhere in PNG. This has facilitated access to financial services of farmers unable to present a national ID for opening bank accounts (I3.1.2). The KYC exemptions were negotiated under the STREIT programme but have since then been applied by the BPNG at national level. Interoperability of financial transactions has been largely achieved between the three Financial Service Providers (FSPs) partnering with STREIT, but not yet with other major commercial banks in the country. Yet, UNCDF's strategy of promoting smaller changes in the regulatory environment has been realistic given the timeframe of the programme.

Several innovative digital financial services and products, tailored to the selected VCs – see JC 3.2 – emerged from an UNCDF-led innovation fund (further aided by policy dialogue) (I3.1.1). Overall, this has showcased how private sector players can seize market opportunities for tailored digital financial services in a region of PNG (and with customer segments) that previously saw only low levels of investment from such service providers.

Finding 11

In total 21 ICT centres have been established by the programme, compared to nine originally planned. A large number have been established in schools across the majority of districts in the Sepik region where they can provide improved access to education and training services for school children, farmers and fisherfolk participating in the programme and the wider local community. However, only the five schools (upgraded with PV systems and an internet connection under sub-component 2.3) are currently operating as ICTs and applying a business plan to cover operational costs. As a result, 76 per cent of the ICTs are not yet providing the online training foreseen to farmers and fisheries groups.

The programme has been highly effective in establishing 21 ICTs in education centres across the majority of districts spanning the programme's intervention area in the Sepik region, which is more than double the nine originally planned. This has been aided by FAO agreeing to support ITU provide additional computing equipment to support this expansion. As such, the programme is making an important contribution to expanding rural connectivity, which is a crucial element in supporting the economic transition in rural areas

prescribed in MTDP III and, currently, MTDP IV. However, the evaluation found that the majority of the ICTs are still awaiting computer equipment and/or an internet connection by NICTA. Indeed, only the five education establishments provided with PV systems and an internet connection under sub-component 2.3 are currently operating as ICTs, meaning the vast majority are not yet able to provide the online training planned by the programme with institutions like UniTech responsible for the LMS (see JC 2.1 above). As a result, only in-person training has been provided to VC groups to date. As a result, monitoring of the impact of these training courses among participating farmers and VC groups in terms of improved digital and financial skills, entrepreneurship, and application of their business plan has to cover operational costs of the ICT has not been possible. Consequently, valuable feedback to UniTech and other online training providers on how to improve the training programmes according to the needs of farmers and fisherfolk has not materialised to guide such training in the post-programme period. Finally, in terms of the strategic role of the ICTs in supporting the national government's "Smart Village Initiative" supported by ITU and which foresees the establishment of ICTs (known also as Digital Resource Centres), the ET found no concrete evidence that the ICT sub-component has been formally embedded in this initiative through which provincial and national government could showcase its expansion in the Sepik region.

13.1.1 Number and type of public-private sector platforms established at the national, provincial and local levels where the programme has supported dialogue the development of sustainable and resilient cocoa, vanilla and fisheries VCs and their degree of functionality and inclusiveness

Support to agricultural policies, legislations, and development plans (output 2.1.1)

Under Activity 2.1.1.1, a Greater Sepik Economic Secretariat Forum was formalised by FAO in 2022 to continue the process of promoting and strengthening agri-enterprise in the Sepik Region. Although the Forum has not met since, the programme has supported the Spice Industry Board of PNG, which includes vanilla, prepare the PNG Spice Policy 2025-2033. The objectives of the policy are to repeal the Spice Act of 1989, establish the Spice Industry Authority to regulate and improve service delivery and develop medium-term investment strategies and plans for the spice industry.

In contrast, plans to support energy policy (Activity 2.1.1.2), food security and nutrition practices (Activity 2.1.1.3), nutrition and healthy diets in school curricula (Activity 2.1.1.4), and the Gender in Agriculture and Fishery Policy (Activity 2.1.1.5) at the national level have not been realised, according to the latest quarterly progress report.

Overall, the support for the Government to develop policies, legislation and development plans (output 2.1.1) has not produced the expected results.

E-agriculture and climate-smart strategy (output 2.1.2)

The programme, through ITU services, developed and got approved by the two provinces a programme-specific E-agriculture strategy. This strategy foresaw the advancement of the following outcomes:

- Enhanced communication and coordination between stakeholders, institutions and individuals using ICTs
- Enhanced access to information resources, networks, digital services and platforms to support policy decisions,
- Improved quality and timeliness of data and information
- Improved market access, financial services, risk mitigation, disaster management, logistics etc.
- Increased efficiency, compliance and monitoring using ICTs among various stakeholders
- Strengthened capacity at all levels on the use of relevant ICT tools/applications.

Main delivery channels for these outputs according to the E-agriculture strategy has been a mix of the following solutions: a) Data delivered via training courses, b) Database and information system development through the FAO developed STREITMIS, c) Infrastructure development through the ICT equipment delivered by ITU and FAO, d) Policy facilitation through guidance, e) Research and capacity development through training and linking events and f) Services through e-service tools.

Financial inclusion (output 2.1.3)

UNCDF organised and launched the Agri-MSME Challenge Fund in 2021 (Activity 2.1.3.2). The fund supported providers of innovative services aimed to help agri-MSMEs to improve their access to financial services, integrate VCs, and develop skills. Nine shortlisted service providers participated in a three-day bootcamp hosted by UNCDF and the (predecessor of the) Bank of Papua New Guinea's Centre of Excellence in Financial Inclusion (CEFI). The five final winners would receive technical support and sign a grant agreement worth USD 50,000-90,000 each. In practice, grant agreements were only signed with three winners as the other two (both international companies) failed to secure national partners in PNG. The three companies provided solutions to

digitalise payments from off-takers to farmers, and technology solutions linking farmers to financial service providers (FSPs). Overall, this increased the number of digital financial services and products tailored to smallholder farmers in the Sepik region. See I3.2.1 for details.

The programme led three evidence-based policy dialogues in Port Moresby, Wewak and Vanimo to advocate for financial inclusion and agricultural financing (Activity 2.1.3.4). The dialogues brought together government policymakers, financial regulators, commercial banks, microfinance institutions, agribusiness representatives, and development organisations. The discussions focused on identifying regulatory bottlenecks, exploring innovative financing models, and addressing infrastructure gaps that hinder financial service delivery in rural areas. Among other things, participants examined models that integrate alternative credit scoring methods to assess creditworthiness and expand lending to underserved farmers. Moreover, in the context of the development of psychometric credit decisioning system to be managed by the PNG Credit Guarantee Corporation (CGC) – see I3.2.3 for details, UNCDF also engaged in dialogue with CGC to promote increased access to agricultural credit.

I3.1.2 No. of knowledge transfer events, exchanges, visits at all levels (national, provincial, local) and how far they have resulted in institutional, policy, legal and regulatory changes, improvements in enforcement, etc. due to the programme's support

Value chains

Value chain stakeholders have been on exposure visits to other provinces and international trade fairs and benefitted from meeting potential buyers, however, this has not resulted in institutional, policy, legal and regulatory changes. The main improvement in the enabling environment has been preparation of the PNG Spice Policy 2025-2023 (Activity 2.1.1.1), as described above, through hosting stakeholder consultation workshops in Wewak, Goroka, Kokopo and Port Moresby.

Financial inclusion

In 2022, UNCDF supported CEFI – the key agency promoting financial literacy and access in PNG, 100 percent owned by the Bank of Papua New Guinea (BPNG) – in the development of the 3rd (2020-2024) National Financial Inclusion Strategy (NFIS, Activity 2.1.3.1). While this support was funded through STREIT, UNCDF's relied mostly on its international best practices, as well as its previous experience from developing the 2nd (2016-2020) NFIS for PNG, to develop the strategy. The specific experience with STREIT in the Sepik region influenced the NFIS very little.

Based on the NFIS and policy dialogue with financial sector regulators, UNCDF somewhat influenced relevant regulatory changes. For example, it negotiated with BPNG that smallholder farmers would not be subject to full Know Your Customer (KYC) regulations, which would normally require farmers to possess national IDs to open bank accounts or apply for loans. Under the lightened KYC regulations, a public person in the community (e.g. coop leaders) can vouch/write letters for farmers, which are accepted by banks in lieu of national IDs. This was first negotiated through the STREIT programme but has since then been applied by the BPNG at national level.

To help CEFI implement and monitor the NFIS, UNCDF developed a national Financial Inclusion Dashboard (Activity 2.1.3.3). The dashboard has been handed over to (and populated with the data by) CEFI in Q4/2025. Stakeholders stated that the main benefit of the system is to centralise, visualise and pull reports from information that was previously dispersed across many different Excel sheets. The data for the dashboard are compiled from individual private and public financial institutions in PNG and aggregated by CEFI into policy reports.

Regarding knowledge transfer through financial literacy training to farmers, please refer to I3.2.2.

Digital inclusion

Regarding knowledge transfer through digital literacy training provided to farmers and fisherfolk participating in the programme (see also I3.2.2), the ET found no information on the outcome and impact of these training courses. This includes, the application of the ICT business plans developed and in operation at five schools (supported under sub-component 2.3) since their endorsement by the provincial administration and the e-commerce businesses training provided to agripreneurs.

Renewable energy

Regarding knowledge transfer through training on solar systems, details are presented under I3.3.2.

Rural transport infrastructure

ILO (under the road infrastructure improvement component) has developed between 2022 and 2025 a number of technical training courses addressing VC enabler road infrastructure development that took place with

support of professional trainers from the Papua New Guinea University of Technology (UniTech) in Lae as well as the Technical and Vocational Education and Training (TVET) institution in Yawasoro, Wewak.

All together around 50 events were implemented bringing together each around 26 stakeholders (provincial staff of DWITS, local contractors, local level officials from districts and local-level governments (LLGs) dealing with civil engineering tasks, RMGs staff, work supervisors, etc.). In total over 1,220 people were trained spread into adult male 561, adult female 161, youth male 334 and youth female 165.

The courses covered 11 theoretical topics²².

These courses were complemented by on-the-job training at the Yawasoro TVET in Wewak and covered nine topics²³. In addition, standard guidance was provided to participants²⁴, and standard drawings were provided to support the preparation of bids and contract awards for road improvement construction²⁵.

Weakly documented by ILO is the outcome and impact of all these training courses on participants in terms of lessons learned and application on the job. The quality of the road improvement works observed during the field evaluation testifies that quality design and road improvement works were systematically applied in all the contracted road improvement works. A similar situation could be observed for the RMGs works where payments were clearly linked to quality of works and not time input of RMG staff. However, the abrupt cessation of the payment to RMG staff in May 2025, led to a complete stop of all routine maintenance works on all rehabilitated and routinely maintained roads – see I3.4.4 for details

13.1.3 Number of local governments and beneficiary communities who are aware of, adopted and applying the expansion of ICT centres in support of the E-agriculture strategy supported by the programme

As shown in Table 14, ITU with FAO have between 2023 and 2025 set up 21 ICT Resources Centres in the two provinces with three of them dedicated for training. In East Sepik, there are now 11 Resources Centres including two training centres, and in Sandaun, there are 10 Resources Centres with 1 training centre. In 2023 ITU established five centres (four in East Sepik, one in Sandaun). In 2024, two additional centres were added in Sandaun by ITU. In 2025, FAO added 15 centres (seven in East Sepik, eight in Sandaun).

Table 14: ICT Resource Centres equipped by ITU and/ or FAO

Name of Resource Centre	District	LLG	Visited	VC groups within 5 km	No. of students	Installation year
Sandaun						
Don Bosco Sec. School	Vanimo Green	Vanimo	yes	7	1,400	2025
Green River Christian Sec. School	Green River	Green River		6		2025
St Michel Prim. School, Ossima	Vanimo Green	Vanimo		1	222	2024
St Mary Leitre Primary School	Vanimo	Leitre	yes	8	150	2024
St Ignatius Sec. School	Aitape Lumi	Aitape		16	1,000	2025
Lumi Sec. School	Aitape Lumi	Lumi	yes	1	393	2025
Fatima Junior High School	Aitape Lumi	Wape East		11		2025
Arop Vocational Centre	Aitape	Aitape West		12		2025
Wyporn Junior High School	Aitape	Aitape West		8		2023
St Francis Sec. School	Nuku	Nuku	yes	13	300	2025
Total Sandaun				83		

²² (i) Road contract management, administration, dispute resolution and arbitration, (ii) Quality assurance and control of roads and crossing structures, (iii) Material testing and laboratory practice, (iv) Occupational Safety and Health (OHS) at site, (v) Preparation of Annual Road Maintenance Plan (ARMP), (vi) Feasibility study and detailed programme report, (vii) Design of rigid and flexible pavements, (viii) Construction supervision and quality control of roads and bridges, (ix) Roadside bioengineering and slope stability in rural roads, (x) Environmental and social safeguard in construction, and (xi) Road Transport Information Management System (RuTIMS) and Construction Site Monitoring (CSM).

²³ (i) Construction of RCC and concrete structures, (ii) Construction of stone masonry and concrete structures, (iii) Labour based approach of maintaining camber, gravelling and construction of side drain, (iv) Construction of pipe culverts, (v) Ohs at construction site, (vi) Construction of stone masonry and gabion retaining wall, (vii) Construction of Pipe culverts, pothole repairs and side drain excavation, (viii) Practical demonstration training to RMG for implementation of labour-based approach routine maintenance, (ix) First Aid training to RMGs.

²⁴ Including (i) RMG staff selection guide, (ii) RMG operational guideline, (iii) Road bio-engineering guideline, (iv) Environmental safeguards guideline, (v) Social safeguard guideline, and (vi) Occupational safety and health booklet

²⁵ Including (i) Box culvert structural design, (ii) Road pavement, (iii) Causeway, (iv) Slab culvert, (v) RCC and corrugated steel pipe crossing, (vi) Road cross sections.

Name of Resource Centre	District	LLG	Visited	VC groups within 5 km	No. of students	Installation year
East Sepik						
Drekikier Techn. Sec. School	Drekikier	Drekikier	yes	0	500	2023
Maprik Sec. School	Maprik	Maprik	yes	4	1,300	2025
Wosera Sec. School	Wosera Gawi	Wosera		15		2023
Nagum SDA Sec School	Yangoru Saussia	Wewak		7	950	2023
Nidinumbo Prim. School	Yangoru Saussia	Yanguru		8		2025
Biwat Yuat Primary School	Angoram	Yuat		2	100	2025
Angoram Sec. School	Angoram	Angoram		5		2025
Brandi Sec. School	Wewak	Turubu	yes	5	1,400	2023
St. John Bosco Dagua Sec. School	Wewak	Dagua	yes	7	100	2025
Kubalia School	Wewak	Wewak		6		2025
Hawaian Technical Sec. School	Wewak	Wewak	yes	10	400	2025
Total East Sepik				69		
Grand total				152		

Source: Dataset received from ITU between September to November 2025 plus inspection during the ET field mission.

The locations of the ICT Resource Centres moderately match the location of the VC groups assisted by FAO. Based on the GIS map produced by FAO, the number of VCs group located within 5 km of the centres is only 152 (East Sepik: 69, Sandaun: 83) or 21 percent of the total of VC groups established (around 720).

Each centre has been equipped with tables and chairs as well as computer desktops plus MS software (15 units in average) as well as printers, large video screen and in some cases Uninterruptible Power Supplies and communication cameras and sundry.

There is little proof in the programme documentation that stakeholders of the deployment of ICT equipment's at 21 ICT resources centres have actively embraced and are efficiently using the procured equipment's. Some centres are currently still lacking affordable power supply and 16 do not have internet access. Main users of the equipment's post-ITU training events are teachers and students from the schools owning the systems. Finalized and government endorsed business plans at the ICT centres allowing them to recoup upcoming O&M cost of centres operation are in place in only some of the ICT centres. For many others they are still in preparation.

Table 15: Main equipment delivered or to be delivered to ICT centres by ILO and/or FAO

Name	ITU supplied desktops 2023/24	FAO supplied desktops 2025	Total desktop	ITU 65 inches TV	FAO 85 inches digital whiteboard	FAO video conf. system	ITU / FAO copiers	UNDP PV solar systems	FAO Solar 6KVA PV system (outstanding)
Sandaun									
Don Bosco Sec. School	15	5	20	1	1	1	2	1	0
Green River Christian Sec. School		10	10	0	0	0	0		1
St Michel Prim. School, Ossima	10	5	15	1	1	1	2	1	0
St Mary Leitre Primary School		5	5	0	0	0	0		1
St Ignatius Sec. School	15	10	25	1	1	1	2	1	0
Lumi Sec. School	10	10	20	1	1	1	2		1
Fatima Junior High School		5	5	0	0	0	0		1
Arop Vocational Centre (Training center)		5	5	0	0	0	0		1
Wyporn Junior High School		0	0	0	0	0	0		1
St Francis Sec. School	15	5	20	1	1	1	2		1
Total Sandaun	65	60	125	5	5	5	10	3	7

Name	ITU supplied desktops 2023/24	FAO supplied desktops 2025	Total desktop	ITU 65 inches TV	FAO 85 inches digital whiteboard	FAO video conf. system	ITU / FAO copiers	UNDP PV solar systems	FAO Solar 6KVA PV system (outstanding)
East Sepik									
Drekikier Techn. Sec. School	10	10	20	0	1	1	2		1
Maprik Sec. School		15	15	1	1	1	1		1
Wosera Sec. School	30	5	35	1	1	1	2		1
Nagum SDA Sec School	10	10	20	1	1	1	2	1	0
Nidinumbo Prim. School	5		5	0	0	0	0		1
Biwat Yuat Primary School		5	5	0	0	0	0		1
Angoram Sec. School	30	5	35	1	1	1	2		1
Brandi Sec. School	35	10	45	1	1	1	2	1	0
St. John Bosco Dagua Sec. School	10	5	15	1	1	1	2		1
Kubalia School (Training center)		10	10	0	1	1	0		1
Hawaian Technical Sec. School (Training center)		5	5	0	0	0	0		1
Total East Sepik	130	80	210	6	8	8	13	2	9
Grand total	195	140	335	11	13	13	23	5	16

Source: Dataset received from ILO and FAO between September to November 2025 plus inspection during the ET field mission.

13.1.4 Number, spatial distribution and percentage of end beneficiaries who are using the expanded ICT network currently available in the programme's intervention area

Despite a reasonable distribution of the ICT centres across the rural areas in the districts of the two provinces, the programme has little documentation of the effective use of the facilities post ITU training events by key stakeholders of the programme E-Agriculture strategy. Main users are currently teachers and students at ICT systems hosting schools.

The equipped ICT centres are reasonably spread across ten districts (six in East Sepik, four in Sandaun) in the two provinces. From the ten centres visited, five centres have currently access to internet services either via a NICTA dish or other mobile network service providers. The five others are in the list for equipment of NICTA dish currently under procurement and expected for delivery in early 2026. It appears that a few equipped ICT centres still do not have access to internet. This makes the updating of the operating software for the provided computers impossible and severely limits the usefulness of these specific ICT resources.

Data on the geographic outreach and/or end beneficiary population served by the ICT resources centres are limited to the organisation of the training event by ITU on e-commerce and others. These training courses took place at initially equipped ICT centres and partially online. Training that included also 168 farmers in 6 batches documented with portrait photography in the ITU impact assessment report, took place for 22 percent in Vanimo, 15 percent online, 13 percent at Brandi School, 11 percent in Maprik, and less at other sites. Beyond the deployment of the ICT training courses by ITU (see I3.2.2), no data on users of the centres are available.

Most of the ICT centres visited during the field mission currently serve the essential ICT needs of teachers and students. All have concern regarding the sustainable maintenance of the received equipment's. Most have the intention to use the competences learned in the ITU training courses to develop and get approved by the competent authority, business plans enabling them to offer services allowing them to cover O&M costs. However, none of the ICT centres met could provide a business plan mature enough for endorsement by the competent authority. The ITU impact assessment report does not document any number of ICT centres with province-approved ICT business plan either.

Embedding of the ICTs in NICTA's wider objectives of establishing smart villages with the support and guidance of ITU (under its global "Smart Villages and Smart Islands Initiative" was not evident, in part because the majority of ICTs are not fully operational. However, some international organisations like UNICEF and WHO are exploring the possibility to use some of the ICTs to carry out their awareness building and social education programmes, in addition to the e-commerce online training foreseen through the LMS and other platforms. This initiative potentially represents a feasible way for the ICT centres to recoup their O&M costs in the future, although this is not evident in the business plans prepared for the ICTs.

I3.1.5 and I3.1.6

Moved to JC 3.2, where they are more relevant (see I3.2.0a and I3.2.0b).

Evidence log summary for I3.1.1 to 3.1.4

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I3.1.1	No	Stakeholder interviews, presentation and press releases Agri-MSME Challenge Fund, Annual progress reports 2021 and 2024	1
I3.1.2	No	Stakeholder interviews, NFIS 2020-2024, Lists of training event held by each Partner Agency with number of participants and topics covered, Focus groups with beneficiaries, Attendance sheets of exemplary specific training courses	2
I3.1.3	No	Annual progress reports, UN Partner Agencies report and datasets, Stakeholder interviews, List and data gathered from ITU and FAO, Focus groups with beneficiaries	1
I3.1.4	No	Stakeholder interviews, Progress reports, Lists of training event held by each Partner Agency with number of participants and topics covered, Focus groups with beneficiaries.	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC3.2 The degree to which value chain support services are operating in the programme area

Note: This JC has been slightly refined compared to its phrasing in the inception report, removing the words “and resilient to climate change impacts” (which is covered under EQ 5).

Finding 12 On the supply side, the programme has reduced several key barriers faced by financial service providers (FSPs), in particular market entry/expansion risks and funding constraints. As a result, FSPs significantly expanded their network of bank access points and engaged in product innovation. Although to a varying degree of success, programme support to FSPs facilitated access to, and increased the number of, relevant financial services and products available to farmers, other value chain actors, and the broader population in the Sepik provinces. FSP will still have to optimise agent-based models to ensure more financial access points can be established and will remain active even off the main towns and roads. To enhance financial inclusion for VC stakeholders, UNCDF (the lead agency of this programme component) partnered mainly with the private sector. Funding from the STREIT programme led each of the three selected FSPs to scale up its pre-existing network of bank access points in the Sepik region by a factor of two to five (I3.2.0a). The present and future success of this initiative depends very much on the different channels through which STREIT has influenced the FSPs’ strategic decisions concerning their markets in the Sepik region. Stakeholder interviews have systematically confirmed that, without the programme, the FSPs would have expanded their activities at much lower scale. At the same time, other financial institutions (not supported by STREIT) did not create many new access points outside the major towns. Therefore, STREIT has been the major contributor to shortening travelling distances of farmers (and the general population) to financial service centres in rural areas of the Sepik region. Prior to the programme, financial institutions hesitated to invest more in the Sepik region due to high (perceived) market risks and market entry costs. The grant agreements and technical support from UNCDF de-risked market entry for the three FSPs by (i) providing funding to explore and learn about new customers, locations, agent models, product incentives and variations, etc., and (ii) reducing some market barriers on the supply and demand side. The business models and experiences with STREIT vary considerably across the three FSPs. The programme created the most stable networks of access points where the costs of scaling them were highest, and vice versa (see JC 8.2 for more information). Specifically, the FSP that has relied (so far) on a small number of ‘mini branches’ in strategic locations, operated by the FSP’s own staff offering financial services in person, is now well established in the region, albeit with the drawback that its customers have to travel longer distances to reach an access point. At the other extreme, the FSP that operates exclusively as a mobile money platform and relies on external agents (mostly shop owners) to offer basic services on the ground represents about 80 percent of all access points established, but it has faced high levels of agent

churn (turnover) and dormant accounts. External agents usually drop out of business due to low activity and/or unfavourable commission structures.

The programme has no full visibility of the locations of the bank points of the latter FSP, neither the ones initially established nor those still active, but data from the two other FSPs show that most access points are located in or nearby towns, and along the main and secondary roads of the Sepik region (I3.2.0b). The overall progress towards better access to financial services is clearly visible. Moreover, the larger business activity in these areas would allow FSPs to accumulate the funds necessary to eventually expand (and cross-subsidise new access points) in more remote areas.

In terms of financial services and products, the programme has amplified the types of solutions available to farmers and other users in the Sepik region. It did so not only by incentivising the three FSPs to expand geographically, but also through an innovation fund that awarded prizes for new digital financial services tailored to value chain actors (e.g., integrated into supply chain or business platforms). STREIT also supported a psychometric credit decisioning system for financial institutions (I3.2.3).

Finding 13

On the demand side, STREIT has contributed to improving financial access in the programme area by registering a large number of farmers for offline and mobile money accounts, although persistent behavioural and structural barriers have resulted in many accounts being underused, or left dormant for more than three months. Some of the behavioural barriers have been addressed through financial literacy training, active promotion of digital payment solutions in the cocoa and vanilla VCs, and community-based approaches, the programme has laid the foundation to further deepen financial inclusion and digitalisation of financial services in the VCs.

STREIT supported large-scale opening of bank accounts and registration on mobile money platforms among a large number of individuals, especially farmers, who previously did not have a bank account. However, many of these accounts and mobile money registrations have not translated into regular use, indicating demand for digital finance is less than expected among farmers. The 90-day account activity rates of the two FSPs that rely on agent-based access points and offer mobile money solutions fell short of the targets established in their financing agreements with UNCDF. This was due to persistent (i) behavioural and (ii) structural barriers.

(i) *Behavioural barriers* include low financial literacy and limited familiarity with digital payment solutions, some reluctance to accept user fees for financial services, and preferences for cash transactions in many parts of the VCs (I3.2.1). In contrast, the MamaBank platforms that functioned offline, incorporated literacy support, and were introduced through trusted channels in the communities were more widely adopted.

The FSPs, with support of the programme, have taken different approaches to mitigate remaining demand-side barriers.

UNCDF has trained over 4,500 farmers on financial literacy, and a few thousand others have received lighter financial literacy training as part of broader entrepreneurial training by FAO. Beyond farmers, the level of financial literacy in the general population has remained low, and only one FSP systematically offers financial literacy training to its customers (I3.2.2).

Preferences for digital versus cash payments are complex and depend on the value chain, the different actors within a specific value chain, and locations. Overall, the cocoa and vanilla VCs have higher potential for digitising payments than the fisheries VC, where the bulk of financial transactions takes place in local markets operating in cash. While digital payments between buyers and producers of cocoa and vanilla are still not very common either, mainly due to strong cash preferences among farmers, the evaluation identified some successful cases of deep financial inclusion and uptake of e-payment solutions (I3.2.3). Their users value the increased safety from not having to transport cash through unsafe areas and the ease of the transactions.

In addition to facilitating payments, the financial inclusion initiatives under the programme have started to enhance access to credit for farmers. So far, however, the increase in the number of farmers receiving loans is modest, given the lack of collateral and formal income history faced by farmers (I3.2.1).

(ii) The main *structural barrier* is limited network coverage and reliability. The UNCDF-led component did not have any direct influence on it (which largely depends on infrastructure investments), except through its joint advocacy activities ('evidence-based policy dialogues') with ITU (see I3.1.1 under the previous JC).

I3.2.0a (formerly I3.1.5) Number, spatial distribution, accessibility, and reliability of the financial services opened through the programme by year

The priority of STREIT / UNCDF for the financial service providers (FSPs) was to (i) first set up as many access points and new bank accounts/customers as possible, accepting that there might initially be large agent

turnover ('churn'); (ii) in a second step, enhance agent and customer management; and (iii) finally, foster product development.

Under sub-output 2.2.1, UNCDF signed grant agreements with three FSPs in 2021:

- Women's Micro Bank Limited, also known as MamaBank. Its access points, which on average have one access point in each district of the Sepik region, are operated by MamaBank staff and exclusively offer MamaBank financial services.
- Nationwide Microbank Limited, with the trading name MiBank. MiBank has a network of authorised external agents (individuals or businesses, such as shops) who provide basic financial services.
- Digicel Pacific, a mobile network provider, which operates the mobile money platform CellMoni. CellMoni also relies on a network of external agents²⁶.

Evidence collected in Table 16 shows that the programme triggered a dramatic increase in access points throughout the Sepik region. Between 2021 and 2024, each FSP multiplied its number of access points by a factor between two to five compared to the 2021 baseline.

Table 16: Number of bank access points and accounts established by the three FSPs:

	Overall target	2021	2022	2023	2024	Total until Sep 2025
Access points	264	46	66	125	68	305
Bank accounts	100,000	16,515	48,952	40,561	13,502	119,530

Source: STREIT logframe until Sep 2025.

The 305 access points are distributed as follows: CellMoni = 255, MiBank = 40, MamaBank = 10. Monitoring data from Oct 2025 shows that roughly three quarters of the new access points were established in East Sepik and one quarter in Sandaun province.

The access points are not always active and functional. The evaluators visited 11 access points of all FSPs in the field and found two of them closed. The consultant of the UNCDF financial services & products mapping for Sandaun (2025) found that only 10 of the 40+ CellMoni agents reported in the STREIT project monitoring data were still active. Stakeholder interviews and more recent STREITMIS data confirmed that especially the networks of agent-based access points have experienced large fluctuations.

In the agent-based models, the two FSPs have experienced large turnover in their networks of agents. The decisions of agents to stay in business and their level of activity has been affected by the following main challenges:

- Relatively low numbers of transaction per agent, especially in more remote areas, often driven by the limited active use of the accounts created by the FSPs (see I.3.2.0b) and low financial literacy in the general population.
- Unattractive (and sometimes untransparent) commission structures, which do not secure enough income from the relatively few transactions for agents, who hence continue to rely mostly on other income generation activities (shop owners also working as agents).
- Supervision and training issues – external agents tend to state that they receive relatively little ongoing support (in terms of equipment, training, visits) from the provincial/regional branches of their FSPs; and they sometimes do not fully understand the products they offer either.
- Cash constraints – the volume of cash deposits made at an agent is often not enough to balance the volume of cash withdrawals by her/his customers; agents face costs (e.g., for frequently travelling to ATMs) for withdrawing cash themselves.
- Unstable network coverage occasionally prevents agents from carrying out some transactions.

I3.2.0b (formerly I3.1.6) Number of smallholders who state they have close access to new financial services (within one hour of their community), have accesses them at least once and who feel the financial services provided uphold key principles (inclusiveness, equality, accountability)

The programme has only partial visibility of the geographic locations of the bank access points. Specifically, the STREITMIS only contains GPS coordinates for approximately one third of the access points created with support of the programme, and no information about their activity status. The missing GPS data concern mainly

²⁶ Women's Micro Bank and Nationwide Microbank are microfinance institutions that hold banking licenses issued by the BPNG while Digicel holds a mobile banking license.

CellMoni agents, whereas the locations of most MamaBank and MiBank access points are known. The STREITMIS map shows that almost all MamaBank and MiBank access points are located in or nearby towns, and along the main and secondary roads of the Sepik region. Therefore, members of cocoa, vanilla and fishery groups in more remote areas still have to travel longer distances to reach these access points.

Overall, however, average travel distances to bank access points have been substantially shortened by the programme relative to the baseline. Access points staff/agents and customers highlighted that travel in many areas of the Sepik region can be arduous and unsafe, especially for women, which reduces their number of visits to the access points. Some access points may be found temporarily closed due to inactivity of agents, for security reasons, climate events, etc.

13.2.1 Number and type of financial products and services developed and percentage of smallholders and fisherfolk interviewed who use them (women and men) by November 2025 (e.g. includes number of AgUnity payments, and mobile money accounts opened annually between 2019-2025)

A. Financial products and services developed

Under sub-output 2.2.2, STREIT has supported the development of financial products and services along three lines: (i) setup of an alternative credit decisioning system to be used by financial institutions, (ii) creation of innovative financial and digital solutions for farmers in the Sepik region via the Agri-MSME Challenge Fund (see 13.1.1), and (iii) the extension of existing financial products and services in the Sepik region via grant agreements with three FSPs (see 13.2.0a).

(i) Psychometric credit decisioning system by Global Psytech

The cooperatives and farmers in the selected VCs often struggle to obtain bank loans given their lack of formal financial history and collateral. To facilitate the credit decisions for financial institutions, UNCDF contracted in 2025 a Malaysian data tech company (Global Psytech) to deploy an alternative credit decisioning system. The system computes credit scores based on behavioural ('psychometric') data of loan applicants, such as financial transaction history, entrepreneurial capacity, etc. CGC holds the master license of the system and, after finalising the piloting phase at the end of 2025, plans to issue sub-licenses to interested financial institutions. The fee for the master license includes technical support from Global Psytech to tailor the system to different financial institutions (their interest is quite high). Test results so far suggest that the system predicts the right credit decisions with high (>95 percent) accuracy.

(ii) Innovative financial and digital solutions introduced by the winners of the Agri-MSME Challenge Fund

AgUnity deployed a digital supply chain platform and onboarded 629 vanilla farmers, also providing subsidised smartphones (139 farmers) or QR cards (490 farmers) and training. Through the platform, AgUnity has linked farmers directly to: (i) Munul Organic Spices in PNG, which connected them to a buyer in Australia (Friend and Burell) in 2022, resulting in an average price premium of 33 percent relative to local bulk buyers; and (ii) a buyer in Singapore in 2024. AgUnity has also partnered with MiBank to facilitate the opening of bank accounts for vanilla farmers with the aim to migrate towards full digital payments in vanilla procurements starting in 2026.

PNG Agriculture Company onboarded 1,500+ cocoa farmers from 10 farmer groups on a digital platform, enabling them to be part of a business system and adopt technology for recording financial transactions. It provided them with access to finance through opening bank accounts (partner: MiBank), financial and digital literacy, business skills training (including an extension service programme), and linking them with cocoa value chain actors.

MiBank (one of the winners of the Agri-MSME Challenge Fund, in addition to being one of the three FSPs) launched an innovative product for agents to open MSMEs accounts remotely, eliminating the need for MSME owners in remote areas to visit a bank branch for this purpose. More than 300 MSME in the Sepik region were remotely onboarded in 2022 and 2023. MiBank also introduced 'Speed Loans' with support of STREIT – a product that allows clients to submit applications for deposit-backed loans via short codes (like *123#) on their mobile phones, rather than submitting applications on paper. The product has been introduced everywhere in the country.

(iii) Product and service portfolio of the three FSPs extended in the Sepik region

The two microfinance institutions (MamaBank and MiBank) offer current accounts, savings/investments accounts, and about half a dozen different loan products (each institution) including for business and agriculture.

CellMoni offers an e-wallet permitting mobile transactions such as payments, deposits and withdrawals (alternatively in cash at an agent), but no savings or loan products.

The three FSPs have signed bilateral 'interoperability' agreements allowing transactions between them – but they are usually not integrated with other commercial banks such as Bank South Pacific.

These products and services are available country-wide and are not specifically tailored to cocoa and vanilla farmers and fisherfolk in the Sepik region. However, the FSPs have experimented with slight adaptations and incentives to increase the use of these products and services among the end beneficiaries of STREIT.

B. Use of financial products and services of the FSPs by smallholders and fisherfolk

See I3.2.0a for the number of accounts opened. The total of 119,500 accounts exceeds the target of 100,000 accounts. From the progress reports, CellMoni accounts for approximately half (50-60k), MiBank for 30-40k, and MamaBank for 20-30k of these accounts. The majority of these accounts are held by previously unbanked individuals. Access points also host accounts for MSMEs, including cocoa, vanilla, and fishery groups, although this is not very common. Most account holders are individual farmers and fishers. 53 percent of the bank accounts were opened by women (according to STREIT Impact Assessment – Role of Enabling Services in VC Transformation).

Many accounts are dormant. For example, at the end of 2024, 90-day activity rates of accounts ranged from 13 percent (Mi Bank, East Sepik and Sandaun) to 43 percent (Sandaun) (source: UNCDF financial services & products mappings and impact assessments).

It is not possible to determine how many percent of STREIT end beneficiaries (smallholders and fisherfolk of the groups supported by the programme) have opened and actively use their accounts. For example, it is not clear whether the programme dashboards of the FSPs only include clients of the new access points established with programme support or not. The total number of account holders might also be lower than the total number of accounts.

The most common products are transactional current accounts (MamaBank, MiBank) and the e-wallet (CellMoni). Interest bearing fixed term deposits and loans are rare.

According to STREIT monitoring data, the programme has mobilised (noting that 5 PGK $\approx$ 1 EUR): PGK 6.7 million of deposits (PGK 56 per opened account), PGK 1.1 million of loans (only MiBank and MamaBank; hence about PGK 20 per account), and PGK 3.5 million of mobile money transactions (only MiBank and CellMoni; about PGK 40 per account). However, the averages per account are biased downward by the fact that the majority of accounts have been inactive and thus present zero balances, loans, and transactions. Field visits suggest that the average balance (deposits) per *active* account is higher, usually a few hundred PGK. Likewise, the typical loan size is a few thousand PGK, given that less than 5 percent of customers have received a loan.

The total volume of loans has steadily increased over the years; yet, the lack of a formal income and credit history makes it difficult for most farmers to apply for loans (and for banks to assess loan applications). Some FSP representatives said their institutions usually preferred loans to individuals, rather than to (farmer) groups since the latter dilutes the liability for loan repayment among too many people.

The demand for, and use of MamaBank 'in-person' financial services is satisfactory (MamaBank has the highest 90-day activity rate of the three FSPs, despite having less access points in the region than the other FSPs). In contrast, the uptake of digital financial services of the other FSPs among individual farmers (see I3.2.3 for MSMEs) still faces more significant barriers:

(i) Behavioural barriers (which can be, and were, mitigated to some extent by the financial inclusion component):

- So far, only partial digitalisation of transactions: receiving income in cash requires farmers to physically deposit some of it at an access point anyway to make payments through their mobile money account.
- Both account holders and non-users met in the field expressed reluctance to accept even small fees for mobile money accounts or transactions.
- Low financial and digital literacy / limited understanding of specific products with trainings by FSPs lacking far behind needs (see I3.2.2).
- Sometimes low trust due to unfamiliarity with the products or reported scams.

(ii) Structural barriers (largely outside the scope of influence of the financial inclusion component):

- Poor network coverage and reliability, especially in more remote areas.

I3.2.2 Number of programme-supported MSME focused training initiatives completed annually between 2019 and 2025 by the programme (e.g. on financial/business/management/ICT training)

Financial inclusion

Under sub-output 2.2.4, financial literacy training was mainly provided by UNCDF (exclusively on financial literacy) and, to a smaller extent, by FAO (financial literacy modules integrated into broader business skills

training for farmers). UNCDF trained 1,500 farmers in 2022 and another 3,000+ in 2025 using Training of Trainers (ToT) approach.

Evidence from focus groups suggest that the programme increased financial literacy among farmers who participated in trainings. However, training participants represent only a small part of the general population, which the FSPs' agents depend on to sustain their business.

Only one FSP (MamaBank) systematically offers full financial literacy trainings (at a small fee at cost recovery level) as part of its strategy to acquire new clients (1,000+ customers trained in the Sepik provinces in 2025 alone); the other FSPs and their agents only offer introduction to their specific products.

Digital inclusion

Concerning the 21 ICT centres established throughout the life of the programme in 10 districts of the two provinces, ITU developed between 2021 and 2025, 46 training courses with an aggregated outreach of 1,560 people in 10 districts. Target audiences were staff of the recipients' institutions to guide them to establish a business plan for the sustainable operation of the delivered ICT equipment. It included also some farmers and agripreneurs (168 farmers in 6 batches according to the ITU impact assessment report) to help them develop their e-commerce capacity. Topics taught included (i) Basic ICT competence, (ii) E-commerce development, and (iii) Data collection. Six courses were also delivered to train trainers capable of disseminating ICT good practices and e-commerce competences into the district and LLGs.

Along the time axis the following courses were organised: 2021 (two courses, 84 people), 2022 (one course, 28 people), 2023 (16 courses, 508 people), 2024 (16 courses, 597 people), 2025 (10 courses, 343 people).

I3.2.3 Percentage of MSME and value chain stakeholders interviewed who are using ICT mobile applications developed between 2019 and 2025 (for example covering extension services, market information, value chain specific information, financial facilities available, etc.).

Financial inclusion

Under sub-output 2.2.3, STREIT promoted knowledge and three mobile applications for (or including) digital financial services: (i) MiBank's 'MiCash' app, (ii) Digicel's 'CellMoni' e-wallet, and (iii) the AgUnity app. See I3.2.1 for the number of registered and active users of these applications.

The applications came with different value propositions, identified by the app providers and the UNCDF VC cash flow mapping (2021), for users in the VCs.

Cocoa VC: (i) Digital payments from exporters to fermenters – exporters have signalled interest, and some have even been onboarded as mobile money agents, although e-payments are only slowly taking off; where done, fermentary owners value the increased safety from not having to carry large amounts of cash back from the market hubs to unsafe areas, or from avoiding long queues at bank offices to deposit cash; yet, fermenteries require cash to pay wet bean producers (see I2.1.5) (ii) Payments from fermenters to farmers delivering wet beans – usually still made in cash, given the reluctance of many farmers to actively use mobile money apps, their preference for cash, and limited network coverage in more remote areas; (iii) Payments from cocoa groups to its members – MiBank has set up some cocoa groups as agents, and these groups have used the MiCash app to pay their members.

Vanilla VC: Some vanilla groups have connected through the AgUnity platform to off-takers or exporters in PNG, Australia, and Singapore (see I3.2.1). In general, the largest digitalisation opportunity would be between Intec and vanilla producers; Intec has so far not adopted MiCash or CellMoni but makes some payments by bank transfer, which reduces vanilla farmers' risk of being exposed to robberies (see I2.2.5).

Fisheries VC: The potential for digitalisation of payments is generally lowest in the fisheries VC. So far, all fisher groups visited still use cash rather than digital money given the local markets where they sell their fish do not use mobile money apps (see I3.2.3)

Evidence log summary for I3.2.0a to 3.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I3.2.0a	Yes	Stakeholder interviews, field visits, STREIT logframe and map/list of access points, grant agreements between UNCDF and FSPs, UNCDF financial services & products mappings and impact assessments for East Sepik and Sandaun (reports and presentation), STREIT Mid-term Evaluation, annual progress reports	3
I3.2.0b	Some	STREITMIS data/map, field visits to access points, UNCDF financial services & products mappings and impact assessments for East Sepik & Sandaun	2

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I3.2.1	Some	Stakeholder interviews, focus group with farmers, field visits, websites of and grant agreements with FSPs; progress reports 2022 and 2023, UNCDF financial services & products mappings and impact assessments for East Sepik and Sandaun (reports and presentation), FSP project dashboards, press releases	2
I3.2.2	No	Stakeholder interviews, focus group with farmers, field visits, UNCDF financial services & products mappings and impact assessments for East Sepik & Sandaun	1
I3.2.3	Yes	Focus groups with farmers and fisherfolk, stakeholder interviews, UNCDF value chain cash flow mapping	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC3.3 The degree to which smallholders and fisherfolk have access to renewable energy to support the development of their VC

Finding 14

The programme has successfully installed nine PV power systems compared to six originally planned, benefiting six schools and three health centres. All are operating off grid and providing more reliable basic public services to their local communities, including over 5,700 students, in a more cost-effective manner than before. Moreover, five schools are currently connected to the internet, enabling them to operate as rural ICTs. However, there is no evidence of long-term maintenance contracts in place beyond the three-year term agreed with the supplier, nor policy dialogue on the upscaling of this initiative within wider programmes in PNG, notably the smart villages initiative.

UNDP has successfully overseen the installation of nine PV systems in six rural schools and three health centres in line with original targets in the logical framework. All nine are reported to be operating smoothly as planned and delivering tangible gains in reducing operational costs, compared to their previous dependency on PNG Power Limited (PPL), or diesel for gensets. Moreover, all four schools visited stated that the solar PV power systems are providing all their energy needs (including dormitories) to operate off grid and the financial savings generated have helped offset general operational costs as well as bridge fluctuations in education subsidies received from the Ministry of Education. As a result, the ET identified 5,772 students are enjoying

This suggests that investment in PV power plus BESS to support rural public facilities to operate off grid can deliver a good return on investment over time, especially as school and health centre operators are able to provide more reliable service delivery, which in the case of the latter includes emergency services at night. However, this finding has not been adequately tracked by the programme so far to justify a public awareness campaign demonstrating these benefits to stimulate policy dialogue on their upscaling to support, for example, the upscaling of the smart villages initiative under the guidance of NICTA in partnership with ITU.

Residual concerns for the owners/operators of these PV systems centres on the lack of long-term maintenance contracts. Although a three-year maintenance and after-sale contract has been signed with the international supplier (based in Africa and sourcing components from Europe), on-demand access to a maintenance contractor beyond this three-year period is not in place.

Finding 15

In total 511 fishing, vanilla and cocoa groups/MSMEs have been provided with small PV systems or solar thermic driers compared to 550 planned. However, impact monitoring on this aspect of the programme is not adequately applied to support learning on their effectiveness and the co-benefits they produce.

In addition to nine PV systems delivered to public facilities under the oversight of UNDP, the programme has distributed 511 small solar systems comprising 38 small PV systems (up to 5-KW) to operate freezers and vacuum sealers for households engaged in fisheries and vanilla production, plus 473 solar thermic driers to cocoa and vanilla groups/MSMEs to November 2025. All 511 units have been distributed to lead riverine/coastal fisher groups and lead farmers officially responsible for cocoa fermentaries and vanilla curing. In addition, the programme intends to deliver a further 15 PV systems to the 15 ICT centres that currently do not have a PV system, seven small PV systems to operate freezers for leaders of seven fishing groups and 177 solar thermic dryers for cocoa and vanilla drying before closure.

However, the ET was unable to find reliable impact monitoring on this aspect of the programme to guide the procurement of the 22 PV systems and 177 solar thermic dryers planned. In addition, it was not able to collect concrete evidence on the selection criteria applied to distribute this equipment, nor who will oversee their operation and maintenance in the post-closure period of EU-STREIT PNG, in particular the long-term maintenance of the PV systems.

13.3.1 Percentage of solar systems installed in schools, health posts and VC processing centres that are (i) operating in a satisfactory manner and have a maintenance plan in place by November 2025. Include (ii) serving the number of people planned (annually between 2019 and 2025)

Table 17 confirms the programme has equipped six schools and three rural health centres with PV systems under sub-component 2.3, which is three more than originally planned.

Table 17: Public facilities equipped with PV electrical power systems in East Sepik and Sandaun

Name	District	Visited	Evolved as ICT Center	Capacity (KW) 2024	PV Pannels KWp	BESS (KWh)	Production MWh/year 2024	No. of students	Internet access at site	Installation year
Sandaun										
Don Bosco Sec. School	Vanimo Green	Yes	Yes	100	59	194	355	1,400	Yes	2023
Vanimo Sec. School	Vanimo Green	Yes	-	100	89	242	438	800	Yes	2023
Ossima Primary School	Vanimo Green	Yes	Yes	10	13	36	66	222	No	2024
Ossima Sub-Health Center	Vanimo Green	Yes	-	10	13	36	66	-	No	2024
St Ignatius Sec. School	Aitape Lumi	No	Yes	100	58	136	248	1,000	Yes	2024
Total Sandaun		4	3	320	231	644	1.172	3,422	3	
East Sepik										
Nagum SDA Sec. School	Yangoru Saussia	No	Yes	100	96	260	475	950	No	2023
Taul Community Health Post	Wewak	No	-	20	15	48	88	-	No	2023
Brandi Sec. School	Wewak	Yes	Yes	100	59	136	248	1,400	Yes	2024
Dagua Health Center	Wewak	Yes	-	20	14	43	79	-	Yes	2023
Total East Sepik		2	2	240	184	487	889	2,350	2	
Grand total		6	5	560	415	1132	2,062	5,772	5	

Source: Dataset received from UNDP to November 2025 and triangulated during the ET field mission.

Site inspections to six facilities confirm the PV systems installed under the supervision of UNDP are robust, in good condition and operating smoothly, although one school in Vanimo was found to have a defective battery rack in one of the three BESS cabinets inspected, which interviews confirm happened shortly after delivery of the system in 2023. Given this happened almost two years ago, the ET identified gaps in operation and maintenance capacity, in particular the lack of adequate communication between the owner and the supplier of the PV system who has signed a three-year maintenance contract. Under these circumstances the school has had to disconnect two additional battery racks (one in each of the two other BESS cabinets) to safeguard balanced power distribution when the battery is in charging mode. As a result, about 12 KW BESS capacity has been lost.

At the time of the field mission, none of the nine sites had access to a recording performance dashboard to monitor PV overall system health and plan maintenance tasks, although Aptech Africa as main contractor and supplier have access to data via a Wi-Fi router. Following a request of the evaluation team in the field, it appears that, with support of UNDP, access to continuously recording digital dashboard has been enabled to all five public facilities equipped with PV sites that have access to the internet.

Although a three-year maintenance contract has been signed with Aptech Africa, site inspections and interviews confirm none of the PV equipped public facilities have a long-term maintenance contract in place with a local certified electrician, approved by the National Energy Authority (NEA), who can respond to requests to operation and maintenance needs on demand. Moreover, interviews confirm the establishment of such a contract has not been discussed between the UNDP and the recipients of the PV systems since they were

commissioned, although it appears that UNDP plans to include it in the handover notice to the nine system-owners at the end of the programme.

Table 17 also shows that five of the six education establishments provided with a PV system have access to the internet. As a result, not only are around 5,770 students (2,350 in ESP and 3,420 in Sandaun) are currently benefitting from online access to support their education, but the schools can now be used as an ICT through which farmers, fishers and other groups can receive online training through the LMS and other platforms. In addition, the three health centres are currently able to serve a population of around 3,000 people, which includes the provision of emergency services at night for the first time. This has particularly benefitted women who have complicated pregnancies or needed to give birth at night.

In addition to the installation of the nine large PV systems (10-100 KW capacity) under the guidance of UNDP, FAO has overseen the procurement, installation and commissioning of: (i) 38 small PV systems (up to 5-KW) to power 15 vanilla vacuum sealer machines and 23 freezers for short-term storage of fresh fish; (ii) 473 thermal solar dryers for cocoa and vanilla. A further 215 pieces of solar equipment are in the process of procurement as follows: (i) 38 PV systems (5-6 KW capacity) to power the 15 ICTs that do not have a PV system and 16 district offices; (ii) seven new small PV systems (<5KW capacity) for lead fishers to operate a freezer (500 l. capacity); (iii) 177 more solar thermic dryers for cocoa and vanilla lead farmers.

13.3.2 Percentage of operators and users of public facilities and VC processing facilities who state that they are satisfied/dissatisfied with the training provided to operate and maintain and/or use solar-powered services

All the owners/operators of the established systems are in general satisfied with the systems. However, the training provided was considered by the owners as too rudimentary. Important aspects such as access to a monitoring dashboard, sustainable maintenance guidance and spare parts access were missed.

The training was provided by the main contractor (Aptech Africa). It focused on basic operation targeting the staff of the recipient institutions in charge of operation (around 50 people in total comprising essentially teachers and staff in charge of infrastructure at the facilities). Topics covered included mainly (i) components of the system (solar panel, batteries, inverters), (ii) system design, (iii) limitation, (iv) recommendation for operation, (v) basic safety issues and (vi) operational maintenance.

No training courses have been orchestrated to reach out to a wider audience of local professionals who could become economic actors along the value chain of design, procurement, installation and maintenance of off- or on-grid solar PV systems in the provinces.

Regarding the smaller active PV systems installed (around 5KW and less), FAO has delivered 510 units across 10 districts of the two provinces. It is planning to deliver 242 units more before the end of the programme. There is no information to which extend the supply of the systems were accompanied by training courses regarding installation, operation, maintenance and safety of the systems especially the larger units (5 KW) and to which extend the programme asked users to register by NEA or report power consumption for monitoring purposes.

The operators of the four visited PV power sites established at public facilities confirmed their overall satisfaction with the delivered systems. The staff of the one school were displeased by the failing battery rack and complained about the lack of reactivity of the supplier not last because of its absence in PNG. The supplier was selected via an international tender based in Africa to optimize procurement cost. Sub-contracts with local fitters selected by the international supplier failed to deliver a couple of time along the programme timeline.

All four PV system owners met complained during the field mission of not having access to a continuous performance dashboard providing basis information (charge/discharge mode, consumption, battery charge level, etc.). This made impossible for them to track the integrity and charge status of the systems components and for monitoring and maintenance planning. The problem was resolved following an intervention of the ET team.

13.3.3 Percentage of users of solar power who have increased the quality of cocoa and vanilla products through drying, processing, cooling

The programme has not systematically tracked data on this indicator. However, qualitative evidence gathered from focal group discussion and interviews with farmers on the impact of the solar dryers indicates that solar-powered drying and processing facilities have:

- Reduced the drying time for cocoa beans by as much as 50 percent, or around 21 days compared to 42 days when applying traditional sun drying techniques (although this is longer in the wet season).
- Reduced the drying time for vanilla pods by well over 50 percent, to less than 45 days, compared to more than 100 days why using traditional sundried techniques.

- The vast majority of farmers confirmed that the new dryers have facilitated increased drying capacity allowing, for example, the drying capacity of 10kg of vanillas pods every seven days
- Bean and pod losses have declined significantly following the application of the new drying techniques.
- Drying consistency has improved, as well as eliminated smoke tarnishing of cocoa beans, which has resulted in an increase in the development of premium commodities that meet export quality standards.

I3.3.4 Percentage of solar energy users who state that their well-being and/or income have increased by November 2025 compared to before the programme started in 2019.

The main gains of the PV power systems installed are cost saving for the owners/operators. It helps them lower payments to either PPL for grid access or for the purchase of diesel for gensets. All visited schools indicated that they can entirely rely on solar PV power for school operation including dormitories. One school has now zero PPL cost for electrical energy supply versus PGK 7,000 monthly before the installation of the system. Another school's electrical energy costs were around PGK 5,000 monthly before the installation. It is now PGK 4,000 for the year. Saving are currently being used by schools for other important operation cost and investment to compensate for fluctuations in education subsidies received from the Ministry of Education. This suggests that investment in PV power plus BESS off- grid for large public facilities has had a good return on investment. It has generated significant savings to programme owners, relieved financial stress for school operators and improved the service quality of health centres.

Evidence log summary for I3.3.1 to 3.3.4

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I3.3.1	Yes	TERI Renewable Energy Assessment of Sepik 2021, Stakeholder interviews, Progress reports, Datasets from UNDP on procured and installed systems, Focus groups with schools and health centres.	2
I3.3.2	No	Module of training course held by the international supplier. Dataset and reports received from UNDP.	1 ²⁷
I3.3.3	Some	Interviews, focus groups with farmers	2
I3.3.4	Yes	Dataset received from Beneficiary schools. Dataset and reports received from UNDP. Focus groups with beneficiary schools. Interview of stakeholders.	1 ²⁸

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC3.4 The degree to which climate-proof transport infrastructure has been installed to support smallholders and fisherfolk develop their VC in the programme area

Finding 16 The developed transportation infrastructure (rural roads rehabilitation, water way clearing and airstrip rehabilitation) enormously benefited the VC groups and villagers located in the vicinity of the rehabilitated infrastructure. Main benefits included significantly improved transportation opportunity and travel time (personal mobility vehicle (PMV), boat, airplane) for crops transport leading to widely improved income gains for crops producers. Villagers also gained better access to social services (schools and health services) resulting to an improved perspective for future wellbeing in concerned villages. Evidence presented under I3.4.3 and I3.4.5 suggests that the rural transportation improvement component of the programme (roads rehabilitation, waterways clearing and airstrips rehabilitation) may represent the most tangible and immediate benefits of the programme for the communities living in the vicinity of rehabilitated infrastructure. The benefits of the road rehabilitation for villagers and farmers along the roads were very significant (as documented in a socio-economic impact study of ILO-STREIT and partially triangulated field). It allowed many farmers to start trading commercial grade quantities of cocoa or vanilla at nearby marketplaces.
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²⁷ Quality of evidence is 2 for UNDP supplied documentation for larger systems delivered to nine public facilities and 0 for FAO supplied information concerning the smaller systems delivered to agro-entrepreneurs.

²⁸ Quality of evidence is 2 for UNDP supplied documentation for larger systems delivered to nine public facilities and 0 for FAO supplied information concerning the smaller systems delivered to agro-entrepreneurs.

Others benefited from social services available in larger cities (health and education). The estimated population served by the rehabilitated and routinely maintained roads under programme according to ILO provide tables is around 112,000 people (East Sepik 89,300 people and Sandaun 22,700 people).

In addition to the rehabilitation of roads, the programme also addressed the issue of water transportation. Initially the rehabilitation or new construction of three jetties had been contemplated in the work programme. Around 200 km (161 km up to in September 2025) along nine Sepik tributaries out of a total length of 485 km of 14 waterways along the Sepik River were cleared from logs, debris and invasive vegetation. The works assisted around 72 villages or communities living on or near the banks of the Sepik River tributaries which are heavily relying on boats for market access, education and social services to Angoram, Pagwi or Ambunti.

In addition, the transportation component rehabilitated five remote airstrips in three districts that are crucial for connecting isolated communities to essential public services like health and education, as well as commerce, ensuring accessibility where roads are often totally absent.

Finding 17

The rehabilitated infrastructure remains limited in scale and outreach. The roads rehabilitated under STREIT represent a small proportion of the rural road networks in the two provinces (8.2 percent of 3,800 km). In addition, only a limited percentage of the VC groups (20 percent of 720 VC groups created and assisted by STREIT) are within 5 km of any rehabilitated roads under the programme.

Although it is clear that all road rehabilitation work was on existing rural roads, the length of the roads rehabilitated remained small (313 km) compared to the rural road networks of the two provinces (3,800 km). In addition, the selection of the roads rehabilitated or spot improved only moderately matches the 720 sites where VC groups were assisted in the three agricultural sectors. One explanation may certainly be related to practical constraints in remote Sepik geography, such as difficult terrain, remoteness of settlements and existing network limitations. However, given the immediate and tangible benefits experienced by the farmers and villagers living along the rehabilitated roads, the programme would have benefited of having more rural roads being rehabilitated once the quality and immediacy of the benefits of the road rehabilitation works for the farmers and VC groups became documented. Given the limited number of VC groups practically located in the vicinity of the rehabilitated roads, the rehabilitation during the second half life of the programme of more rural roads located along the areas where VC groups are located, would have be value adding for the programme outcome and impact (I3.4.1 and I3.4.2).

Finding 18

The development of the RMG mechanism to support the road rehabilitation and maintenance works was instrumental to the success of the infrastructure component of the programme with multiple benefits to concerned villages and related VC groups. Benefits included income generation for vulnerable villager groups, the fostering of cooperation across villages sharing a road section and the simplification of road works contracts for civil works intensive tasks. On the other hand, the RMG financing mechanism was designed with little regard to the provincial administrative maintenance funding process and procedures incapacitating an easy funding continuation from provincial/ national budget post programme.

The development of the RMG mechanism for the road rehabilitation component²⁹ involved the employment over the programme life of vulnerable groups issued from villages along the infrastructure to be rehabilitated. Benefits included programme lifelong income generation for vulnerable groups of villagers with little opportunity for other types of jobs allowing households to increase their income for additional investment (like buying a motorbike to reduce travel time along the rehabilitated roads). According to the socio-economic impact study on the road works, the wages paid to the RMG staff represented around 40 % of the total consumption budget of the concerned households. It also facilitated the involvement of wider groups of villagers beyond farmers in understanding the value for the villages of contributing by themselves to the maintenance of the rehabilitated roads. In several cases it fostered a cooperative mood and mode among neighbouring villages for a common cause benefitting all, which reduced risks of inter-villages tension and conflicts. It finally also simplified the road rehabilitation contracts enabling the use of RMG activities to clear the road paths from vegetation and bushes ahead of the road works scoping task. This is needed to precisely define the civil works to be covered in the road rehabilitation contracts and to limit the road works contracts to civil work intensive infrastructure development activities (I3.4.4).

On the other hand, the RMG financing mechanism was designed as a direct funding instrument between ILO and the people employed in the RMGs. While immediately efficient and transparent for the programme,

²⁹ Water ways clearance works have established a similar mechanism with the local WDC in the concerned districts and RAA also employed local villagers for airstrip bushes and vegetation clearing tasks before airstrips rehabilitation.

it failed to integrate the provincial administrative maintenance funding process and procedures which need to be respected to enable a continuation of maintenance funding from provincial budget after programme completion.

Public funding for maintenance is only possible through registered companies that have secured the national/provincial credentials for such works. RMGs will therefore need to be first structured as local companies and secure the credentials needed for simple maintenance tasks along the rural roads they have displayed during the programme life. This may need some policy change at the DoWH and DWITS to allow the certification and then contracting of such low civil work machinery/ high manual work civil work companies targeting rural road basic maintenance.

13.4.1 Percentage of local and provincial institutions, contractors, and communities who have increased their capacity to plan, rehabilitate and maintain rural transport infrastructure in the programme area by November 2025 compared to mid-term in 2022 (includes capacity to develop and update technical specifications, norms, guidelines, etc. to ensure they are climate resilient)

According to the two provincial Road Master Plan developed during the life of the programme, the two provinces have a cumulated length of around 6,653 km of provincial and district roads composed of Provincial Trunk (PT) and District Feeder Road (DF) plus Local Access Road (LR) and Local Trunk (LT). This includes for East Sepik 2,441 km composed of 805 km (PT & DF) and 1,636 km (LR & LT); and for Sandaun 1,917 km composed of 726 km (PT & DF) and 1,191 km (LR & LT).

The programme rehabilitated a mix of existing District Feeder Roads (DF) roads and Local Access (LA) Roads. The latter is assumed to correspond to the sum of LR and LT roads. As the coding of roads defined in the Master Plans do not coincide with the coding applied for roads under STREIT and in the RuTIMS system, quantitative figures may not totally match.

According to Table 18, the programme rehabilitated and spot improved 13 existing roads or 207.4 km (8.2 percent of the total length of DF and LA Roads in the two provinces (131.4 km or 5.9 percent of the East Sepik DF + LA network, and 76 km or 4.8 percent of the Sandaun DF + LA network). For comparison, the programme logical framework had as target for rehabilitated roads of 264 km. Therefore, the programme achieved in this context 78.6 percent of the target. Up to September 2025, road improvement works had been completed on nine roads with a total length of 170 km (2022: three roads, 20 km; 2023: four roads, 82 km; 2024: two roads, 58 km; 2025: up to September 10 km). Residual work is still in progress on four roads covering a length of 37 km.

Table 18: Main lengths of existing rural roads addressed in STREIT Programme

Road name (district and province)	District	Length road works (km)	RMG staff employed	Rehabil. work (km)	Spot. improv. work (km)	Routine maint. only (km)	Overall routine maint. (km)	Road visited by ET
Sandaun								
Passi – Krissa	Vanimo Green	25.5	29		25.5		25	1
Onip - Rawo Leitre	Vanimo Green	16.7	18	16.7			17	1
Aitape - Malol	Aitape Lumi		25			25	25	
Walkasa - Maimai Wanwan	Nuku	15.9	15		15.9		18	1
Yiminim - Wilbowe	Nuku	17.9	19	17.9			18	1
Total Sandaun		76	106	34.6	41.4	25	103	4
East Sepik								
Yawasor - Kunger	Ambuti - Drikiriki		12			14	14	1
Nanaha - Tau	Kwanga-Ambuti-Drikiriki	14.5	14	14.5			15	1
Bonohoi - Endibi Tuanages	Maprik	11.8	11	11.8			14	1
Tuanages - Asanakor	Maprik-Ambuti-Drikiriki	5.8	6	5.8			6	1
Balif - Araseli	Ambuti-Drikiriki	12.8	12		12.8		13	1
Patiko - Nungaia	Wosera Gawi	31.6	33	31.6			32	
Buruwi - Torembi	Wosera Gawi		25			25	25	
Munji - Haripmo	Yangoru Saussia	6.5	6	6.5			7	1
Salaki - Palpal	Angoram		20			22	22	1
Angoram - Marienberg	Angoram	30.2	30		30.2		30	1

Road name (district and province)	District	Length road works (km)	RMG staff employed	Rehabil. work (km)	Spot. improv. work (km)	Routine maint. only (km)	Overall routine maint. (km)	Road visited by ET
Yawasoro - Niengwanjie	Wewak	10.4	11	10.4			10	1
Yarapi - Suambukau	Wewak		12			14	14	1
Banak - Wautogik	Wewak	7.8	8	7.8			8	1
Total East Sepik		131.4	200	88.4	43	75	210	11
Grand total		207.4	306	123	84.4	100	313	15

Source: Dataset received from ILO September to October 2025.

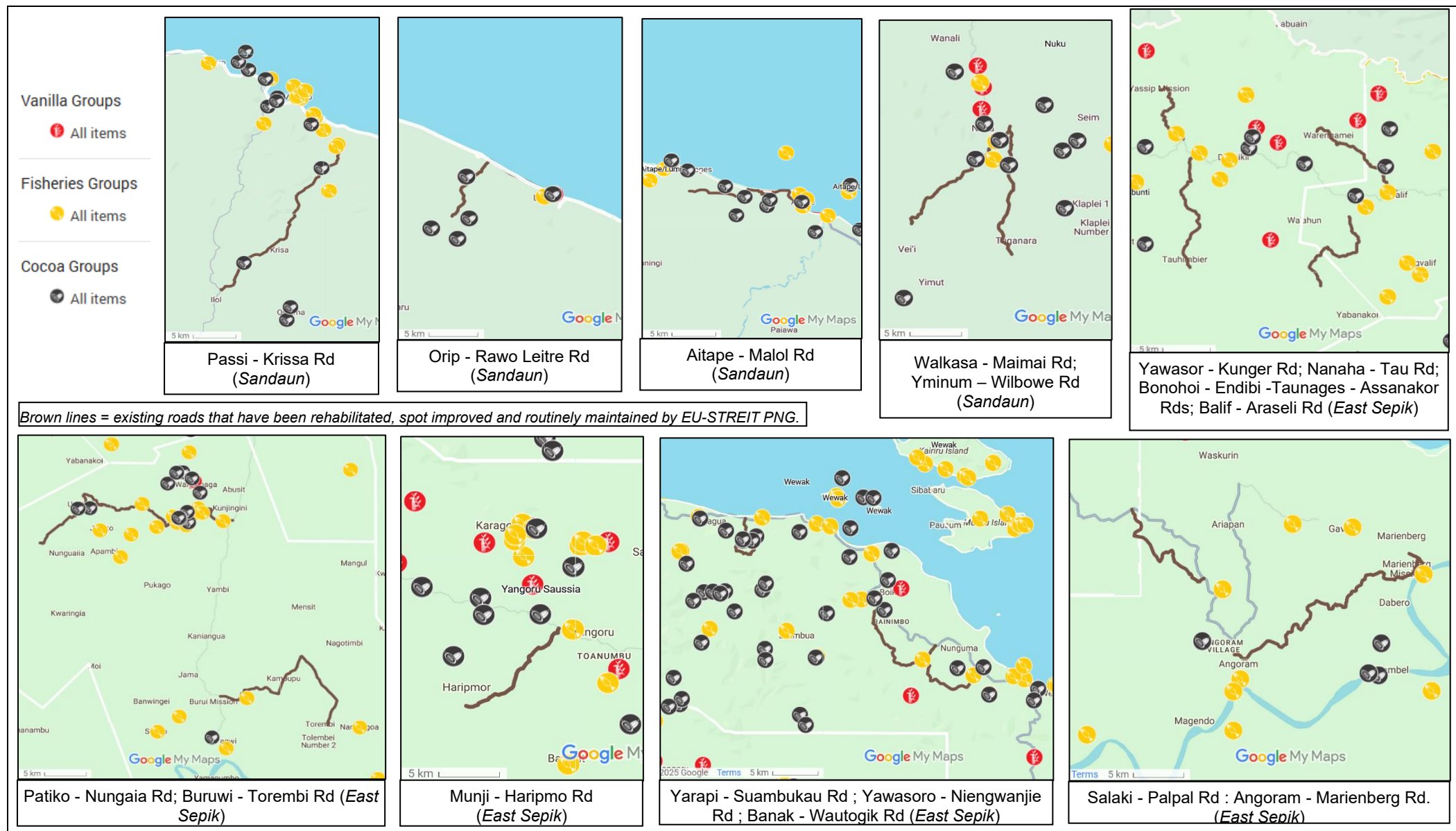
While the rehabilitated and spot-maintained roads have made a significant contribution to reducing transport constraints and improved market access for the people who live in along these roads, the actual number of the 720 VC groups supported by the programme that benefit directly from these roads was found to far lower than expected. Indeed, the ET found only around 20 percent of VC groups are located within a 5 km radius (applied by FAO) of any one of the roads supported by the programme. These findings are substantiated in Table 19 and Figure 9 showing 145 VC groups are located within this the 5 km radius target (91 VC groups in East Sepik and 54 VC groups in Sandaun). Furthermore, the ET found that only 53 VC groups (7.4%) are located within a 1 km radius of a rehabilitated/spot-maintained road (31 VC groups in East Sepik and 22 in Sandaun). When broken down, the corresponding percentages confirm a very small percentage of VC groups enjoy close access to these roads: (i) cocoa VC groups 7.0 percent; (ii) vanilla VC group 8.8 percent; (iii) fisheries VC groups 6.3 percent. This limitation can be partially explained by the practical constraints in remote Sepik geography such as difficult terrain, remoteness of settlements and existing network limitations but the relative mismatch remains.

Table 19: Number of programme VC groups located within 5 km from a programme rehabilitated, spot improved and routinely maintained road

Road name	Cocoa VC groups within 5 km	Vanilla VC groups within 5 km	Fisheries VC groups within 5 km	All VC groups within 5 km
Sandaun				
Passi – Krissa	3	0	6	9
Onip - Rawo Laitre	5	2	1	8
Aitape - Malol	9	0	7	16
Walkasa - Maimai Wanwan	7	2	4	13
Yiminum - Wilbowe	4	2	2	8
Total Sandaun	28	6	20	54
East Sepik				
Yawasor - Kunger	2	0	3	5
Nanaha - Tau	3	1	2	6
Bonohoi - Endibi Tuanages	1	0	0	1
Tuanages - Asanakor	0	1	1	2
Balif - Araseli	4	3	2	9
Patiko - Nungaia	10	2	12	24
Buruwi - Torembi	1	0	3	4
Munji - Haripmo	4	1	2	7
Salaki - Palpal	0	0	1	1
Angoram - Marienberg	2	0	4	6
Yawasoro - Niengwanjie	3	2	5	10
Yarapi - Suambukau	3	1	4	8
Banak - Wautogik	5	0	3	8
Total East Sepik	38	11	42	91
Grand total	66	17	62	145

Source: Evaluation team analysis of GIS map provided by FAO.

Figure 9: Location of VC groups in relation to rehabilitated, spot improved and routinely maintained roads in Sandaun and East Sepik



In terms of the road works completed to 30/09/2025, the programme has rehabilitated or routinely maintained a total of 18 roads, as well as around 100 km of district function (DF) roads and local access (LA) roads in the two provinces (75 km in East Sepik and 25 km in Sandaun). In total, the programme has supported the rehabilitation and maintenance of 313 km (210 km in East Sepik and 103 km in Sandaun) to 30/11/2025. This corresponds to 100 percent of the target of the logical framework (313 km) in the programme and 8.2 percent of all DF and LA networks of rural roads in the two provinces (3,800 km).

Road maintenance took place with the help of programme established Road Maintenance Groups (RMGs) composed of staff selected from villages served by the roads. Routine maintenance with the help of RMGs started early in developing road rehabilitation works as the RMGs were tasked with clearing the land and bushes along the paths to be followed by the road tracks to be rehabilitated or spot improved. On the other hand, road maintenance funding to RMGs ceased in May 2025 with the end of the regular extended programme.

The ET inspected 15 of 18 roads with a cumulated lengths of road visited of 175.8 km or 84.8 percent of the rehabilitated roads and 56.2 percent of the additionally routinely maintained roads in the two provinces. For East Sepik, this was 11 from 13 roads with a cumulated lengths of 99.8 km or 76 percent of the programme rehabilitated and spot improved roads in the province and 47.5 percent of the overall routinely maintained roads under the programme for the province. For Sandaun, the equivalent figures are four of five roads with a cumulated lengths of 76 km or 100 percent of the rehabilitated roads and 75 percent of the overall routinely maintained roads there.

The rehabilitation works on the road followed a rather strict protocol starting with a survey and a scoping exercise of the planned road paths jointly by an ILO civil engineer together with local villagers to identify spots requiring particular civil works features such as box culverts, gabions, retaining walls, roadside drainage and ditches, bridge and river crossing. For roads located in steep mountainous terrain facing strong erosion concrete road surface were applied to stabilize and protect the gravel road surface against risks of severe water erosion.

The surveys led to a Detailed Programme Report that included, besides salient technical features, structural analysis, costs and drawings, and also an environmental management plan and social safeguards. These reports led to the formulation of extensive tender documentation and guidance documents per road covering a wide range of aspects to be considered for road construction works according to international good practices. Among others the following was reasonably well documented:

- Road work design manual
- Drainage manual for rural roads,
- Occupational safety and health guidelines,
- Environmental safeguards guidelines,
- Social safeguards guidelines, etc.

Bids for road construction works were received from PNG companies sometimes assisted by international actors (like the China Shenyang international (PNG) limited in the rehabilitated road between Munji and Haripmo.

Contract award and construction started practically in 2022 (1 contract: 6.5 km), followed then by more contracts in subsequent years (2023: five contracts, 76.6 km; 2024: seven contracts 85.8 km; 2025: three contracts 38.3 km plus additional civil works elements in two roads).

Several contracts had to be cancelled and retendered because of incapacity of the contractors to deliver or excessive underperforming on roadworks.

Some contractors stopped working and disappeared when faced with construction sites hardship. Some contractors also stopped working when affected by angry villagers (two construction machines were disabled and destroyed in two roads) when the contractor sourced construction material and gravels from outside the area of nearby villages.

By the end of 2025, six road works contracts in four roads were still incomplete and are expected to be completed in the 1st quarter of 2026. These contracts concern 75.3 km of roads.

13.4.2 Number and length (km) of rural roads and other access ways (airstrips, jetties, etc.) rehabilitated under the programme by November 2025 compared to planned outputs, and percentage of rural transport infrastructure visited that demonstrate climate-smart solutions have been fully integrated in their design and implementation to enhance their long-term resilience to extreme weather events

Key civil work features during the road rehabilitation work contracts include the following.

Table 20: Main civil work features of road work rehabilitation contracts

Road name	Clearing and grubbing (km)	Sub grade preparation (km)	Gabion / retaining wall (m3)	Pipe culvert (#)	Slab culvert (#)	Gravel surfacing (km)	Concrete causeway (m)	Rigid pavement (m)
Sandaun								
Passi – Krissa								
Onip - Rawo Laitre	17.6	17.6	Small volume only	3	5	17.6	250	
Aitape - Malol								
Walkasa - Maimai Wanwan	15.5	15.5	Small volume only	Small volume only	3	15.5		310
Yiminum - Wilbowe	18	18	198		6	18		240
Total Sandaun	51.1	51.1	198	3	14	51.1	250	550
East Sepik								
Yawasor - Kunger								
Nanaha - Tau		14.5	184	7		14.5		50
Bonohoi - Endibi Tuanages	17.6		Small volume only	15	2	17.6		300
Tuanages - Asanakor	5.8	5.8		5	2	5.8		200
Balif - Araseli			Small volume only	11		Limited length		50
Patiko - Nungaia	31.6	31.6	Small volume only	9	1			
Buruwi - Torembi								
Munji - Haripmo	6.5	6.5	372	9		6.5	54	
Salaki - Palpal								
Angoram - Marienberg	31	31	Small volume only	1	1			
Yawasoro - Niengwanjie	10	10	657	9	1	10		
Yarapi - Suambukau								
Banak - Wautogik			306	22	2	7.8	30	
Total East Sepik	102.5	99.4	1,519	88	9	62.2	84	600
Grand total	153.6	150.5	1,717	91	23	113.3	334	1,150

Source: Road contracts, road works datasets and roads factsheets received from ILO complemented by Roads sites inspection.

In addition to the rehabilitation of roads detailed in the preceding paragraphs, the programme also addressed the issues of water transportation. Initially the rehabilitation or new construction of three jetties had been contemplated in the work programme. According to the PSC meeting from August 2023 some studies were explored for the construction of five floating jetties. Due to the prohibitive cost of designing, getting approved and implementing such structure, the PSC meeting from September 2024, endorsed the reallocation of the construction of the jetties into the clearing and removal of debris and vegetation in waterways and tributaries of the Sepik River.

Around 200 km (161 km up to in September 2025) along nine Sepik River tributaries out of a total length of 485 km of 14 waterways along the river were cleared from logs, debris and invasive vegetation. This took place essentially in the Angoram district in the LLG of Marienberg, Angoram, Karawasi, Keram and Yuat. Some tributaries of the Sepik were also cleared more upstream in the districts of Wosera Gawi and Ambuti-Drekikier. Besides water clearing operation on Sepik water ways, the programme transportation component managed by ILO helped rehabilitate five remote airstrips in three districts: in East Sepik province, in the Ambuti-Drikikier district (airstrip of Moropotee) and the Angoram district (airstrips of Munduku and Mariama); and in Sandaun province, in the Teleformin district (airstrips of Okisai and Warakori).

These airstrips are not used internationally and therefore have no International Civil Aviation Organization (ICAO) reference code. They correspond however to the ICAO reference category 1A (1 < 800 m long and A < 15 m wingspan).

The airstrip rehabilitation was entrusted to the Rural Airstrip Agency (RAA) which is a not-for-profit partnership between the PNG government and the private Mission Aviation Fellowship (MAF). MAF has the mandate to restore and maintain remote, vital airstrips across PNG that are crucial for connecting isolated communities to essential public services like health, education, and commerce, ensuring accessibility where roads are often totally absent.

The contract between ILO and RAA was signed in 2023 for an initial period of 14 months. Due to delay in planning and implementation, two addenda were signed to extend the completion date to May 2025. A third addendum regulated the split of the funding as the initial budget of the ILO RAA agreement was exceeded. The works were all completed in May 2025. Successful test landing in Munduku and Mariama took place in November 2024 and February 2025. Wakakori was successfully tested in May 2025. Moropote and Okisai airstrips did not require a test landing, as these two airstrips were still operational before improvement works commenced. The Notice to Air Missions advisory notices that register hazards on these airstrips appear to have been indeed cancelled in May 2025.

The airstrip rehabilitation work included an initial survey and a scoping of the work needed at each site with the help of local villagers. Soil strength assessments were performed at every site. The procurement of equipment, tools and materials for 3 airstrips had to be airlifted to sites. For the Munduku and Mariama airstrips, access for materials and tools took place via the river system. For work implementation, workforce from the communities concerned were mobilized. They were compensated by RAA in line with the RAA-ILO agreement. All airstrip works were completed before the specified completion date of 15th May 2025.

To secure the sustainability of the operation of the airstrips, RAA formulated and submitted to the responsible provincial governments draft RAA Memoranda of Agreement recommending a periodic maintenance of the airstrip under RAA oversight. These memoranda have to date not received any response from the provincial decision makers

13.4.3 Number and duration of paid jobs created locally in rehabilitation and maintenance of transport infrastructure (by year 2019-2025)

Routine road maintenance was deployed with the help of manpower intensive Road Maintenance Groups (RMGs) selected by the wards and LLG along the maintained roads. RMG staff selection criteria were established by ILO together with DWITS. These criteria included technical criteria (age, physical and mental fitness and residence along the road) as well as social criteria (unemployed or underemployed, from economically disadvantaged households, at least 33 percent women participation, with preference for above 50 percent female groups where feasible, vulnerable groups such as single mothers, widows, and persons with partial disabilities). The gender of the selected RMG staff according to the ILO record of RMG works was 46 percent male (142 people) and 54 percent female (164 people). Accordingly, the RMGs had a fair number of women and participants were not particularly robust persons well suited for heavy road works. Nevertheless, for bush and vegetation cutting, as well as for minor patching and stamping of potholes with gravels and filling materials, the RMG staff were adequately suited.

Each road depending on its length had one or two RMGs group composed of around 5 to 7 people. In total 306 people (East Sepik 200 people and Sandaun 106 people) were employed by the RMG programme. The setting up of the RMGs took some time to establish as some villages and wards were found fighting against involving other communities in the RMGs setup. Ultimately common sense triumphed, and wards cooperation prevailed to establish the RMGs for the benefits of all communities along the roads. The programme in this context may have been instrumental in smoothing inter-villages communication and fostering cooperation between initially warring communities.

All activities of the RMGs were regulated in a detailed RMG guideline. Maintenance contract signed with the RMG chair specified:

- How the RMG staff are to be selected
- The training to be provided to the RMG staff which emphasized the importance of working conditions, OSH compliance and social safeguards for RMG Staff activities
- The principle of performance or output- based contracting arrangements with inspection of work done, and
- The wage payment approach with monthly payment and allowances.

Forms were provided to systemize the reporting process for RMG staff application, work planning and reporting, attendance sheets, estimated timing of activities, work volume calculation and maintenance inspection.

All RMGs staff were trained at the TVET Yawasoro a vocational school in Wewak that has civil engineering as skill speciality. ILO orchestrated RMG works were supported by exemplary guidance regarding working conditions, OHS rulebook and social safeguards contributing to RMG works deployed by ILO offering reasonably decent employment to concerned RMG staff.

As stated in the socio-economic study on the road works, the wages paid to the RMG staff contributed significantly (around 40 % of the household consumption budget) for the concerned households. In total PGK 4.0 million were disbursed to RMG staff between 2021 and May 2025. Annual payments were spread as follows: 2021 - 8.5 percent; 2022 - 26.7 percent; 2023 - 20.0 percent; 2024 - 28.3 percent, 2025 - 6.4 percent. This corresponds in average to a payment of PGK 13,258 or the equivalent of 2,652 EUR per RMG staff over 5 years. RMG payments ceased in May 2025 at the time of the initially agreed extended completion of the programme agreed discussed and agreed in March 2024 at the 6th PSC meeting.

The performance payment following work inspection approach although necessary and accepted by the Wards and LLG concerned along the maintained roads led at time to some discontent among a few RMGs staff who thought they have been cheated of expected more payment for work accomplished.

The clearing of the waterways in the Angoram district and other lower Sepik tributaries followed a similar approach. People from 69 wards and riparian villages were temporarily tasked to implement the clearing works on boat under the guidance and oversight of the respective concerned Ward Development Committees. Simple tools and clearing equipment's were provided by the programme. No detailed annual information on the payments made to the Ward Development Committees for water ways cleaning has been received from the programme.

13.4.4 Number of local authorities and community organisations interviewed that have (i) adopted a rural transport maintenance plan, which includes agreement on the number of members who will be paid to support the maintenance work (by sex and number of youths engaged aged 15-25) and who have allocated funding to implement the plan from 2026

The costs and payments made in connection with the road rehabilitation works and their maintenance is shown in the table below.

Table 21: Road rehabilitation, spot improvement and RMG contracts to 30/09/2025 (in PGK)

Road name	Road work contracts received (Status September 2025) in PGK			Completion status	Routine maintenance cost (RMGs)	Contractor cost only	Overall direct cost of the road works including maintenance
Sandaun							
Passi – Krissa	2,528,257			50%	384,578	2,528,257	2,912,835
Onip - Rawo Latre	1,788,215	3,912,671		80%, 100%	238,703	5,700,887	5,939,590
Aitape - Malol					331,533		331,533
Walkasa - Maimai Wanwan	2,999,280			75%	198,920	2,999,280	3,198,200
Yimum - Wilbowe	2,551,754	2,010,203		60%, 55%	251,965	4,561,957	4,813,922
Total Sandaun	9,867,507	5,922,874			1,405,698	15,790,381	17,196,079
East Sepik							
Yawasor - Kunger					159,137		159,137
Nanaha - Tau	2,096,975			100%	185,658	2,096,975	2,282,633
Bonohoi - Endibi Tuanages	2,687,110			100%	145,874	2,687,110	2,832,985
Tuanages - Asanakor	2,646,372	54,815		80%, 0%	79,568	2,701,187	2,780,755
Balif – Araseli	1,691,395			100%	159,136	1,691,395	1,850,530
Patiko - Nungaia	4,579,818			90%	437,623	4,579,818	5,017,441
Buruwi - Torembi					331,533		331,533
Munji - Haripmo	1,756,257	1,043,204	173,838	100%	79,568	2,973,300	3,052,868
Salaki - Palpal					265,226		265,226
Angoram - Marienberg	2,468,588			100%	397,839	2,468,588	2,866,427

Road name	Road work contracts received (Status September 2025) in PGK			Completion status	Routine maintenance cost (RMGs)	Contractor cost only	Overall direct cost of the road works including maintenance
Yawasoro - Niengwanjie	2,509,394			100%	145,874	2,509,394	2,655,268
Yarapi – Suambukau					159,136		159,136
Banak - Wautogik	3,500,000			100%	106,090	3,500,000	3,606,090
Total East Sepik	23,935,910	1,098,019	173,838		2,652,261	25,207,767	27,860,029
Grand total	33,803,416	7,020,893	173,838		4,057,959	40,998,148	45,056,107

Source: Dataset received from ILO September to November 2025 plus inspection work during ET field mission.

During the 10 different focus group held with the RMGs met along many of the 15 roads inspected during the field mission, it was noted that RMG payments have ceased in May 2025 and led immediately to a complete cessation of the routine maintenance work by RMG teams along the rehabilitated and maintained roads of the programme. The inspection of the roads showed that already minor ruts, rills, gullies, potholes, and corrugations started to appear on the road surface of some road segments due to continuing PMV traffic as well as downpour during storm. It was also observed that debris started appearing in some road drains and culverts due to deficient periodic clearing leading to risk of clogging which can trigger heavier damage on road civil work structures.

Discussion held during the focus groups with RMGs highlighted that, while having ceased to deliver routine maintenance, due to the absence of payment, RMGs staff and villagers were conscious of the importance of continuing routine maintenance on the roads to secure their physical integrity and the high value of the services the roads deliver to the villagers. The identification of a sustainable funding source beyond the STREIT programme is the main issue to be resolved. The preferred solution was a takeover of maintenance payment by provincial and district government who are responsible for the local rural road networks.

The RMG procedures are a creation of the programme. It has however not been assessed to ensure embedment into the process used by DWITS, districts and LLGs to fund maintenance works along the rural roads. RMG payment interruption under the programme automatically led to the disruption of the RMG payment system. This endangers the sustainability of the rehabilitated roads and the well-documented benefits to the communities served by these roads (see I3.4.5).

Discussions with the DWITS in East Sepik and Sandaun indicated that, while the mobilisation of funding from the central government is possible, sustaining such funding may not last, because a new budget line has been introduced in the governmental ledger of the national budget for road maintenance. Sandaun DWITS appears to have already applied for such funding to DoWH for the upcoming budget for 2026, although the indications are that all future road maintenance funding will be allocated exclusively to private contractors who are registered to do road maintenance.

13.4.5 End user perceptions of the quality and usefulness of the rural transport infrastructure installed in their communities to November 2025, compared to before the programme in 2019

The detailed socio-economic study orchestrated by ILO completed in December 2024 covered five rehabilitated or spot improved roads (68 km or 33 percent of all rehabilitated roads under the programme) and documented their socio-economic benefits impacts. The study applied a mixed methodology approach that combined household surveys collecting qualitative and quantitative evidence, focus group discussions, and interviews with key stakeholders (community groups on the roads, RMG members, transport service providers, suppliers of tools and materials and partner UN agencies in EU-STREIT). The impacts considered two main categories:

- Those arising from the improved and maintained roads (lower transport costs and increased supply of transport for the cocoa and vanilla VC groups including for other crops and business activities as well as for essential services such as education and health and other reasons), and
- The local resource and labour-based approach adopted by the programme to generate incomes and employment for local people.

For farmers, the reduction of travel time and associated cost to bring their cash or subsistence crops to the market is the most tangible immediate economic benefits. Travel time along rehabilitated roads was reduced significantly from for example four hours walking to reach a PMV along a district feeder road to 25 minutes due to the possibility to catch a PMV near its production site (Onip-Rawo Leitire Road). Farmers have still to pay the PMV to bring them with their crops to some marketplace (between PGK 5 to PGK 40 one way depending on the distance to the market). This is but easily compensated by the sale of the crop (currently around PGK

1,200 per bag of 60 Kg dried cocoa), as well as the time saving of being able to rely on multi-purpose vehicle transport that can allow them to allocate more time for other farming or else activities.

For all households along the rehabilitated roads, another main benefit is the improved access to PMV near their dwelling place to reach essential social services such as health or education. While primary school students tend to continue to walk on foot along rehabilitated roads because of the limited distance to the school (around 5 km max.), secondary school students have often much farther to go and can benefit from PMV transport along the way.

For households of RMG workers, the boost of income is very substantial in relation to their incomes without the programme. According to the socio-economic study, the programme RMG payments added income equivalent to 88 percent of workers' households' non-subsistence expenditure. This allowed some of them to purchase light motorbikes reducing further their individual travel time.

Taking the Nanaha-Tau Road as an example, the study concludes that 10 km of rehabilitated roads yields an economic internal rate of return of 18 percent and an economic net present value of PGK 749,000 at a social discount rate of 10 percent. These numbers represent a very robust positive and encouraging outcome placing the rehabilitation of local roads at the top priority for action for the provincial governments to lift the provinces out of hardship and poverty.

All the people met along the rehabilitated and maintained roads visited during the field mission asserted that they were extremely satisfied with the newly rehabilitated roads and hope they will continue to be maintained.

In one road near Maprik, the principal of the local school willingly summed up the benefits of the rehabilitated and maintained roads for the nearby villagers as "a genuine saviour that gave them back hope in the future". A district counsellor in another road confirmed "With the rehabilitated road, travel time to market has been reduced from 4 hours to 25 minutes".

At some far end point of rehabilitated roads where some communities had initially refused to be part of the programme due to grudge with neighbouring villages, it was observed that villagers seeing the benefits of the roads, now wanted the rehabilitation work to be continued post programme to reach out to their isolated communities. Some of these villagers were said to stand every morning at the end of the rehabilitated road waiting for the PMV to take them to the market.

Evidence log summary for I3.4.1 to 3.4.5

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I3.4.1	No	Road rehabilitation contracts, Guidance provided by ILO during training courses, Interviews with DoWH, DWITS and ILO road works supervisors, Review of policies on DoWH website.	2
I3.4.2	Yes	Road rehabilitation contracts, Detailed datasets and expenditures lists received from ILO, Interviews with stakeholders and ILO road works supervisors. Focus groups with beneficiary villagers along the roads visited	3
I3.4.3	Yes	RMG Datasets and expenditures list received from ILO. Interviews with stakeholders and ILO supervisors, Focus groups with RMGs staff along the roads visited.	3
I3.4.4	No	Interviews with stakeholders and ILO road works supervisors. Focus groups with RMGs and beneficiary villages along the roads visited	1
I3.4.5	No	Socio-economic impact study of rehabilitated roads, Interviews with stakeholders and ILO road works supervisors. Focus groups with beneficiaries along the roads visited, annual reports	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 4: How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?

JC4.1 The extent to which women and youths (aged 15-25) are participating in the three VCs in the programme area

Finding 19

Women and youth achieved substantial participation rates across STREIT's VCs during the programme's implementation period, though participation patterns revealed significant variation over time and persistent structural barriers limited the quality and sustainability of engagement.

Participation data demonstrates that STREIT underwent rapid scaling between 2020 and 2021, though this surge may reflect improved data capture as much as actual recruitment expansion. Throughout the implementation period, adult women represented 17.9 percent and youth 36.5 percent of all participants.

Training delivery showed concentrated effort during the programme's mid-phase. Women's proportional representation in training remained consistent between 2020 and 2024, fluctuating within 16-20 percent of total trainees. Youth training totalled 12,605 individuals over the programme life, with the combined youth cohort (male and female) representing a significant proportion of trainees (35.7 percent) in the entire period.

Access to information and financial services through ICT remains incompletely documented, with critical data gaps identified in STREIT's monitoring records. While 1,244 people (including 435 females) participated in ICT training events, specific outcomes such as e-commerce business launches or completed ICT business plans were not captured in programme databases. Financial inclusion showed progress through partnerships with MamaBank and UNCDF, with simplified account-opening requirements enabling rural women to access formal banking services. However, key informant interviews revealed persistent barriers to effective ICT and financial service access. Low digital literacy levels in rural areas, combined with limited smartphone ownership among women and youth, constrain independent access to information and services. Security concerns further compound these challenges, with women reporting that road hold-ups and safety risks force them to rely on male household members to conduct financial transactions on their behalf, thereby undermining the programme's gender empowerment objectives.

Despite these constraints, available evidence from key informant interviews suggests STREIT achieved meaningful women and youth participation rates across the three VCs, with fisheries showing particularly strong female engagement aligned with women's traditional roles in this sector. NGO partnerships facilitated efficient training delivery during peak programme years. However, participation quality and sustainability remain uncertain, with evidence suggesting stronger engagement in newer STREIT-formed groups compared to established cooperatives.

14.1.1 Annual increase in the number of women and youths who participated in value chain activities by group (youth, adult, senior, disabled) compared to male groups (percent between 2019-2025)

Complete data on participation are only available for the period 2020 to 2024 and only disaggregated by female vs. male and adult vs. youth (not by senior persons or persons with disabilities). No data are available for 2019, and the 2025 data are incomplete and hence not considered here. Table 16 summarises the annual participation by gender and age group (adult vs. youth) for the period 2020 to 2024. It also reports the proportions of female participants (adult women) and of youth participants (youth female and youth male) in the total.

Table 22: Participation in all three VCs by year, gender, and age group (2020-2024)

Year	Adult male	Adult female	Youth male	Youth female	% adult female in annual total	% youth in annual total	Annual total
2020	13,235	4,636	150	78	25.61%	1.26%	18,099
2021	11,965	5,135	13,617	5,836	14.05%	53.22%	36,553
2022	7,554	2,801	4,005	1,586	17.57%	35.16%	15,946
2023	3,436	1,634	2,226	1,433	18.72%	41.92%	8,729
2024	1,301	489	734	266	17.53%	35.84%	2,790
Total	37,491	14,695	20,732	9,199	17.90%	36.45%	82,117

Source: STREIT M&E database.

Notes: To prevent double counting, beneficiaries of Component 2 (VC enabler) interventions are the same individuals already accounted for under Component 1 (VC) activities, hence not listed separately.

In a nutshell, the previous data show that annual participation has declined in all groups after reaching a peak in 2021, and that there are no systematic trends in female and youth participation, which both fluctuate over time around their 2020-2024 averages (adult women: 17.9 percent, youth: 36.4 percent).

The sharp rise in youth participation in 2021 likely reflects programme scale-up and improved reporting rather than a structural shift in youth inclusion. No evidence confirms sustained engagement or retention of youth participants in subsequent years.

14.1.2 Number of women and youths who were trained annually to apply new skills in the VC (percent of total women participants between 2019-2025)

The following table shows that number of training participants (in relation to new skills for the VCs (by year, gender, and age group. There was an overall peak in training activities midway through the programme (2022). Over the total period 2020 to 2024, 18.7 percent of training participants were adult women, and 34.7 percent were (female or male) youth. Again, there is no systematic trend in these two variables over time, but the annual percentages fluctuate without any discernible pattern around these average values.

Table 23: Number of people trained to apply new skills in the VCs by year, gender, and age group (2020-2024)

Year	Adult male	Adult female	Youth male	Youth female	% adult female in annual total	% youth in annual total	Annual total
2020	635	160	150	77	15.66%	22.21%	1,022
2021	3,548	1,402	2,548	5	18.69%	34.03%	7,503
2022	6,879	2,563	3,132	1,650	18.02%	33.62%	14,224
2023	3,690	1,854	2,245	1,446	20.08%	39.97%	9,235
2024	2,219	806	988	364	18.41%	30.89%	4,377
Total	16,971	6,785	9,063	3,542	18.66%	34.67%	36,361

Source: STREIT M&E database.

14.1.3 Number of women and youths interviewed who stated that they are able to access information on inputs, financial services, and other services and communications through ICT services supported by the programme (includes the number of women in possession of their own smart phone)

The following summarizes the evidence regarding ICT access, financial services, and the challenges faced by women and youths.

Digital and ICT barriers: Interviews with agents highlight a low level of digital literacy in rural areas. While women and youth constituted about one third of all participants in digital literacy training, the lack of ownership of smartphones (although no exact data are available from the M&E data) continues to limit their ability to independently access information and services.

Access to financial services: Significant progress was noted in financial inclusion through partnerships with MamaBank and UNCDF, which allowed women to open bank accounts with simplified requirements.

Security and mobility risks: Access to services is further hindered by security concerns. Women often feel unsafe traveling to financial access points due to frequent road hold-ups and organized crime, which is reportedly facilitated by the very technology intended to assist them (e.g., using mobile phones to coordinate robberies). Consequently, some women rely on their husbands to conduct transactions on their behalf.

Evidence log summary for 14.1.1 to 4.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
14.1.1	No	STREIT M&E database, Annual Progress Reports 2020-2024	2
14.1.2	No	STREIT M&E database, Annual Progress Reports 2020-2024, stakeholder interviews	2
14.1.3	No	Stakeholder interviews, field observations, STREIT M&E database	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC4.2 The extent to which women and youths are actively engaged in decision-making roles in value chain governance and VC enabling actions of the programme.

Finding 20

Women and youth achieved measurable but uneven progress in decision-making roles across STREIT's value chains, with significant variation by sector and persistent structural constraints limiting the depth and sustainability of governance transformation.

Leadership representation data from September 2025 reveals substantial sectoral disparities in women's and youth's integration into decision-making positions. Fisheries groups demonstrated the strongest inclusion metrics, with women holding 25 percent of managerial positions and youth representing 41 percent of leadership roles, suggesting alignment with women's traditional roles in this sector and successful youth targeting strategies. General MSMEs showed similarly positive results with 24 percent female and 23 percent youth representation in leadership. In contrast, the cocoa and vanilla VCs remained heavily male-dominated: women held only 16 percent of managerial positions in cocoa cooperatives and a concerning 9 percent in vanilla groups. Given that most cooperative management committees comprise four members, these percentages indicate that the majority of cocoa and vanilla committees function with no female representation, while those that do include women typically have only a single woman among four board members. Youth participation in cocoa groups reached 40 percent, demonstrating more successful age-based inclusion than gender inclusion in this sector. However, the absence of annual trend data from 2020-2025 prevents assessment of whether these represent improving trajectories or stagnant patterns, constituting a critical gap in the evidence base for evaluating programme effectiveness over time.

Qualitative evidence from field interviews and key informant consultations demonstrates meaningful progress in women's confidence and voice in group processes, though with important caveats. Women who participated in Gender Action Learning System (GALS) training reported substantially increased confidence in speaking during meetings, negotiating roles within their groups, engaging directly with buyers and government officials, and contributing to business planning decisions. This represents a significant shift from baseline conditions where women's participation in cooperative governance was minimal. Government officials confirmed observable "mindset transformation" regarding gender roles, with changes visible in household dynamics and the emergence of women's groups, particularly in the vanilla trade.

Evaluation fieldwork indicates that women in various roles – provincial government staff, cooperative members, NGO partners, and direct beneficiaries – confirmed the value of training and demonstrated awareness of changes in how their contributions are perceived. However, the evaluation identified a critical distinction between newer groups formed or trained by STREIT, where these positive dynamics were more evident, and established cooperatives that existed prior to programme intervention, where male leadership patterns remained largely unchanged. Government officials confirmed observable shifts in household dynamics and consultation patterns, though evidence suggests progress in joint consultation rather than women's independent economic authority.

At the policy and institutional level, STREIT achieved significant formal empowerment outcomes that establish enabling conditions for sustained women's and youth participation in agricultural governance. The programme provided essential technical and financial support for the development of the National Women and Youth in Agriculture Policy in collaboration with the National Department of Agriculture and Livestock and the Investment Promotion Authority, contributing to the creation of a national policy framework that legitimizes and mandates attention to women's and youth's agricultural roles. STREIT also supported review of the National Youth Policy 2020-2023, contributing to coherence between sectoral and national youth strategies. Most notably, the programme facilitated establishment of the first District Youth Council in Ambunti-Dreikikier district, aligned with Papua New Guinea's Medium-Term Development Plan IV pillar on youth empowerment. Stakeholders emphasized this achievement's significance, noting that this structure represents the first successful implementation despite multiple previous attempts by the National Youth Development Authority, and that STREIT "started the ball rolling" and contributed to empowering the youth in the area. However, sustainability concerns emerged regarding whether provincial government has sufficient capacity and resources to expand and maintain this model independently after programme conclusion.

The evidence reveals that while STREIT generated measurable progress in women's leadership representation starting from near-zero baselines in some VCs, the quality and depth of this engagement vary dramatically depending on institutional context. Women and youth exercise more meaningful decision-making authority in groups formed or trained by STREIT, where participatory approaches and gender-responsive methodologies were integrated into group formation, compared to established cooperatives that existed prior to programme intervention, where entrenched male leadership patterns proved more resistant to transformation.

Furthermore, structural barriers constrain the sustainability and impact of governance gains achieved. Customary land tenure norms – which restrict women's ability to own land or independently expand production – create a structural ceiling on women's economic independence and therefore their bargaining power within cooperative governance structures. Multiple informants noted that regardless of training or confidence-building, women's inability to control land undermines their capacity to function as fully equal decision-makers in agricultural cooperatives. The programme's institutional achievements at policy level provide important enabling frameworks, but their ultimate impact depends on uncertain provincial government capacity and commitment to sustain and expand youth councils and implement gender policies without continued external support. These structural and sustainability constraints suggest that governance transformation remains incomplete and potentially fragile.

14.2.1 Annual increase in women and youths who took up decision-making roles supporting the governance of their VC and/or VC enabling actions (number/percent of women/youth leaders and committee board members compared to men between 2019-2025)

Table 24 below provides quantitative data on the member of women and youth in managerial positions of cocoa, vanilla and fisheries groups, as well other MSMEs.

Table 24: Leadership statistics including women and youth (September 2025)

Value chain/ entity	Total entities	Total managerial positions	Estimated adult women leaders (% of total)	Estimated adult women leaders (number)	Estimated youth leaders (% of total)	Estimated youth leaders (number)
Cocoa groups	360	1,440	16%	182	40%	456
Vanilla groups	96	384	9%	35	15%	58
Fisheries groups	310	1,240	25%	310	41%	508
General MSMEs	1,015	4,060	24%	974	23%	934

Source: STREIT M&E database

The data show that a clear disparity exists in how different VCs integrate women and youth into decision-making roles. Fisheries and general MSMEs lead in inclusion. In contrast, cocoa and vanilla remain heavily male-dominated. In many small cocoa and vanilla committees (typically comprised of four members), the 16 percent and 9 percent representation rates suggest that most boards consist entirely of men, with less than one woman per committee on average.

Data limitations: The leadership data represents a September 2025 snapshot without annual trend data from 2020-2025. This prevents assessment of whether current representation levels reflect improving trajectory or stagnant patterns, constituting a critical gap in evaluating programme effectiveness over time.

14.2.2 Percentage of women and youths interviewed who are satisfied compared to dissatisfied that men respect and value their views in committee decision making processes on developing sustainable and resilient VCs.

While specific numerical percentages for satisfaction versus dissatisfaction in committee decision-making were not explicitly quantified due to baseline limitations, there is significant evidence of progress in the confidence and respect afforded to women and youth.

Increased voice and confidence: Women who participated in the Gender Action Learning System (GALS) training reported significantly greater confidence in speaking during meetings, negotiating roles within their groups, and engaging directly with buyers and government officials. Their public voice has improved to the point where many now actively contribute to group business decisions and participate in planning processes.

Youth empowerment and mindset transformation: Stakeholders have expressed satisfaction with the programme's initiation of district youth councils, which are expected to empower young people to speak up and participate in both household and community decision-making. This is viewed as a "mindset transformation" within communities, particularly regarding the capacity of youth to contribute to peace, security, and VCs activities.

Household vs. committee dynamics: Monitoring at the household level has documented behavioural changes where families discuss budgets together and men share income with their wives. There is no conclusive evidence to what extent this can be contributed to the programme as this was already evident in the baseline data. In the baseline, over 70 percent of respondents believed decision-making on how income was spent was done jointly between male and female heads of households, though only 10 percent believed women had the "upper hand".

Persistent barriers: Despite these gains, structural constraints remain. Customary land tenure norms continue to restrict women's and youth's ability to own land or expand production. Furthermore, male leadership still tends to dominate established cooperatives formed prior to the programme's intervention.

Overall satisfaction: Government officials and local NGOs have confirmed that gender mainstreaming has led to observable changes in household dynamics and the emergence of women's groups, particularly in the vanilla trade. While specific satisfaction percentages for committees are not listed, the field visits point to a generally positive reception of the increased respect for women's and youth's views.

Depth of authority: Field evidence revealed critical distinctions in where confidence gains translated to actual decision-making authority. Newer groups formed or trained by STREIT, where participatory approaches and gender-responsive methodologies were integrated from inception, showed women exercising substantive voice in business decisions and planning. In contrast, established cooperatives that existed prior to programme intervention maintained male-dominated decision-making patterns despite women's increased confidence to speak, with male leadership resistant to sharing actual authority. This suggests that training alone is insufficient without structural changes to governance mechanisms at group formation stage. Women leaders documented in fieldwork include women in Lumi leading buyer negotiations and Wainam Agro Services representatives in Nuku articulating clear business visions. Women also manage MamaBank access points. However, such examples represent specific success stories in newer STREIT-formed groups rather than universal patterns across all cooperatives.

Quality of engagement: Field evidence revealed critical distinctions in where confidence gains translated to actual authority. Newer groups formed or trained by STREIT, where participatory approaches and gender-responsive methodologies were integrated from inception, showed stronger women's voice in substantive decision-making. In contrast, established cooperatives that existed prior to programme intervention maintained male-dominated patterns despite women's increased confidence, with male leadership resistant to sharing decision-making authority. This suggests training alone is insufficient without structural changes to governance mechanisms.

14.2.3 Percentage of women and youths interviewed who confirm that thanks to the programme's support they participate as a board member in formal decision-making platforms dedicated to the sustainable and resilient development of one or more VCs in their local community, district, or at the provincial level covering East Sepik and Sandaun provinces.

The information regarding the indicator highlights significant qualitative progress.

Policy and structural support: STREIT has provided essential technical and financial support for the development of the National Women and Youth in Agriculture Policy, working in collaboration with the National Department of Agriculture and Livestock and the GI Investment Promotion Agency.

Establishment of district youth councils: A key achievement in formal decision-making is the establishment of the District Youth Council in Wewak District. This structure is the first of its kind in the region, despite several previous attempts by national authorities, and it aligns with the National Youth Policy and the Medium-Term Development Plan (MTDP).

Empowerment and sustainability: Stakeholders have observed that the programme "started the ball rolling" in terms of empowering local youth and creating a model that is now a provincial responsibility to expand and maintain.

Related leadership metrics: See 14.2.1.

Qualitative impact: Evaluation fieldwork suggests that women trained through the programme have gained confidence to actively participate in meetings and contribute to community and household decision-making. However, customary land tenure remains a structural barrier that limits the independent expansion of women's roles in these VCs.

Sustainability concerns: While stakeholders praised STREIT for "starting the ball rolling," scaling from one to six district youth councils (needed to cover all districts in East Sepik and Sandaun) depend entirely on provincial government capacity and financing. Provincial Community Development Departments responsible for expansion face significant resource constraints in what stakeholders characterize as a "very challenging context" for maintaining structures without continued external support. The ultimate impact of institutional achievements at policy level therefore remains uncertain.

Structural constraints: Multiple informants emphasized that customary land tenure norms—which restrict women's ability to own land or independently expand production—create a fundamental ceiling on women's bargaining power within cooperative governance structures. Regardless of training or confidence-building, women's inability to control productive assets undermines their capacity to function as fully equal decision-makers in agricultural cooperatives. Youth face similar constraints in accessing land for independent production.

Evidence log summary for I4.2.1 to 4.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I4.2.1	Some	STREIT M&E database, fieldwork observations	2
I4.2.2	Yes	Baseline survey, stakeholder interviews, focus groups with producers, field visits	1
I4.2.3	No	NWYiAP document, National Youth Policy 2020-2023, stakeholder interviews, PSC meeting minutes, field visits	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC4.3 The extent to which women and youths are directly benefitting individually, socially and economically from the benefits of participation.

Finding 21

STREIT generated measurable improvements in women's and youth's human and social capital through skills training and organisational support. However, economic benefits for women remained limited – despite performing critical quality-determining labour in all three VCs, women systematically lack control over income from final sales, constraining their economic empowerment.

Women and youth demonstrated substantial gains in human capital through STREIT-supported capacity building interventions. Participants reported acquiring technical skills in cocoa and vanilla cultivation, fish processing technologies (including FAO-Thiaroye smoking equipment), and digital financial literacy. For many women and youth, STREIT represented their first exposure to formal business practices, creating foundational knowledge assets that enabled transition from subsistence farming to structure value chain participation. The programme's approach to human capital development extended beyond technical skills to encompass financial literacy training that equipped participants to navigate formal banking systems and digital payment platforms. Youth participants specifically gained entrepreneurial capabilities through the CellMoni agent programme, with agents developing capacity to operate as rural financial service providers and create new economic roles within their communities. The establishment of lead farmer networks and organized producer groups strengthened social capital by fostering knowledge-sharing mechanisms and collective bargaining power, transitioning participants from isolated subsistence activities to coordinated engagement with formal markets.

Social capital gains were supported by the Gender Action Learning System (GALS) methodology, which contributed to start a household-level behavioural transformation. Women who participated in GALS training reported increased confidence to speak in meetings, participate in planning processes, and contribute to family business decisions, representing a significant shift from baseline conditions where women's voices in household economic decisions were minimal. The formation of women's groups, particularly visible in the vanilla trade, created peer support networks that enabled collective action and mutual learning. At the institutional level, establishment of the District Youth Council in Ambunti-Dreikikier provided youth with formal platforms for voice and representation in community decision-making processes. Qualitative evidence suggests a narrative shift toward "family business" framing in household. Social capital gains extended to community-level infrastructure, with women reportedly investing income in health centres and schools, though distributional concerns emerged regarding gendered time burdens, exemplified by women's continued responsibility for carrying water from long distances for community use.

Economic capital showed concentrated growth during the programme's mid-phase implementation, though with critical constraints on women's direct control over income gains. Key informant interviews and focus group discussions documented visible economic benefits across all VCs, with participants reporting ability to purchase permanent housing materials (replacing grass roofs with corrugated iron sheets), pay school fees in full rather than instalments, acquire solar lighting systems, and for youth specifically, purchase mobile phones and motorbikes that enabled new business activities. Mobile money platforms functioned as a protective mechanism that reduced immediate spending pressures and social obligations to distribute cash, allowing women and youth to accumulate savings for future investments rather than immediate consumption. Women demonstrated strategic investment priorities, directing increased income toward education (school fees and supplies), health expenses (medical consultations and medicine), food security and nutrition (purchasing protein-rich foods to supplement subsistence farming), housing improvements, and reinvestment in value chain activities including improved tools, seedlings, hired labour during peak periods, and transportation to reach better markets. Women's economic agency was specifically visible in fisheries where women dominate fish processing and marketing, representing a high-leverage entry point for gender-inclusive value chain development.

However, increased participation does not always translate into women's economic empowerment. Despite women performing labour-intensive, quality-determining activities – including cocoa fermentation that determines final product grade, vanilla curing that requires precise technical knowledge, and fish processing using specialized technologies – men systematically control most income from final sales of these products. This was consistently documented across VCs: women's labour contributions are essential to achieving premium prices, yet the economic returns from that quality accrue primarily to male household members who typically manage sales transactions and control resulting cash flows. Multiple women confirmed that overall household income increased through STREIT interventions, but evidence on women's direct control of this income remains unclear and varies significantly across contexts.

The digital financial inclusion tools that provided some protective mechanism for women who did control income cannot address this more fundamental issue of who receives payment for products in the first instance. Customary land tenure norms further constrain women's economic independence by restricting their ability to own orchards or independently expand production, creating a structural ceiling on women's capacity to operate as autonomous economic actors within VCs regardless of their skill levels or entrepreneurial ambitions. Women expressed awareness of this constraint during GALS trainings, seeking income diversification strategies beyond seasonal cocoa and vanilla, including herbal medicine for soap production and local perfume manufacturing, demonstrating agency in identifying potential pathways to economic independence beyond the programme's three target VCs. The sustainability of economic capital gains depends not only on market conditions and continued technical support, but more fundamentally on whether household-level and community-level norms regarding income control evolve to recognize women's labour contributions with commensurate economic authority.

14.3.1 Percentage annual increase in the number of women and youths interviewed that increased their human, social and environmental capital through participation in VC activities supported by STREIT (2019-2025)

The progress regarding the indicator reflects a period of significant growth and capacity building between 2020 and 2025. The following outlines the achievements and trends observed:

The STREIT programme has driven a consistent annual increase in human capital by providing specialized technical training and financial literacy. For many women and youth, this was their first encounter with formal business practices.

Skill acquisition: Participants reported a marked increase in "human capital" through training in cocoa and vanilla cultivation, as well as digital financial services. For instance, the introduction of CellMoni agents in 2023 provided youth and women with technical skills to operate as financial service providers. For youth specifically, the CellMoni agent programme provided entrepreneurial capabilities, with agents developing capacity to operate as rural financial service providers and creating new economic roles within communities. The establishment of lead farmer networks and organized producer groups strengthened social capital by fostering knowledge-sharing mechanisms and collective bargaining power, transitioning participants from isolated subsistence activities to coordinated engagement with formal markets.

Community integration (social capital): Participation in VC activities has fostered stronger social networks. The formation and support of lead farmers and organized groups have allowed women and youth to share resources and knowledge. The evaluation fieldwork revealed that these interactions have moved from informal subsistence farming to structured participation in the VCs, strengthening community bonds and collective bargaining power.

Climate-Smart Agriculture: The programme emphasized rehabilitation and sustainable management of cocoa and vanilla plots. Stakeholder interviews indicate that participants (especially the youth) are increasingly aware of the environmental requirements for premium-grade exports, leading to improved soil management and biodiversity preservation within their farm plots.

14.3.2 Percentage annual increase in the number of women and youths interviewed that increased their economic capital through participation in VC activities supported by STREIT (2019-2025)

The fieldwork captured specific examples of how "economic capital" was accumulated by the participants:

Asset acquisition for women: Interviews and focus groups with women in the vanilla and cocoa sectors frequently cited the transition from "grass-roofed" houses to "permanent" structures using corrugated iron sheets. The ability to pay for school fees upfront and purchase solar lighting systems was a recurring theme, indicating a shift from survival to investment.

Youth entrepreneurship: For youth, increased economic capital was manifested in the purchase of mobile phones and motorbikes. Youth utilized mobile technology to track market prices and provide logistics services, effectively creating new business niches within the VCs.

Financial inclusion: The accessibility of digital financial services allowed women and youth to "keep their money safe" from social pressures of immediate distribution, thereby allowing for the accumulation of capital for future VC investments. Overall, about three quarter of the women and youth interviewed in the field reported to have increased their economic capital (in some form).

Income control constraints: However, increased participation does not always translate into women's economic empowerment. Despite women performing quality-determining activities—including cocoa fermentation that determines final product grade, vanilla curing that requires precise technical knowledge, and fish processing using specialized technologies—men systematically control most income from final sales of these products. Women's labor contributions are essential to achieving premium prices, yet economic returns from that quality accrue primarily to male household members who typically manage sales transactions and control resulting cash flows. Multiple women confirmed that overall household income increased through STREIT interventions, but evidence on women's direct control of this income remains unclear and varies significantly across contexts.

14.3.3 Percentage of women and youths interviewed that are investing their increased income from participating in the VC in (i) education; (ii) health; (iii) food security and nutrition; (iv) housing; (v) reinvestment in VC activities; and (vi) have money confiscated by male family members.

The following text summarizes how women and youth interviewed are investing the income increases identified in 14.3.2. Interviews with women and youth participating in the VCs activities indicate a strong prioritization of household well-being and long-term stability. The increased income is primarily used to meet immediate family needs, improve living standards, and sustain their agricultural businesses.

(i) Education: Education is a primary investment for the majority of the participants. Interviewees consistently reported that their increased income allowed them to pay school fees for their children and purchase necessary school supplies. For many women, being able to contribute to education has enhanced their decision-making power within the household, as they are no longer entirely dependent on their husbands to cover these costs.

(ii) Health: A significant portion of the increased income is directed toward health-related expenses. This includes paying for medical consultations, purchasing medicine, and covering transportation costs to reach healthcare facilities. The improved financial liquidity has reduced the "shocks" associated with sudden illnesses, ensuring that family members receive timely medical attention.

(iii) Food security and nutrition: Participants highlighted that the extra income has directly improved their household's FSN. Instead of relying solely on subsistence farming, families are now able to supplement their diets by purchasing protein-rich foods (such as tinned fish or meat) and other store-bought essentials (like rice, flour, and oil). This shift has led to more balanced diets for children and youth in the household.

(iv) Housing improvements: The evaluation notes a clear trend in utilizing VC income for housing improvements. Participants reported buying building materials such as corrugated iron roofing sheets (to replace traditional thatch), timber, and hardware-like nails and hammers. These investments are seen as a way to provide more permanent, safer, and more comfortable living environments for their families.

(v) Reinvestment in VCs activities: Sustainable growth is evident through the reinvestment of profits back into agricultural activities. Both women and youth reported using their earnings to:

- Purchase improved tools and equipment (e.g., solar dryers for cocoa, better fermentation boxes)
- Buy seedlings or fertilizers to expand their production areas.
- Pay for hired labour during peak harvest periods to increase efficiency.
- Cover transportation costs to bring their produce to more lucrative markets.

(vi) Confiscation of money by male family members: Regarding the issue of money being confiscated by male family members, the reports present a nuanced view. While traditional norms sometimes dictate that men control household finances, the evaluation fieldwork indicate a positive shift. Many women reported that because they earned the money through their own labour in the VCs and often managed it via mobile money apps promoted by STREIT, they had greater control over the funds. However, some instances of "pressure" to hand over cash for social obligations or alcohol were noted in isolated qualitative responses, though it does not appear to be the dominant trend among the successful participants interviewed. The use of mobile wallets was specifically cited as a protective factor, keeping the money "hidden" and secure from physical confiscation.

Evidence log summary for 14.3.1 to 4.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
14.3.1	Some	STREIT M&E database, stakeholder interviews, focus groups, field visits	2
14.3.2	Some	Stakeholder interviews, focus groups, fieldwork observations	1
14.3.3	Yes	Baseline survey, stakeholder interviews, focus groups	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 5: How effectively did the programme identify and address environmental risks, and to what extent did it promote environmental sustainability and adaptation to climate change to reduce the vulnerability of the target population in Sepik and Sandaun provinces?

JC5.1 The degree to which mainstreaming of environmental considerations and climate action is evident in the design of the programme

Finding 22

The programme's design demonstrates a high level of integration of environmental and climate action through the explicit emphasis given to sustainability and climate resilience in its two Specific Objectives and their sub-components.

The Financing Agreement and the latest logical framework applied by the PIMU provide evidence that the environment and climate action are part of the objectives of the programme rather than just cross-cutting issues. Consequently, they are integrated into the vertical and horizontal design of EU-STREIT PNG.

In the case of Component 1 (SO1), the programme prioritises rehabilitation of existing cocoa blocks within which climate smart practices are to be applied. This avoids encouraging farmers to expand cocoa production in forest clearings which also helps to preserve habitats for local biodiversity that support, for example, insects that pollinate cocoa trees. In addition, the promotion of community-based fisheries management is designed to empower fishing groups to self-regulate their fishing practices in coastal and riverine ecosystems.

Meanwhile, Component 2 (SO2) explicitly includes the identification and implementation of E-agriculture and climate smart agriculture strategies that have resulted in, among others, the development of the Agricultural Meteorological Advisory Monitoring and Services (AMAMAS) to provide farmers with climate programmes for adaptation planning. In addition it places importance on the construction of climate-resilient enablers, in particular the rehabilitation of 207 km of climate-proofed road infrastructure to international standards, and the expansion of solar photovoltaic systems to promote the expansion of renewable energy in rural areas of the Sepik region where more than 70 percent of the population has little or no access to the electricity grid.

Latest monitoring data also provides evidence of significant progress in achieving, and in some cases exceeding the environmental and climate targets set under Components 1 and 2. For example, under the former, the programme has rehabilitated 12,888 hectares of cocoa and 6,514 hectares of vanilla incorporating climate-smart practices, which apart from exceeding planned targets is evidence that rehabilitation of existing agricultural plots represents a viable mitigation strategy to prevent environmental degradation that is often experienced in value chain expansion programmes. Under the latter, this approach directly contributes to reducing the risk of habitat loss and carbon emissions. Furthermore, the horizontal integration of climate-proofing of rural roads has enabled cocoa, vanilla and fish groups long-term market access. Moreover, the inclusion of AMAMAS represents an opportunity to develop a data-driven approach to establishing VCs that support sustainable and adaptive management of smallholdings.

Finding 23

Data scarcity highlighted in the Baseline Survey prevails in some key areas, especially scientific baseline data to track biological and climate trends. This restricts learning on ecological outcomes and long-term sustainability trends.

Despite the abovementioned integration of environmental and climate targets, the programme's design and implementation has overlooked the importance of including environmental indicators, baselines and targets that track environmental health trends, notably on:

- Soils, which is of particular interest to stakeholders like the National Agriculture Research Institute (NARI), DAL and FAO's Global Soil Partnership
- Biodiversity and habitats, which is of particular interest to farmers and fisherfolk to safeguard local varieties and practices to sustain food security and nutrition and manage fish stock biomass
- Water resource parameters that are of interest to the aquaculture sector, in particular baselines and targets for dissolved oxygen, water temperature, and clarity, all of which are vital in the establishment of sustainable aquaculture practices
- The outcomes of annual renewable energy generation and rehabilitation of cocoa blocks outcomes in terms of contributions to PNG's Nationally Determined Contributions (NDCs) and other reporting commitments linked to Multilateral Environmental Agreements.

Finally, the reliance on participation numbers, such as 68,200 households who are reported to have adopted climate-smart cocoa practices overlooks the importance reporting on the quality of these practices to

determine their level of positive and/or negative environmental impact. As a result, these data remain unverified, which means the PIMU cannot definitively track how far the training provided on land management is actually improving over time, and/or that these practices are effectively mitigating the impacts of climatic events such as prolonged drought, or heavy rainfall on soil loss. Likewise, the tracking of the number of fish caught without monitoring data on the biological health of fish stocks poses a risk of encouraging increased production in environmentally sensitive areas.

15.1.1 Evidence that Environmental Risk Analysis took place in the proposed programme area, was of satisfactory quality and appropriate, and realistic mitigation measures have been proposed/used to justify the programme design

The Financing Agreement provides evidence that environmental protection, conservation and sustainable use of natural resources should be fully integrated into the programme's planning and implementation. Under Component 1, the establishment of cocoa, vanilla and fisheries VCs requires that all three sub-components integrate the management of natural resources into main activities to support the development of sustainable VCs. This is evidenced by the following approaches and/or actions:

- Rehabilitation of existing cocoa blocks to avoid expansion of cocoa production into secondary or primary forests in the Sepik region and which can build on local good practices such as agroforestry production systems.
- Production and expansion of CPB-tolerant seedlings to mitigate agricultural biological risks associated with pests.
- Application of low-cost solar-drying technologies for cocoa and vanilla that reduces the need for grid-powered alternative solutions.
- Promotion of community-based management of the fisheries VCs to encourage fisherfolk to self-regulate that their fishing practices and techniques conserve fish stocks, habitats and increasingly apply Fairtrade, Organic and GI certification.
- Introduction of fish smoking technologies that reduce firewood consumption and deforestation.

Under Component 2, the Financing Agreement specifies that sub-components 2.3 and 2.4 aim to reduce impact on the environment through the application of appropriate environmental mitigation measures. This is evidenced by the programme's promotion of the following actions, among others:

- Promotion of renewable energy in rural areas through the introduction of solar photovoltaic systems, which reduces the need to cut power lines through forests.
- Promotion of local employment approaches to rehabilitation and maintenance of roads, airstrips and fishing jetties (replaced by river clearing in 2022) to reduce the need for heavy machinery.
- Application of Occupational Health and Safety and environmental manuals, which is designed to encourage contractors to adopt measures that reduce their impact during hard infrastructure rehabilitation and maintenance, including as application of waste management.

Evidence of an "Environmental and Social Safeguards Checklist" on how these environmental measures should be tracked against baseline data during the implementation phase is not, however, evident in the Financing Agreement, nor the logical framework. Instead, the logical framework specifies that a comprehensive baseline survey is to be applied in the inception phase of the programme's implementation. An overall Environment and Social Screening from FAO was done for the whole project and not separately for the roads or assessment of each cluster of cocoa or vanilla farming areas. An Internal FAO check in 2022 noted this as disappointing, however, since the project has only a few years left to run, it was decided to proceed without these assessments.

A review of the Baseline Survey (2021) confirms that a major gap is data scarcity within the provincial and district administrations of the Sepik region. Areas where the survey was able to establish comprehensive environmental baseline data to track the programme's environmental impact in relation to the abovementioned approaches/actions baselines are summarised as follows, among others:

- Average landholding size of rural households in the Sepik region is 1.60 ha, which allows the programme to monitor rehabilitation of cocoa blocks against potential expansion into forested areas.
- Climate smart agricultural practices are reported to have been implemented for both cocoa and vanilla VCs, although explicit information on these practices is not provided in the annual reports, nor tracked by the programme's MIS to support learning on the outcome of the CSA training sessions in terms of general uptake and the choice of CSA measures that are most popular and/or replicated. Moreover, some of the training materials on CSA were considered difficult to follow by some of the stakeholders interviewed, resulting in different levels of resilience observed, especially in the cocoa blocks visited.

- Identification of types of coastal and riverine species caught by season, which facilitates monitoring of fish catches and the degree to which local fish conservation measures are operating effectively.
- Identification of average fish loss and wastage among households engaged in coastal and riverine fisheries was around 20 and 15 percent of the total catch respectively, which facilitates monitoring of fish loss averages after support from the programme.
- Confirmation that the number of rural households surveyed who had limited or no access to electricity is 73 percent, which facilitates monitoring on the impact of the programme's solar energy component.

The survey provides insufficient evidence, however, on some important baselines that are key to tracking environmental sustainability of the VCs. The most significant include among others:

- Soil health and composition during the assessment of average landholdings of farmers surveyed, which is a critical indicator to assess cocoa and vanilla health and productivity levels.
- Soil erosion rates, which is an important indicator to assess how far the programme's support to cocoa and vanilla farmers is delivering changes in land management over time.
- Food crop variety, which is crucial to assess how far farmers are intercropping different food crops to improve food security and nutrition in their household.
- An inventory on local foods and wild relatives that support food security and nutrition, which is crucial to determine how far the promotion of cash crops impacts on food sovereignty.
- A similar tree inventory to determine which trees are used for shade/support to cocoa and vanilla farming, sourced for construction of homes, outbuildings, fermentaries, drying facilities, firewood for cooking/smoking, etc.
- Absence of scientific data on the health of fish stocks to support the monitoring of seasonal fish caught by the riverine and coastal fisherfolk surveyed, which is important to assess how far the programme has contributed to improving the size and quality of fish caught, as opposed to increasing the number of fish caught by fisherfolk.
- Absence of environmental indicators for aquaculture to track the sustainability fish farming VCs, which includes tracking of (i) fluctuations of dissolved oxygen content during the day which is key to optimising feeding times and stocking levels; (ii) water temperature to guide shading needs and climate resilience; (iii) water clarity to track the impact of land management/erosion around the fish farm and which may also affect local water resources.

15.1.2 Evidence that climate vulnerability analysis took place in the proposed programme area, was of satisfactory quality and current and expected impacts of climate change on developing sustainable and resilient VC were identified, mapped and used to justify the programme design

The programme's Financing Agreement explicitly mentions that EU-STREIT PNG was strategically developed with a specific focus on cross-cutting issues that include strengthening resilience to climate change. However this is not substantiated through reference to a specific vulnerability assessment conducted in the Sepik regions, such as the Climate Risk, Vulnerability and Risk Assessment in East Sepik conducted by UNDP, the Climate Change and Development Authority (CCDA) and the Adaptation Fund (AF) in 2017.³⁰ Instead, the Financing Agreement mentions that the 12-month inception phase should identify the baselines for tracking the programme's contributions to enhancing climate resilience with explicit mention of the following actions:

- Promotion of sustainable VCs that include climate smart agriculture.
- Development of an e-strategy in which a specific MIS has been developed to guide agricultural MSMEs and cooperatives to take informed decisions on adaptation to climate change. This resulted in the development and incorporation of the Agricultural Meteorological Advisory Monitoring and Services (AMAMAS) system to mitigate climate vulnerability at the farm level.
- Providing training on sustainable husbandry and cultivation practices that incorporate climate smart agriculture.

³⁰ The assessment provides maps outlining three types of vulnerability (social, physical and economic) in East Sepik and concludes: (i) prolonged drought was not considered a major concern for the province; (ii) flooding in central areas of the province covering parts of the Sepik River and in upland areas is a growing concern, but lowland flooding is a recognized hazard people have adapted to for generations; (iii) land management practices like terracing should be introduced hilly areas to reduce the risks of erosion and flash floods; (iv) the traditional crop mix was considered well established to distribute risk, but climate variability is likely to affect yields and crop choices in rural zones indicating a need for improved cropping practices and strategies should be identified, particularly the adoption risk management and integrated farming systems (includes reforestation plans for high risk areas, measures to enhance ground water recharge and drainage and digging of wells in areas prone to drought).

- Application of measures that ensure all transport-related infrastructure is "climate-proofed", according to international standards to ensure that they remain passable year-round.
- Promotion of large-scale solar-powered initiatives to advance greener, low carbon rural development that also enhances resilience by removing the dependency of a large number of rural households on unreliable electricity supplies.

The Baseline Survey conducted in the first year of the programme, explicitly mentions that there is a critical need to integrate climate change adaptation into the programme's planning, implementation and monitoring. As a result, the survey explicitly highlights the following two main areas where climate actions should be tracked in the programme:

- Adoption of CSA practices to monitor the number of hectares of cocoa and vanilla production that are directly supporting the establishment of climate-resilient VCs in the Sepik region. This has subsequently facilitated the production of the "Fama Gaid Buk" (Farmer Guidebook) and CSA training under the topic of "Soil Management". An assessment of this guidebook confirms it was produced by the Binatang research group in Madang and mainly focuses on providing an overview of CSA. More detailed field notes, guidelines and even phone applications designed to support farmers implement CSA practices and enable them to self-assess how far they are climate resilient were not evident. In addition, only one hard copy of the Farmer Guidebook was reported to exist, resulting in the distribution of only relevant sections of the guidebook being photocopied and handed out in the field.
- Increase in the establishment of climate-resilient transport infrastructure in the Sepik region to determine the number of farmers and fisherfolk that have year-round/all season access to cocoa, vanilla and fish markets, ICT services and basic services.

However, a major shortcoming in the Baseline Survey is that it also provides no direct references to the abovementioned Climate Risk, Vulnerability and Risk Assessment, nor gathers scientific data to comment on trends in temperature, rainfall, extreme weather events, etc. to support monitoring on climate change adaption, or specific measures to enhance disaster risk reduction in the cocoa blocks, vanilla gardens and fisheries sector, such as protection of landing sites and fishing boats and equipment. In addition, the lack of soil health monitoring mentioned under I5.1.1 also precludes assessment of soil humidity levels and mineral content data that are crucial to sustaining cocoa productivity rates.

15.1.3 Evidence that environmental and climate impact and mitigation have been integrated in the vertical and horizontal aspects of the logical framework and monitoring

A review of the latest logical framework to 30/09/2025 provided to the evaluation team by PIMU in November 2025 provides explicit evidence that climate resilience has been integrated in the horizontal aspects of the logical framework in line with the objectives and sub-components listed in the Financing Agreement. Moreover, targets at subcomponent level are monitored in detail through the application separate sheets (in Excel) to report on how far targets have been achieved. As a result, the programme is able to report quarterly and annually on the following achievements at the horizontal level:

- 12,888 ha of cocoa production are under "Sustainable/improved climate-smart management practices" compared to 10,000 ha targeted (O1.1.4)
- 6,514 ha of vanilla production are under "Sustainable/improved climate-smart management practices" compared to 5,000 ha targeted (O1.2.4)
- Two strategies for E-agriculture and climate-smart agriculture implemented as planned (O2.1.2)
- 517 households have access to renewable energy compared to 550 targeted
- 170 Km covering 9 roads have been rehabilitated and climate proofed compared to 207 Km covering 13 roads (O2.4.2).

Evidence that this target approach is matched by environmental indicators and qualitative indicators to assess change that emerges from the targets achieved is, however, not adequately covered in the logical framework to support learning and guide planning on good practices and environmental and climatic trends. For example, the number of households adopting sustainable/and climate-smart cocoa management practices (O1.1.1) stands at 68,200 households against a target of 30,000 households, but provides no evidence on the environmental/adaptation outcome of these practices on natural resources/resilience level of these households, or on strategic issues such as carbon sequestration to support GoPNG's reporting on its NDCs. Similarly, the logical framework confirms total renewable energy generation has reached 824.79 MW per annum against a target of 164MW, but does not provide evidence of positive trends in terms of climate mitigation, which is also of interest to the NDCs.

Finally, the lack of inclusion of baseline data on biological and physical indicators linked to, for example, agro-biodiversity, soils and water quality, confirms that there is a lack of monitoring on environmental health trends. Consequently, data scarcity remains in key areas of the programme to assess the long-term contribution of the programme to establishing sustainable and resilient VCs in the Sepik region.

Evidence log summary for I5.1.1 to 5.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I5.1.1	Some	Environmental Risk Analysis took place	1
I5.1.2	Some	Evidence that climate vulnerability analysis took place	1
I5.1.3	None	Environmental and climate impact and mitigation have been integrated in the logical framework and monitoring	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC5.2 The degree to which climate change adaptation and mitigation measures have been integrated in the cocoa and vanilla value chains

Finding 24

Climate adaptation and mitigation are strongly embedded in the selection and design of cocoa and vanilla VCs, but in practice their application at farm level remains limited due to gaps in replication of training through the training of trainer's approach applied by the programme, lack of access to critical data on weather, climate, soil analysis, and adequate extension support from DAL, the Cocoa Board and, especially the Spice Industry Board.

The evaluation found that climate change adaptation and mitigation considerations were clearly integrated into the initial selection criteria for both cocoa and vanilla VCs, in line with climate-smart objectives in the Financing Agreement. Stakeholder interviews confirm that cocoa farmer groups were selected based on commitments to rehabilitate existing plantations indicating the programme has contributed to changing attitudes on the need to continue cocoa and vanilla production in new deforested areas, which in turn would have a negative effect on climate adaptation and mitigation efforts in PNG. Moreover, the promotion of 18 CPB-tolerant cocoa varieties and improved vanilla germplasm has enabled farmers to directly participate in monitoring which varieties are most suited to local conditions including resilience to pests and climate variability and trends.

Evidence of effective replication of training in CSA to cluster group members was mixed, indicating gaps remain in learning retention and delivering adequate levels of supervision and extension for many cocoa and vanilla groups to address learning gaps. On the one hand, the replication of improved varieties of cocoa clones and vanilla vines appears to have been highly successful, resulting in a significant increase in the number of cocoa and farmers who are growing resilient varieties to 30/09/2025 (68,200 and 6,514 households respectively). On the other, this expansion appears to be mainly driven by interests to increase economic returns rather than as a part of a wider strategy to enhance their economic resilience. Moreover, despite identifying some success stories among cocoa and vanilla groups, the evaluation found that the groups involved were not used as systematic "models" to promote on-the spot peer to peer learning and networking with other cocoa and vanilla groups in the district.

Under these circumstances, climate adaptation and mitigation principles may have been successfully integrated in the design and selection criteria, but uptake at the farm level is not to establish climate-smart agricultural practices. This may explain why learning retention is lower on application of technical knowledge and skills but higher where it relates directly to increasing income, such as management of fermentaries and solar driers. Consequently, the translation of initial training into consistent, long-term changes in farm management practices across the cluster groups has not happened in most cases as planned.

This situation has been compounded by several systemic gaps identified in the training approach delivered by the programme. First, there is little or no access to weather and climate data to support informed decision-making. Moreover, because the operation of the AMAMAS information system on weather and climate forecasting has experienced delays, the AMAMAS is still not issuing reliable and timely weather and climate warnings to farmers. Second, the absence of systematic soil sampling through NARI have restricted learning on a key discipline that is crucial to applying effective CSA. As a result, the promotion of composting may not adequately address broader soil fertility or disease challenges. Third, insufficient access to specialised extension support in areas such as crop pathology, and good husbandry practices is a key discipline that is crucial to sustaining climate resilience.

15.2.1 Evidence that adaptation and mitigation to climate change were included in the selection criteria for the cocoa and vanilla VCs

Interviews with main stakeholders confirm that three of the main criteria applied in the selection of cocoa farmer groups has been their agreement to: (i) focus exclusively on rehabilitation of their existing cocoa blocks, rather than to develop new plantations, based on slash-and-burn approaches that can lead to deforestation and environmental degradation; (ii) to produce up to 18 CPB-tolerant cocoa varieties in budwood gardens and nurseries to identify the most resilient to CPB and climate stress; (iii) to nominate lead farmers to be trained on applying sustainable and climate-smart practices, such as solar drying to avoid the need for energy derived from fossil fuels, and based on the training of trainers principle to expand resilience development within the cluster groups in keys areas such as expansion of resilient varieties and fermentaries. Furthermore, this has been supported by the development of training materials and communications to highlight the connection between climate smart agriculture and economic resilience. For example, EU-STREIT PNG launched the [Climate-Smart Cocoa Training](#) and [Building Resilient Communities](#) videos in 2025.

A similar process was applied with vanilla farmers who were selected on the basis that they agreed to (i) rehabilitate existing vanilla gardens rather than develop new gardens; (ii) replace diseased-ridden vanilla vines with new improved germplasm to support farmers improve and sustain vanilla quality and yields; (iii) receive training on reproducing improved varieties of vanilla and on post-harvest handling that also relies on solar curing and drying, as well as low-energy packaging solutions to support the transition to market-led production.

15.2.2 Percentage of cocoa and vanilla farmers interviewed in their plots who are actively engaged in the application of climate smart agricultural practices

Focal group discussions, interviews and site inspections provide strong evidence that cocoa and vanilla farmer groups have received training on the application of climate smart practices, but that this has not been adequately replicated through the training of trainers' principle. Moreover, although there is some evidence that training has included the importance of managing soil health, pests and cropping systems, retention of this training was low. In most cases the evaluation team found the following gaps prevail in the programme's promotion of climate smart agriculture among cocoa and vanilla producers:

- *Little or no information on weather and climate data.* Despite the planned launch of the AMAMAS information system in the Sepik region in 2026, provincial and district administrations and farmers alike are unaware of weather and climate trends to discuss informed decision making on cropping systems with DAL's provincial and district staff participating in the programme. As a result, a high percentage of farmers stated that rely heavily on local knowledge and practices to manage climate variability and change. For example, field observations confirm that farmers carry out local land use decisions to locate their cocoa and vanilla crops in slope areas to avoid growing in areas prone to flooding.
- *Little or no access to soil data.* Interviews with NARI and other stakeholders confirm that there is no systematic soil sampling process in place to inform farmers on soil health and humidity, or land management decisions. This has not been aided by the general lack of decentralised services by NARI in this area, and no evidence of specific engagement of FAO's Global Soil Partnership in the Sepik region. As a result, it was evident that farmers produce compost with cocoa husks and other local vegetation, but this does not address nutrient and pest management needs. Again, farmers stated that they continue to rely on local knowledge and practices such as agroforestry to protect their soils and food security
- *Limited access to CB's extension officers* specialising in crop pathology and block husbandry techniques to improve shade and pruning to manage light and air circulation in their blocks, or manage disease through application of plant care and development of biopesticides, among others, among cocoa and vanilla farmers. For example, farmers visited in Vanimo Green showed evidence they had carried out shading and pruning guidance, but this appears to have been for the specific purpose of the evaluation's visit rather than systematic improvements in land husbandry. A visit into a neighbouring part of the same cocoa block confirmed that CPB was evident in uncleared areas.

Evidence log summary for 15.2.1 to 5.2.2

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
15.2.1	No	Adaptation and mitigation to climate change were included in the selection criteria	2
15.2.2	No	Farmers who are actively engaged in the application of climate smart agriculture	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC5.3 The degree to which the sustainable use of natural resources has been integrated in the VCs to enhance their sustainable development and climate resilience

Finding 25

The expansion of good agricultural practices in the cocoa blocks and vanilla gardens was not aligned with any externally certified scheme, restricting verification of sustainable natural resource practices and the potential to link the VCs to niche markets upholding these practices.

The engagement of FAO in EU-STREIT PNG ensured good agricultural practices were applied to support the development of the cocoa and vanilla VCs, while the Cocoa Board's participation enhanced quality control on the upstream activities of the value chain. However, by not integrating GAP into internationally recognised certification frameworks, monitoring of environmental sustainability and other parameters farmers have had to rely heavily on the resources of the programme and CB's extension services for training on GAP. Interviews and site visits confirm that this approach has resulted in:

- Focusing training on rehabilitating and sustaining the production of quality cocoa and vanilla
- A lack of baselines on soil health, biodiversity, and water resources to support the development of wider regenerative agricultural approaches that help restore the ecosystem upon which cocoa and vanilla crops ultimately depend on to sustain yields
- A lack of adequate follow-up supervision and supplementary training to avoid the current variations in GAP observed in the farms visited, especially among vanilla farmers where problems of disease persist (see I2.2.1)
- The CB focusing its resources on technical and administrative compliance rather than promoting environmental sustainability through verifiable standards
- The general absence of engagement with CSOs and Reducing Emissions from Deforestation and Forest Degradation (REDD+) actors in the Sepik region to strengthen environmental monitoring and governance of the VCs.

Finding 26

The expansion of good fishing and aquaculture practices have focused predominantly on providing fisherfolk with training and equipment to address immediate food and security needs, rather than on conserving and sustainably managing the coastal, riverine and inland watershed ecosystems on which these VCs depend. As a result, wider pressures on these ecosystems from industrial fishing, logging, mining and climate change remain largely unaddressed.

Evidence collected under I5.3.1 shows that EU-STREIT's interventions in coastal, riverine and inland fisheries were primarily designed to respond to immediate FSN needs and to create short-term income opportunities for coastal and riverine fisherfolk. Programme support for coastal and riverine fisher groups focused on identifying commercially important fish species, distributing fishing gear, introducing solar powered cold chain equipment and fish smoking ovens to reduce post-harvest losses. In aquaculture, the emphasis was on household production of tilapia to supplement diets in inland communities, where FSN is a major problem. These actions contributed positively to improving nutrition and, in some cases income from collective fish sales, especially among riverine fish groups. As a result, the programme had a far stronger focus on responding to socio-economic needs than the growing pressures on the ecosystems that sustain coastal, riverine and aquaculture fisherfolk.

The evidence also indicates that the programme did not establish the technical or governance mechanisms required for to establish ecosystem-based fisheries management. As a result, there was no indication that baseline stock and habitat assessments took place through which protection of spawning grounds, establishment of no-take zones/fish sanctuaries, or locally enforced management plans could be adopted and applied. Aquaculture initiatives were also found to lack systematic training and monitoring on key environmental parameters such as dissolved oxygen content, temperature control, or watershed protection to ensure long-term viability of the fishponds. Limited availability of specialised fisheries extension officers at district and provincial levels was also evident, resulting in low levels of technical oversight and environmental guidance.

Finally, the evaluation found no evidence that EU-STREIT engaged civil society organisations or established multi-stakeholder platforms through which environmental monitoring of fisheries and aquaculture could be applied and used to support informed decision-making on enhancing the environmental sustainability of the fisheries VCs. This absence of broader institutional engagement limited the programme's ability to respond to ecosystem-level pressures affecting fisheries resources in the Sepik region, including industrial fishing activities in coastal waters, degradation of riverine habitats linked to logging and mining upstream, and increasing climate variability and change. Therefore, while fisheries interventions addressed short-term FSN

objectives, they did not sufficiently integrate sustainable natural resource management measures necessary to safeguard the long-term productivity and resilience of coastal and riverine ecosystems, or local watersheds for aquaculture.

Finding 27

EU-STREIT has been highly effective in promoting the rehabilitation of degraded cocoa blocks and vanilla gardens while avoiding any expansion of production into secondary or primary forested areas.

Between 01/01/2020 and 31/12/2024, a total of 6,196 ha of cocoa blocks and vanilla gardens were rehabilitated compared to the target of 6,880 ha. Evidence collected from farmers indicates that the programme's support to cocoa farmers has contributed to the rehabilitation of 4,960 ha, equivalent to 77.5 percent of the target to 31/12/2024, and that this has resulted in: (i) establishing a year-on-year increase in cocoa rehabilitation; (ii) reducing the felt need of farmers to expand cocoa production in forested areas. Rehabilitation of vanilla gardens with improved vines has experienced similar results to cocoa, namely exceeding the original rehabilitation target by 157 percent (1,234 ha achieved compared to 480 ha planned), and providing no clear interest among farmers to deforest in order to increase rural incomes.

Finding 28

While agricultural rehabilitation avoided deforestation, EU-STREIT did not integrate land-based ecosystem restoration or nature-based solutions to stabilise riverbanks, coastlines, or restore habitats and biodiversity.

No evidence was found of systematic tree planting or revegetation activities linked to cocoa, vanilla, fisheries, or transport infrastructure that would contribute to erosion control, flood mitigation, or habitat restoration, nor are data available on hectares restored or tree species planted. River clearing activities were implemented as short-term navigation improvements without riparian replanting, and infrastructure works prioritised engineering solutions (ditches, gabions, slope stabilisation) rather than ecological measures, with some vegetation clearance occurring along roads and airstrips. As a result, the programme's environmental gains are largely confined to avoided deforestation through rehabilitation, rather than active landscape or ecosystem restoration.

15.3.1 Percentage of planned farmers and fisherfolk in the programme area who have, between 2019 and 2025 (i) received sustainable agriculture certifications; (ii) expanded soil conservation and regenerative farming/fishing methods and technologies; (iii) expanded fish sanctuaries, no-take zones, catch quotas and other sustainable fisheries activities and plans in coastal and riverine areas; (iv) managing the water use and quality of aquaculture ponds; (v) number of platforms and CSOs engaged in monitoring, reporting and verification of the VC's environmental and climate footprint, law enforcement governance structures, etc.

Sustainable agriculture certifications: Stakeholders from DAL, CB, SIB and NFA confirmed that they do not operate government-backed certified schemes for good agricultural practices (GAP). However, the CB stated that its mandate includes applying quality controls on cocoa farmers, such as approval of clones and varieties that can be propagated, authorising budwood gardens and registering fermentaries, which should be inspected annually to meet CB standards.

Focal group discussions with cocoa and vanilla farmers confirmed that none are participating in official, third-party certification schemes for GAP or similar standards linked to organic, or Fairtrade practices. However, a small number of vanilla farmers and government staff participated in a study tour to Madagascar in 2023 to observe how the government regulates the vanilla market, controls quality and traceability and how third-party certification schemes like Fairtrade operate. The aim of the study tour was to promote learning on how PNG could develop policy to guide the transition of the vanilla VC to market-led development. Due to delays in finalising SIB's new National Spice Policy (see also I1.2.1), systematic transformation of the vanilla VC in the Sepik region has not materialised as planned by the programme.

Expansion of soil conservation and regenerative farming: As highlighted under JC 5.1 and 5.2 the programme has focused on a rehabilitation approach over expansion into forested areas, which has included training on managing soil fertility through compost production to reduce the use of chemical inputs as part of commitments to improve farmer's resilience to climate change. This approach has contributed to conserving soils in forested areas of the Sepik region as well as soils to sustain improved yields for two cash crops. However, there is no evidence that this approach constitutes a regenerative farming approach, given the programme has no Specific Objective dedicated to wider landscape restoration and land use planning, in which soil health diagnosis to develop evidence-based decisions on restoring soil health, biodiversity and effective water resources management are explicitly mentioned.

Expansion of regenerative coastal and riverine fisheries (including expansion of fish sanctuaries, no-take zones, catch quotas and other sustainable fisheries activities and plans): The programme's focus on identifying fish species, providing fishing equipment and training to increase catches and reduce post-harvesting losses through processing and solar-powered cold chain development was primarily designed to improve FSN and provide new opportunities to increase economic income from coastal and riverine fishing. This approach does not constitute the establishment of regenerative fishing practices supported by stock and ecosystem assessments to develop the baselines needed to measure the regeneration of coastal/riverine habitats, main spawning grounds, no take zones/fish sanctuaries, water quality, customary governance systems, etc. Indeed, the lack of effective governance systems has been a major reason why external factors such as encroachment of tuna fishing vessels in coastal zones is a growing problem (see I2.3.6).

Managing water use and quality of aquaculture ponds: The programme's main objective was to support marginalised inland communities produce tilapia fish as a supplementary protein source at the household level. There is no evidence that aquaculture initiatives have been promoted as a technically viable production system that monitors the abovementioned variables of dissolved oxygen management, water temperature and water quality (including turbidity, pH control and algae management). In addition, site inspection revealed little or no evidence of local watershed management to ensure clean and reliable water supplies year-round, not that fisheries officers from District/Provincial administrations are able to provide on-demand site inspection support and guidance, except in a few cases where aquaculture sites were found to be close to main centres like Vanimo.

Number of platforms and CSOs engaged in overseeing environmental and climate issues: The evaluation found no evidence from its document review and field interviews to confirm the programme has actively engaged CSOs or developed specific platforms to actively engage civil society and non-governmental organisations in supporting farmers and fisheries groups carry out environmental monitoring, reporting and verification that would align with GoPNG's support to REDD+, notably with Verra NGO operating the Lower Sepik REDD+ Project (2022-2027). In this specific case there is a geographical overlap with the EU-STREIT PNG programme in Angoram District, East Sepik. As a result, opportunities to enhance forest surveillance to detect any hidden expansion of cocoa production in forested areas in East Sepik has not materialised.

15.3.2 Percentage of cocoa and vanilla production promoted by the programme that is (i) supporting the rehabilitation of degraded lands compared to planned rehabilitation between 2019-2025; (ii) located in secondary or primary forested areas (not planned by the programme between 2019-2025)

Table 25 provides a summary of progress on the rehabilitation of cocoa blocks and vanilla gardens against targets compared to cocoa and vanilla expansion reported by farmers in the interviews conducted.

Table 25: Rehabilitation of existing cocoa & vanilla blocks compared to expansion in forested areas to 30/09/2025

Action	Target (Ha)	2020 (Ha)	2021 (Ha)	2022 (Ha)	2023 (ha)	2024 (Ha)	Total achieved
Existing Cocoa block rehabilitation	6,400	60	337	943	1,089	2,532	4,960
Cocoa expansion in forested Areas	0	0	0	0	0	0	0
Vanilla garden rehabilitation	480	0	0	0	179	1,056	1,234
Vanilla expansion in forested Areas	0	0	0	0	0	0	0
Total	6,880	60	337	943	1,268	3,588	6,196

Source: STREITMIS.

Data not available for 2025.

Table 25 shows that EU-STREIT's cocoa and vanilla interventions have avoided expansion into forested areas according to the farmers interviewed, suggesting that the programme's emphasis on only supporting rehabilitation of existing cocoa blocks and vanilla gardens has been a viable approach to avoiding expansion of the agricultural frontier in the Sepik region.

The table also shows that cocoa rehabilitation accelerated significantly each year confirming training in the replication of budwood cloning of cocoa varieties has become a highly successful practice that has generated significant environmental co-benefits in the form of expanding resilient varieties and reduced pressure on forests. Although data are not yet available for 2025, there are strong indications from the site visits and focal groups discussions with farmers that the programme will reach or exceed its rehabilitation target by 2026.

Vanilla rehabilitation, by contrast, started later and expanded rapidly between 2023 and 2024 to a total of 1,234 ha, which has exceeded the target of 480 ha by 754 ha (157 percent). This provides credible evidence that expansion of improved vanilla vines in existing vanilla gardens has been a viable approach to avoiding negative environmental impact in forested areas.

15.3.3 Land area planted to stabilise riverbanks and coastlines, reduce the effects of flooding and storm surges, reduce soil erosion, restore habitats and protect biodiversity (in hectares, tree types planted (native/exotic))

The evaluation found no consolidated evidence that EU-STREIT PNG has supported land-based ecosystem restoration activities. For example, river clearing activities to improve boat navigation in the Sepik River basin were not accompanied by complementary replanting or revegetation measures aimed at stabilising riverbanks, or restoring riparian strips. Likewise, promotion of cocoa nurseries have not included promotion of any community-based tree planting activities, for example, shade trees to support cocoa production and fisherfolk confirmed that no nature-based solutions or specific climate proofing of vulnerable coastal areas have taken place.

Programme documents and stakeholder interviews confirm that some infrastructure-related works have been implemented, such as drainage improvements and slope stabilisation measures, but there is no evidence that the rehabilitation of transport infrastructure included tree planting to protect water courses, soils or biodiversity. Instead, there is evidence that clearing of vegetation has taken place as part of the rehabilitation of roads and airstrips and supported by the digging of ditches and construction of gabions as part of their climate proofing. This included along riverbanks of a few roads running parallel to a river, such as the Munji-Haripmo road in East Sepik.

Evidence log summary for 15.3.1 to 5.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
15.3.1	No	No. of farmers/fisherfolk who (i) received sustainable agriculture certifications; (ii) expanded soil conservation and regenerative farming/fishing; (iii) expanded conservation of fish stocks; (iv) managed water use & quality for aquaculture; (v) number of platforms dedicated to environmental and climate action.	2
15.3.2	Yes	No. of cocoa and vanilla farms dedicated to rehabilitation of degraded lands compared to expansion in secondary or primary forested areas.	3
15.3.3	No	Land area planted to improve environmental quality and/or restore habitats	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC5.4 Infrastructure works are climate-proof and implemented with environmental safeguards

Finding 29

The vast majority of transport infrastructure rehabilitated under the programme was found to be fully compliant with UN-ILO environmental safeguards, and implicitly in line with key elements in the Environment Act and the Climate Change (Management) Act. However, institutionalising environmental safeguards and climate-screening at the provincial and district levels has not been achieved indicating some gaps remain in delivering sustainable and resilient transport infrastructure in the post-programme period.

Triangulated evidence shows that the planning and implementation of its rural transport infrastructure component has systematically applied UN-ILO's Rural Road Environmental Safeguards Framework and largely complies with key elements of the Environment Act. As a result, approximately 90 percent of the 226 km of roads inspected were found to comply with this framework. Moreover, the integration of climate-proofing measures was evident in all, but one road inspected, confirming implicit compliance with the Climate Change (Management) Act. However, the absence of both CEPA and the CCDA in the programme has contributed to applying environmental safeguards and climate proofing in a programme-specific manner without their guidance in some critical areas, namely:

- Institutionalisation of an environmental safeguards framework at the provincial and district levels in the Sepik region so that Provincial Road Master Plans fully integrate environmental protection, climate adaptation or disaster risk reduction criteria into road selection and prioritisation
- Institutionalisation of climate risk screening at the provincial and district levels in the Sepik region to ensure strategic investments like rural roads systematically assess climate hazards, identify

appropriate adaptation measures and conduct risk management and monitoring in line with the Climate Change (Management) Act and the National Adaptation Plan.

In the case of the rehabilitated rural airstrips funded by the programme, compliance with aviation safety requirements also resulted in aligning with key provisions in the Environment Act 2000, such as avoiding physical expansion of the airstrip infrastructure and applying low-impact maintenance through direct employment of local communities. As a result, overall compliance with the Environment Act is estimated at around 65 percent. However, the level of compliance with the Climate Change (Management) Act and the National Adaptation Plan was difficult to assess, because evidence that climate risk screening took place at the airstrips was not explicitly evident. The absence of CEPA and CCDA in the programme has not aided this situation, in particular providing regular guidance and oversight on institutionalising environmental and climate safeguards for airstrip rehabilitation in the provincial and district administrations of East Sepik and Sandaun.

Finding 30

The shift from fish jetty rehabilitation to river clearing appears to have improved short-term river access for fisherfolk in selected waterways in East Sepik but was implemented as a temporary intervention without applying adequate environmental safeguards, climate risk screening or addressing longer-term river management needs of the provincial and relevant district administrations in East Sepik.

The 2022 decision to abandon fish jetty rehabilitation in favour of river clearing was driven primarily by cost considerations and the need to improve canoe and boat transport in selected areas of the Sepik River basin that are affected by debris accumulation, overgrowth and invasive species, among others. The reported clearing of approximately 141 km of waterways appears to have helped restore navigability for fisherfolk and other groups, including remote cocoa producers, although the programme has not monitored the number of households directly benefiting from the clearings.

The minor nature of the clearing activities realised comply with Level 1 activities specified in the Environment Act, meaning they did not trigger the need for environmental permits or a river management plan (required under Level 2 activities). River clearing has been implemented, therefore, as a stand-alone, short-term measure that meets the immediate needs of fisherfolk and other river users. There is no evidence that it was conceived as part of a wider effort by EU-STREIT PNG to establish a structured environmental and climate risk framework for river management within the provincial and relevant district authorities of East Sepik. As a result, opportunities to develop capacity on climate proofing the Sepik River basin through initiatives such as community-based nature-based solutions and development of permanent river navigation corridors has not materialised. Consequently, while the intervention delivered immediate functional benefits for riverine fisher groups, cocoa farmers and other users, advances in climate resilience, ecosystem health and river governance issues have been missed in the Sepik River basin.

15.4.1 Percentage of constructed/rehabilitated feeder roads visited in the field that comply with latest national and international environmental safeguards and standards and climate adaptation and mitigation measures

Feeder roads: Field inspections covered 15 rehabilitated or spot-improved rural feeder roads, totalling 226 km and serving an estimated 71,000 people (approximately 314 people per kilometre). Approximately 90 percent of these roads were found to be compliant with applicable national and international environmental safeguards for rural gravel roads. However, approximately 10 percent of the roads inspected were showing signs of track deterioration affecting accessibility. This mainly identified along the Salaki–Palpal road (22 km) in Angoram District, where routine maintenance was reported to have been completed only six months ago in May 2025.

This high level of compliance is attributable in part to the use of a comprehensive Rural Road Environmental Safeguards Framework Manual developed by ILO under the Department of Works and Highways (DoWH) framework. The manual includes clear procedures and tools covering Initial Environmental Examination, environmental screening, Environmental Impact Assessment, and Environmental Management and Monitoring Plans (EMMPs). It also provides standardised templates for Rapid Environmental Screening Assessments, Environmental Scoping Reports, draft EMMPs, and checklists addressing road rehabilitation-related environmental impacts, site inspections, and environmental monitoring. Review of documentation and field evidence confirms that these safeguard procedures and tools were consistently applied during the planning and implementation of road works funded by the programme. In addition, training material and success stories also report on the benefits of applying these safeguards, such as the “Rehabilitated Road, Transforming Lives” communication in 2024 on the inauguration of the Yawasoro-Niewanjie Road in East Sepik.

While explicit climate change adaptation and mitigation measures were not clearly articulated in ILO planning, design, or maintenance documentation, there is evidence that the climate-proofing measures incorporated into

road design and construction practices comply with the provisions in PNG's Climate Change (Management) Act (2015). For example, this was particularly evident in the longitudinal profiling of roads, the application of improved drainage systems, installation of gabions, and the hydraulic design and dimensioning of box culverts, bridges and river crossings to withstand heavy rainfall events, storm-induced runoff and other climate-related hazards. These measures are also congruent with PNG's National Adaptation Plan (NAP), 2020-2030, notably its call to reduce vulnerability of rural transport infrastructure to growing trends of extreme rainfall and flash-flooding events.

In the specific case of road segments located in mountainous terrain that have higher levels of vulnerability to climate-related risks such as landslides, satisfactory levels of monitoring and targeted maintenance of these sections were evident. For example, steep, sparsely vegetated sections of the Banak–Wautogik road that are vulnerable to erosion and landslides during the wet season had undergone slope stabilisation and revegetation measures in compliance with environmental safeguards and road resilience standards.

River clearings for boat transport: The official decision in 2022 to abandon the rehabilitation of fish jetties originally foreseen in the Financing Agreement due to the higher-than-expected cost to rehabilitate these jetties, resulted in the decision to run parallel to the road rehabilitation and maintenance activities a river clearing programme to improve boat transport primarily for riverine fisher groups, although this may also benefit cocoa farmers located in remote rural areas in the Sepik River basin. The evaluation's assessment of this activity was restricted to document analysis and stakeholder interviews, but the evidence collected indicates:

- A reported 141 km of waterways have been cleared of debris, overgrowth, and invasive plants (such as water hyacinths), which were considered Level 1 activities (minor, low risk routine works) rather than Level 2 activities listed in the Environment Act that require a permit and management plan.
- The clearing activities have been implemented as temporary measures rather than part of a training package designed to strengthen the provincial administration's capacity to develop a formal environment and climate risk framework to guide river management and maintenance of important fishing areas in the Sepik River basin in East Sepik.

As such there is no evidence that the river clearing activities have integrated climate-proofed initiatives, such as the application of community-based nature-based solutions and establishment of navigation corridors.

15.4.2 Percentage of constructed/rehabilitated airstrips that comply with the latest government environmental and climate-resilient standards

The evaluation team were unable to visit any of the five airstrips, because they are all located in isolated locations. Instead, photographic evidence and reports produced by the Rural Airstrip Agency (RAA) have been evaluated. Overall, analysis of this evidence confirms that all five airstrips (100 percent) comply with the rules and regulations of the Civil Aviation Safety Authority (CASA) for non-certified aerodromes, in particular CASA's Advisory Circular 139-6. This circular provides the standards and guidelines for rural airstrip safety, runway surfaces, obstacle clearance, post rehabilitation inspection requirements and risk management.

Meanwhile, compliance with the latest environmental and climate-resilient standards is estimated to be around 65 percent. Analysis of the RAA's final report on the rehabilitation of the five airstrips funded by EU-STREIT PNG provides evidence that rehabilitation of all five airstrips largely respect key aspects of the Environment Act (2000). These include carrying out infrastructure works that do no serious environmental harm and limit their physical footprint (i.e. avoid physical expansion of the airstrips into forested areas). Moreover, there is evidence that the rehabilitation of the five airstrips have integrated environmental and climate resilience assessments that draw on recommendations in the Environmental Examination Report produced in 2022 by the National Airports Corporation under the Civil Aviation Development Investment Programme II – Rural Airstrips, funded by the Asian Development Bank.

In addition, there is evidence that all five airstrips have respected community participation protocols to that require the employment of local inhabitants in the rehabilitation process as well as the implementation of the Airstrip Management Plans that have been produced in 20255. These plans incorporate environmental actions such as vegetation management, drainage and erosion control and waste and fuel management. As such, these plans comply with the Environment Act's requirement that civil infrastructure applies routine, low impact operation and maintenance practices.

Nonetheless, some caveats were identified. Most notable is the absence of the Conservation and Environment Authority (CEPA) in the programme to provide guidance and oversight in the following areas:

- Ensuring the scoping and screening of the rehabilitation works resulted in specifying their environmental impact category given the Environment Act requires appropriate mitigation measures must be applied where their impact may cause environmental harm
- The Airstrip Management Plans are accompanied by a parallel Environmental Management Plan in which environmental and climate baselines and targets are determined to track the environmental

impact of the airstrips (sediment runoff into rivers, effectiveness of waste management and fuel storage and spills, disposal of spoil from the rehabilitation works, etc.), and their vulnerability to climate hazards.

Similarly, the absence of the Climate Change and Development Authority (CCDA) in the programme has restricted access to guidance and oversight on the application of climate risk screening for the rural roads and airstrips to ensure that climate hazards and adaptation measures were explicitly assessed, agreed and monitored in line with the Climate Change (Management) Act and the National Adaptation Plan.

15.4.3 Environmental safeguards management framework has been developed and updated each year between 2019-2025 at the provincial and local government levels (i.e. district and local-level governments)

An environmental safeguards checklist and accompanying mitigation measures was not applied and integrated in the Financing Agreement. Instead, the programme conducted a general environmental scoping exercise as part of the Baseline Survey conducted in 2020. Subsequently, an environmental and social management screening exercise was conducted by FAO, recommending a safeguards specialist be sent to the programme, although this was due to the triggering of a social safeguard (see I6.1.2). However, the PSC rejected this recommendation in 2023. As a result, there is no evidence that an environmental and social safeguards management framework was identified, applied and updated annually in East Sepik and Sandaun provinces.

However, there is evidence that this framework has been applied by UN-ILO. Analysis of contractual documentation and interviews on the rehabilitation of the feeder roads sub-component shows a comprehensive manual, entitled the Rural Road Environmental Safeguards Framework, has been systematically applied for all roads rehabilitated by EU-STREIT PNG. This framework covers environmental screening checklists linked to, among others, Inclusive & Innovative Employment, Renewable Energy & Sustainable Agriculture, Environmental & Social Responsibility, Environmental Impact Assessment, and EMMP is an Environmental & Social Management & Monitoring Plan, all of which are crucial for integrating decent work in PNG's green growth aspirations. In addition, to support the application of this framework, the ILO has provided training on the application of its checklists to staff responsible for Works and Highways in the provincial administrations, during the planning and implementation phases of road rehabilitation. However, there is no clear evidence that district level staff have been systematically included in this training to support the development of local safeguards systems aligned with the Environment Act.

Nevertheless, neither the provincial nor district authorities stated that they are taking steps to formally integrate the ILO's framework in their road policies and regulations to guide future road works, rehabilitation and maintenance in the two provinces. In addition, the selection criteria for rural road development and maintenance in the draft Master Plans for Provincial Roads developed under ILO's oversight in both provinces, continue to focus on population and the number of settlements served. Relevant environmental criteria, such as environmental protection, climate change adaptation needs or disaster risk management to enhance the resilience of local communities, are missing.

As a result, there is insufficient evidence to confirm that provincial and district stakeholders will carry out annual reviews and updating of the ILO's safeguards framework through which:

- A consolidated system for recording environmental screening results, mitigation actions, and follow-up monitoring across sectors (agriculture, fisheries, infrastructure) takes place;
- Risks are identified and mitigation measures triggered to comply with the Environment Act;
- Risks and mitigation measures are reported to, and receive approval from, the environment officer in the Provincial Administration, or CEPA itself, before they are implemented.

Evidence log summary for I5.4.1 to 5.4.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I5.4.1	No	No. of constructed/rehabilitated feeder roads visited in the field that comply with latest national and international environmental and climate safeguards and standards	2
I5.4.2	No	Percentage of constructed/rehabilitated airstrips that comply with the latest government environmental and climate-resilient standards	2
I5.4.3	No	Environmental safeguards management framework has been developed and updated	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC5.5 The degree to which climate change mitigation has been promoted through the expansion of solar power in the programme area

Finding 31

EU-STREIT has made a small, but important contribution to supporting GoPNG expand solar energy solutions in the Sepik region, although impact monitoring on their co-benefits is not evident. However, initial calculations by the evaluation reveal that the introduction of solar driers is making a significant contribution to reducing carbon emissions.

The evidence shows that the programme has promoted a range of solar energy initiatives to support the development of all three VCs. However, the programme's lack of any impact monitoring to estimate tCO₂e saved through the rehabilitation of cocoa blocks and vanilla gardens and introduction of solar energy solutions in general has resulted in little or no learning on the areas in the programme where it is delivering most impact on reducing carbon emissions and in terms of generating environmental and climate co-benefits.

Preliminary calculations of data available to 31/12/2024 indicate that the programme is contributing to climate change mitigation in two main areas. First, through its emphasis on the promotion of rehabilitation over expansion, which in the specific case of cocoa shows that the rehabilitation of 4,960 ha of cocoa blocks has contributed to sequestering as much as 384,000 tCO₂e between 2020–2025. However, deployment of solar technologies like solar driers for cocoa farmers indicates the substitution of firewood with solar dryers avoided an estimated 77,000 tCO₂e over the same period. The data collected reveal that the introduction of solar driers represents an important action to advance EU-STREIT PNG's contribution to the achievement of the NDCs. Similarly, the installation of PV electrical power systems at nine public facilities (seven schools and two health centres) has helped replace local diesel genset power generation and reduce the need to use power from the grid. However, there is no data on the tCO₂e saved as a result of these actions although preliminary calculations by the evaluation team indicate only 1,408 tCO₂e have been sequestered.

In operational terms, the programme has also exceeded its renewable energy target by 254 percent, through the delivery of these solar initiatives, which have centred on procuring 966 solar dryers for cocoa and vanilla. However, challenges observed in fisheries VC, in particular the provision of unreliable solar freezers, has limited opportunities to improve fish sales, enhance livelihoods and reduce carbon emissions. In addition, the absence of routine emissions monitoring by the programme, has restricted the opportunity to raise awareness on the co-benefits that are derived from solar energy, as well as identify gaps in technical support, maintenance requirements, and the mainstreaming of climate metrics into the programme's planning and implementation.

15.5.1 Estimated tCO₂e saved through the introduction of sustainable and resilient cocoa and vanilla farms between 2019 to 2025 (based on data from FAO's Ex-Act tool)

The programme does not monitor this indicator in the STREITMIS, so the evaluation team was unable to assess programme data on, for example, the tonnes of carbon dioxide equivalent (tCO₂e) that has been sequestered by restoring 4,960 ha of new resilient varieties of cocoa between 2020-2025.

However, assuming the programme rehabilitated on average 992 ha/year between 2020-2025 and sequestration levels start to accrue when the cocoa seedlings have been planted, the calculations for biomass sequestration and avoided deforestation for cocoa indicate that an estimated 384,000 tCO₂e has been sequestered to date.

This figure excludes the CO₂ emissions also avoided by switching to 500 cocoa solar dryers (see Table 26 below). Assuming each solar dryer has dried on average 1 tonne of cocoa per month over the last 48 months and used 1.75 tonnes of firewood per month to dry one tonne of cocoa using conventional firewood dryers (ACIAR, 2021), a total of 77,000 tCO₂e has been avoided by these dryers over four to 30/09/2025. These estimates indicate that the introduction of the solar driers has a significant impact on reducing CO₂ emissions by the programme.

15.5.2 No of producer groups and processors using renewable energy in VC activities (drying, processing, cold storage, lighting, etc.) by November 2025 compared to mid-term in 2022

Data taken from programme's MIS data and logical framework on the number of producer groups, processors, and MSMEs using renewable energy systems in their value chain activities to 30/09/2025 compared to targets is presented in Table 26.

Table 26: MSMEs and Producer Groups using renewable energy (to 30/09/2025)

VC category / entity type	Target (31/05/2026)	Achievement (30/09/2025)	Technology used
Cocoa fermentaries	50	500	Solar dryers
Vanilla curing	200	466	Solar dryers
Vanilla processing	-	15	Solar PV panels (for vacuum packing)
Fisheries (MSMEs/Groups)	30	23	Solar freezers
Banking access points	20	10	Solar PV panels
Enterprise Solar Kits	50	48	Mobile solar kit
ICTs & training centres	11	21*	Solar panels and lead acid/lithium batteries
Total	311	1,083	

Source: STREITMIS.

* Only 9 are in operation to 30/11/2025. Note: 10 solar kits have also been distributed to all 10 District Offices.

The data in Table 26 shows that on paper, the programme has provided a total of 1,083 solar energy initiatives to MSMEs and producer groups up to 30/09/2025, confirming the original target of 311 initiatives has been exceeded by over 250 percent. This achievement confirms the programme has made an important contribution to expanding solar powered solutions that directly contribute to strengthening climate-resilience for a large number of end beneficiaries participating in the programme in the Sepik region. For example, the electricity generated from solar PV systems provided to rural households in the Sepik region is reported to be currently generating in total around 1,930 kWh/day, and 824.79 MW over one year (see also I5.1.3) which is providing as many as 54,000 members of the three VC with access to an off grid sources of energy for the first time.

In addition, the provision of 966 solar dryers is not only supporting reductions in tCO₂e but also generating economic savings in two ways. First, removing the cost of electricity to dry cocoa and vanilla. Second, reducing the costs associated with post-harvest losses. Third, enhancing the quality of dried cocoa and vanilla to optimise humidity levels and other international quality standards.

The programme has also extended renewable solutions to 23 fisheries groups, although visits fisher groups confirmed difficulties in generating sufficient levels of solar energy on cloudy days to operate the freezers, while others stated corrosion of battery connectors has resulted in a significant drop in fish freezing capacity within some groups. Meanwhile, 10 of the 20 banking access points planned have solar panels installed in areas traditionally suffering from inconsistent electricity from the national grid.

Evidence log summary for I5.5.1 to 5.5.2

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I5.5.1	No	Estimated tCO ₂ e saved through establishment of sustainable and resilient cocoa and vanilla farms	1
I5.5.2	Yes	No of producer groups and processors using renewable energy	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 6: To what extent was the programme governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

JC6.1 The extent to which the programme's governance structure was clear, appropriate and effective to deliver coordinated management over the programme's planning, implementation, monitoring and reporting

Finding 32

The programme's multi-tiered governance design was clear at the strategic level but revealed gaps at the operational and technical levels, constraining effective coordination across all the sectors to deliver integrated rural development in support of the economic transformation prioritised in the MTDP IV.

The programme's design established a comprehensive multi-tiered governance structure to oversee all aspects of the programme's implementation. However, clarity on the specific roles and responsibilities of stakeholders in this structure were not formally laid out and described in an operations manual. This restricted opportunities to establish robust cross-sector coordination on key issues such as the selection of intervention sites and end beneficiary groups, application of effective planning and monitoring approaches to deliver integrated rural development outcomes and joint reviews to identify gaps and propose coordinated solutions to consolidate and upscale economic transformation in the Sepik region in line with priorities of GoPNG.

Despite some positive elements in the programme's governance structure at the strategic level, notably clearly defined ToR for the PSC, the establishment of the TWG in 2022 and change of the Programme Coordinator in the PIMU also in 2022, the roles and responsibilities of stakeholders at all levels show that their main function has been to comply with administrative duties like the approval of annual work plans, endorsement of annual progress reports, agreeing budgets and resource allocations, etc. This reinforced the PSC's role as overseer of the implementation of the programme's components and sub-components to deliver on targets at the sector level in accordance with the programme's MIS. As a result, insufficient attention was given to addressing the fragmented approach to planning, implementing and monitoring that continued, despite efforts to respond to emerging coordination needs, notably the inclusion of the UN Resident Coordinator as a co-chair in the PSC and the launch of the TWG in late 2022.

Moreover, the launch of the TWG resulted in the establishment of sectoral groups to provide technical guidance to the PSC on the programme's implementation, which the PIMU subsequently implemented following the approval of the annual work plans by the PSC. In practice, the absence of ToR, or an operations manual specifying the PIMU's coordination role, meant that PIMU meetings with the five participating UN agencies and government counterparts already had a predetermined role of coordinating sector-based operations, rather than a coordinated inter-sectoral approach to implementing the programme. This reduced the PIMU's effectiveness in promoting system-wide integration at all levels, particularly at provincial and district levels to deliver the economic transformation objectives of MTDP IV in selected parts of the Sepik region.

16.1.1 Evidence of clearly defined ToR outlining (i) the roles and responsibilities of the PSC, the TWG, the PIMU and the PTF and (ii) the coordination mechanisms to be applied for programme planning, implementation monitoring, reporting and communications

Programme documents confirm a multi-tiered governance framework was to be put in place to implement EU-STREIT PNG comprising the following levels of authority:

- Programme Steering Committee (PSC) engaging representatives from all main stakeholders as follows: the EU Delegation (acting as co-chair), the DNPM (acting as co-chair), line departments (includes DAL, NFA and DoWH), representatives from the private and non-governmental sectors
- Technical Working Group (TWG) involving technical staff from DAL, CB, SIB, NFA DoWH and other institutions linked to specific activities (includes NARI, NICTA, National Youth Development Authority (NYDA)) to support the PSC oversee all technical aspects of the programme
- Programme Implementation Management Unit (PIMU)
- Programme Task Force (PTF) to promote cross-sector dialogue at the government level on the programme's implementation under the management of the DNPM.

The PSC operated with clearly defined Terms of Reference (ToR) established in the Financing Agreement signed on 24/06/2019 and endorsed at the first PSC meeting held on 10/02/2020. The main functions of the PSC are to:

- Provide strategic guidance on the programme's implementation ensuring alignment with national policies and priorities
- Review of annual work plans and budgets
- Approval of annual progress reports
- Facilitate inter-partner coordination
- Approve resource reallocations
- Monitor the use of funds.

PSC membership included UN agencies, government institutions (DAL, DNPM, DoWH, NFA). Initial PSC composition was defined as flexible and designed to expand over time. For example, the PSC members agreed to include the UN Resident Coordinator as a third co-chair at the third PSC meeting held in May 2022. Interviews confirm that this decision was taken to improve coordination between the five UN agencies involved in EU-STREIT PNG (ILO and ITU do have offices in Suva/Fiji and Geneva/Switzerland). Second, communicate with UN headquarters on fund transfer delays and other budgetary issues linked to the UN Trust Fund mechanism through which EU funds are channelled to the five UN agencies involved in the programme.

In contrast the TWG lacked clearly defined ToR in the Financing Agreement, which were not fully defined and agreed upon until the fourth PSC meeting held in November 2022. Minutes from this meeting do not indicate that formal ToR were identified concerning its composition, decision-making authority, accountability to the PSC and PIMU, or on how it was to carry out cross-sector coordination. However, they do clarify that the TWG's mandate is to: (i) strengthen technical coordination; (ii) address technical implementation issues; (iii) provide technical inputs and recommendations to the PSC prior to strategic decision-making. The 2024 Annual Progress Report confirms that the TWG has implemented this mandate through the establishment of sectoral groups to oversee technical aspects of the cocoa and vanilla VCs as well as cross-cutting objectives linked to gender equality and youth engagement in the VCs, among others.

The third level of the programme concerns the establishment of the PIMU as prescribed in the Financing Agreement. The Financing Agreement and, more specifically the Contribution Agreement, provide clear information on the role of FAO to manage the joint-coordination of the programme's implementation with ILO, ITU, UNCDF and UNDP. In addition, the PIMU is required to:

- Prepare annual work plans and progress reports on a quarterly and annual basis
- Act as the PSC's secretariat to ensure all its main decisions on implementation are implemented
- Carry out day-to-day coordination of all activities at intra and inter-institutional levels.

Internal meetings of the PIMU have functioned as a platform to prepare workplans, monitor and prepare communications on achievements, review challenges and to identify follow-up actions to achieve targets. However, the document review and interviews found no standalone ToR document was identified and agreed for the PIMU.

The PTF is described in the Financing Agreement as a government-led initiative to carry out supervision missions to the PIMU at least once per year. However, there is no evidence that a document was produced defining the structure, membership, functions and coordination mechanisms to be applied by the PTF. The 2024 Annual Progress Report states that FAO convened PTF meetings to monitor overall programme progress with special emphasis on FAO-led workstreams, but DNPM confirmed that these missions did not take place because the PTF has not been operational since 2022. Stakeholder meetings confirm the main reason for this was that most of the functions of the PTF could be covered through meetings with PSC members in advance of the PSC meeting itself.

Finally, planning implementation, monitoring, reporting and communications between the five UN agencies to implement the programme under the One UN approach have relied on:

- Annual joint work planning involving all five UN agencies to agree on budgeting of annual operations using a detailed budgeting format specified by the EU
- Each UN agency implementing the work plan in coordination with their counterpart agency and the PIMU
- Monitoring of progress on the achievement of annual targets set out in the work plan and the logical framework
- Holding regular monthly meetings under the coordination of the PIMU to discuss progress and aggregate data for the production of the programme's website, quarterly and annual progress reporting requirements

- Conducting M&E cluster meetings to support the creation and running of the programme's web-based M&E system known as "STREITMIS" in 2022, which has also facilitated the application and monitoring of monthly activity plans
- The preparation and submission of quarterly and annual progress reports and budgets using the UN's own budgeting format, rather than the EU budgeting format used for annual planning.

16.1.2 Stakeholder views on the clarity and effectiveness of their roles and responsibilities in the programme's governance structure to deliver results

Stakeholder interviews confirm that the application of the multi-tiered approach has been challenging to implement in practice due to a general lack of an operations manual clarifying not only the general mandate of the PSC, TWG, PIMU and PTF, but also their specific roles and responsibilities to secure integrated approaches to planning, implementation and monitoring of the programme at the national, provincial and district levels of government. Triangulated evidence indicates that the following points have contributed to preventing the PSC from addressing this need in the inception phase:

- Delays in establishing the TWG until 2022
- Ambiguity on the roles and responsibilities of the PTF
- The absence of the UN Country Representative in the PSC until late 2022
- Incongruent rules and procedures concerning the procurement of equipment by each UN agency demonstrating a serious gap in the One UN approach
- The strong emphasis given by the PSC and PIMU on focus their roles and responsibilities on the application of a target-driven approach to implementing the programme.

In addition, external factors, notably capacity constraints coupled by high rotation rates of staff in the government's partner agencies at the national and provincial level encouraged the UN agencies to adopt direct implementation methods to ensure targets were reached.

As a result, the programme has experienced constant implementation challenges and ineffective coordination mechanisms to govern key aspects of the programme. In particular there is no clear evidence to confirm clear roles and responsibilities were missing in the following areas, among others:

- Maintaining a presence in the capital, Port Moresby, to ensure coordination with institutions that do not have provincial representatives in place (NARI, IPA, NICTA, NYDA, NTO, etc.).
- Mapping and selection of intervention sites and end beneficiaries, building on climate vulnerability assessments conducted by UNDP
- Identifying specific socio-economic, physical and environmental baselines in the intervention sites and communities selected, given the Baseline Survey only provided baseline information at the provincial level
- Establishing effective co-management approaches that build capacity at the sub-provincial level to deliver the rural economic transformation prioritised in the MTDP IV and Vision 2050.

Under these circumstances concrete evidence of integrated approaches to VC and VC enabler activities was patchy. For example, while roles and responsibilities were clear between ITU and UNCDF on establishing coordinated approaches to digitalisation and financial inclusion, coordination on feeder road selection to cover the highest number of groups engaged in VC development was far less evident. Consequently, roles and responsibilities in bridging the gap in coordination between DAL and DoWH to advance rural transformation have not materialised as planned. For example, some of the feeder roads constructed were found to serve small numbers of cocoa farmers within a 2 km radius. The PIMU clarified that the applicable radius applied by the programme had been changed to 5 km. However, the evaluation found no concrete evidence that the outcome indicator 2.5 (Number of people/households living within 2 km of all-season rural roads rehabilitated) had been changed in the STREITMIS.

16.1.3 Evidence that meetings within the governance structure took place as planned and engaged all partners in the decisions taken on the programme's planning, implementation, monitoring, reporting and other duties (communications, visibility, grievance mechanism, etc.)

Triangulated evidence confirms the programme's governance bodies have met regularly and engaged the participation of the vast majority of members officially involved to run them. Moreover, in most cases, more meetings have taken place than planned. This is summarised as follows:

- PSC has met in total on 13 occasions to November 2025, compared to eight meetings planned. Participation rates of stakeholders in these meetings are reported to have been satisfactory with the

majority of PSC members from the EU, UN, DNPM, DAL, DoWH, NFA, and provincial authorities confirming attendance at all nine meetings realised.

- TWG's sectoral groups have met on 78 occasions since they were formed in 2022, compared to 62 planned.
- PIMU meetings engaging PIMU staff, main focal points from all five UN agencies and their partner government institutions have totalled 21, compared to nine planned.
- Programme coordination meetings between all five UN agencies implementing the programme are reported to have taken place on 30 occasions compared to 26 planned.
- M&E joint annual review and planning meetings have taken place on five occasions compared to five planned in which members of the PIMU, the UN implementing agencies and national counterpart staff have all participated to support the collection and validation of data on achievements/shortcomings for implementation and progress reporting purposes.
- Five baseline and mid-term evaluations have been conducted compared to six planned in which UN and government counterpart agencies, together with independent evaluators, have participated in the field missions conducted.

Communications on the programme's activities and achievements have been managed by a dedicated communications officer, who is responsible for overseeing the implementation of the programme's Communications and Visibility Strategy, which includes a Social Media Strategy and Action Plan. In total, the programme has produced:

- 1,812 communications and press releases (compared to 1,904 planned). The communications include success stories, short informative video clips and documentaries, regular updates posted on social media (Facebook), and spots on television and radio stations, among others.
- 12,206 visibility items (compared to 6,226 planned). Inspections in the field by the ET confirm EU visibility rules and procedures have been applied to all equipment, training materials, banners, clothing and other items funded by the EU. In addition, visibility of all five UN agencies participation was also evident.
- A two-day Learning and Innovation Event with 42 participants from government, the private sector and development partners. The event shared evidence showed how the cocoa and vanilla value chain model works and discussed how it could be expanded nationwide.
- Through a partnership with NBC TV, a documentary called 'Cocoa Revolution in the Sepik' using insights from M&E data and field work, which was broadcast several times across the country.
- Two case studies to share best practices and lessons learned through knowledge and science publication channels, providing an additional avenue to reach the expert community beyond routine communications.
- YouTube playlists ("Hear from Beneficiaries" and "Hear from Partners"), featuring direct stakeholder testimonials and explanations of how the support is influencing practices and processes relevant to value chain transformation, contributing to improvements in lives and livelihoods in rural Sepik and beyond.

Establishment of a grievance mechanism is evident, but its application has not adhered fully with EU and UN rules and regulations. This was first pointed out following an environmental and social management (ESM) screening exercise carried out by FAO in November 2022, which pointed out that the mechanism was not responding in an adequate manner to grievances, notably a household that had been displaced following the acquisition of land to support the establishment of cocoa collection and processing centres in Sandaun province. The screening report also confirmed the lack of application and free prior and informed consent to underpin the programme's planning and implementation under components 1 and 2.

According to interviews with FAO officials, this situation triggered a call for a safeguard specialist to assess the programme's grievance mechanism and identify an ESM risk management plan. However, this was rejected by the PSC in 2023 resulting in the general lack of application of environmental and social safeguards, outside of those applied by ILO for the road rehabilitation and maintenance sub-component (see also JC 3.4 and 5.4). According to some stakeholders interviewed the grievance mechanism has continued to operate in an informal manner, whereby verbal complaints can be issued to PIMU staff who then deal with them informally on a case-by-case manner. This represents a fundamental accountability gap on how far the programme has been successful in resolving the grievances of end beneficiaries.

Evidence log summary for I6.1.1 to I6.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I6.1.1	No	Evidence of (i) clearly defined ToR for PSC, TWG, PIMU, PTF (ii) operational coordination mechanisms in place	3
I6.1.2	No	Stakeholder views on the clarity and effectiveness of their roles and responsibilities	2
I6.1.3	No	No. of meetings on planning, implementation, monitoring, reporting, governance that took place and level of engagement of main stakeholders	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC6.2 The extent to which the governance structure resulted in effective and coordinated delivery of planning, implementation, monitoring reporting and other duties across implementing partners

Finding 33

Coordination mechanisms successfully brought stakeholders together at the national and provincial levels to agree on targets, report on progress and address bottlenecks and shortcomings, but their strong target-driven approach largely excluded sub-provincial government engagement to deliver integrated rural development at the local level.

Evidence shows that inter-agency and inter-institutional coordination took place regularly and more frequently than planned, providing a stable platform for agreeing annual work plans, budgets, monitoring arrangements and consolidated reporting. Formal coordination platforms included PIMU meetings, inter-agency coordination meetings, and regular engagement with national government institutions (DNPM, DAL, NFA, IPA, DoWH, NICTA/DICT, CEFI) and provincial administrations for East Sepik and Sandaun. These platforms enabled the programme to meet its planning, reporting and accountability requirements as foreseen in the Financing Agreement.

However, stakeholder interviews and the document review confirm that the coordination platforms have mainly be used to identify and agree on sector-specific outputs/sub-outputs, targets and budgets, rather than to design and implement integrated, mutually reinforcing intervention packages at the local level. The level of inclusion of local government in these platforms has been low, resulting in the establishment of a strong target-driven approach at the sub-component level, rather than coordinated action at the local government level. This has been reinforced by the launch of the Accelerated Action Plan for the 2023-2025 period and the strengthening of target monitoring in the STREITMIS from 2024. As a result, only a few examples of cross-agency complementarity were identified, in particular involving ITU which has shown a high level of coordination of its activities. This has included ITU's agreement to cover the cost of training following the digitalisation of financial inclusion initiatives promoted by UNCDF, with FAO on coordinated expansion of ICT centres, and with ILO on GIS mapping of ICT infrastructure. Nonetheless, these examples were not adequately captured by the PIMU to develop the case for systematic integrated planning and delivery of the programme's sub-components.

Finding 34

Strategic decisions taken by the PSC were generally followed by prompt action by the PIMU and the TWG, contributing to improved implementation rates. However, the application of UN agency-specific procurement procedures limited the PSC's ability to influence the speed of procurement and to promote the development of procurement capacity in the provincial administrations of East Sepik and Sandaun.

The evidence identifies at least six priority decisions taken by the PSC that were subsequently implemented in a timely manner by the PIMU and TWG. These include decisions related to establishing the programme's physical presence, approving annual work plans, appointing a new Programme Coordinator, launching the TWG, adopting the Accelerated Action Plan, approving a no-cost extension, and strengthening internal monitoring tools. Stakeholders widely acknowledged that these decisions contributed to improved implementation momentum, particularly from 2023 onwards. As a result, the governance mechanisms in place, in particular the decision to nominate the PIMU as the PSC's secretariat, have proven to be a viable mechanism to implement strategic decisions at the provincial level in PNG.

Conversely, PSC decisions linked specifically to authorising the procurement of equipment to support the intensification of activities under many of the sub-components has not resulted in swift procurement processes, which in turn has caused delays in the delivery of specific outputs/sub-outputs such as the rehabilitation of the East Sepik Provincial Agriculture and Livestock Training and Extension Centre, or the

procurement of solar PV kits and processing equipment for cocoa processors (highlighted under sections 2 and 3). As such, this demonstrates that the PSC has limited influence over systemic constraints linked to procurement, because procurement processes remain firmly under the control of the UN agencies concerned.

The fact that all five UN agencies apply different tendering rules and procedures that are not controlled by the PSC, highlights an important gap in the programme's governance structure. Moreover, this has contributed to higher transaction costs derived from a lack of pooling approaches to procurement, through which the benefits of economies of scale can be exploited. In addition, the non-resident and non-accredited status of ITU in PNG has forced procurement of digitalisation equipment to be channelled through UNDP, which stakeholders confirmed added around six months to the procurement process.

The limited engagement of provincial administrations in the procurement processes of the five UN agencies concerned, has also prevented the PSC from promoting capacity development at the provincial administration level. As such there is no evidence to confirm these administrations have enhanced capacity on procurement planning, tendering and commissioning of equipment according to current statutory rules and regulations.

16.2.1 Evidence that inter-agency and inter-institutional coordination took place frequently to agree on annual work plans, programme implementation, internal monitoring and progress reporting

Programme documents and interviews confirm that inter-agency and inter-institutional coordination meetings were convened on a regular basis throughout the implementation of EU-STREIT PNG at the programme's offices in Wewak or Vanimo. As stated under 16.1.3 these meetings exceeded the total number of meetings planned in most cases, confirming communication between UN and GoPNG implementing partners was satisfactory to carry out the following:

- Inter-institutional coordination with national government counterparts (DNPM, DAL, NFA, IPA, DoW&H, NICTA/DICT, CEFI), to support the elaboration of annual work plans and budgets.
- Inter-provincial coordination with the provincial governors and administrations on a periodic monthly basis to discuss all aspects of the programme's planning, implementation and monitoring. This was aided by the signing of an agreement in 2021 between the programme and the provincial administrations to allow provincial staff to actively engage in the programme's planning, implementation and monitoring.
- Inter-agency meetings at EU-STREIT PNG offices in Wewak and Vanimo to discuss in internal coordination needs, procurement procedures, validate information and data for the programme's MIS (STREITMIS), develop communications, carry out visibility actions, accompany evaluation field visits and celebrate important events on the PNG, EU and UN calendars. Interviews confirm, this was supported by regular informal meetings at the UN staff residence in Wewak.

Overall, triangulated evidence confirms that formal coordination fora involving all five UN agencies and government institutions were convened frequently and on a recurring basis to support annual planning, programme implementation follow-up, internal monitoring and consolidated progress reporting.

16.2.2 Stakeholders views on the quality, timing and level of inclusiveness within the governance structure and with national and subnational counterparts to deliver the programme's intended outputs and outcomes

Evidence gathered from stakeholder interviews and the document review provides strong indications that coordination has been interpreted and applied as a common task to agree on each implementing partner's proposed outputs, targets and budgets, rather than an integrated package of actions that are designed to be mutually reinforcing to develop robust and sustainable VCs and VC enablers in selected communities in the Sepik region where the potential for economic transformation is most viable and scalable. Instead, interviews indicate that the programme's planning has had to try and achieve two things that are not entirely compatible. In summary they are:

- Satisfy EU and GoPNG interests that the programme covers a wide area of the Sepik region to ensure as many poor rural communities as possible receive some form of support, on the assumption that this will alleviate poverty and promote economic development.
- Satisfy the interests of the private sector that need a constant supply of cocoa beans and vanilla pods in quantities and the quality required to justify investment in private sector-led development in the Sepik region.

This dichotomy appears to be reinforced by the adoption of two Specific Objectives in the programme that has largely singled out the role of the UN agencies by sub-components. Indeed, interviews with stakeholders

provide strong evidence that each UN agency is primarily concerned with meeting their sector-specific targets, which has intensified since the launch of the Accelerated Action Plan in 2023 (see I6.1.2). Under these circumstances, the programme's coordination and implementation strategy has been shaped by target-driven needs that are tracked by sub-component, outputs and sub-outputs in the Target versus Achievement matrix integrated in the STREITMIS.

However, stakeholder interviews did state that some of the programme's activities have explicitly relied on cross-agency coordination to establish complementarity in some specific areas of implementation. These include:

- ITU has ensured its mandate to expand digitalisation in the Sepik region has supported the connectivity of the 305 new rural banking services promoted by UNCDF (see I3.2.0a). In addition, stakeholders confirmed ITU has covered the cost of some of the activities where UNCDF has lacked adequate financial resources, such as for financial literacy training.
- FAO has supported ITU/DICT expand the number of ICTs from 10 to 21 centres to expand access to online services including the E-agriculture Strategy (see also I3.1.2). This has mainly involved the funding of additional computers, monitors, printers, large screen television screens for online training and other equipment needs.
- ILO developed GIS maps to support ITU and UNCDF plan their respective interventions at the field level.

Finally, in terms of the level of inclusiveness applied in the planning, implementation and monitoring applied by the programme, the evaluation identified overall satisfaction among national and provincial counterparts, although this was more evident in East Sepik province than in Sandaun province, where the latter expressed a lack of information on the programme's annual expenditure levels in each province. However, at the subnational level, interviews confirmed that participation rates had generally been low. For example, consultations on the development of national policies for gender and youth targeted participation at the provincial level only, rather than engaging with key stakeholders at the District, Local Government and Ward levels. In another example, District Officers confirmed participation had mainly focused on the provision of computing equipment.

I6.2.3 Number of priority decisions taken in PSC meetings that were subsequently implemented in a timely manner and as planned

The evaluation identified at least six priority decisions by the PSC that the PIMU, acting as the secretariat to the PSC, carried out in a timely manner:

- The decision taken in the first PSC meeting in February 2020 to build the programme's Wewak office complex was recorded as completed in the second (virtual) PSC meeting held in April 2021.
- The second (virtual) PSC meeting's approval of the second annual work plan marked the end of the inception phase and enabled to the PIMU to officially start the implementation phase.
- The third PSC meeting held in Vanimo in May 2022 endorsed the selection of a new Programme Coordinator with increased powers. The majority of stakeholders interviewed agreed that this has resulted in improved implementation rates since 2023.
- The fourth PSC meeting in November 2022 endorsed the launch of the TWG. This was officially launched soon after in May 2023 with the support of the PIMU.
- The 5th PSC meeting held in August 2023 included a field site visit to various intervention sites to assess cocoa nurseries, rural roads, financial services access points, infrastructure under construction). This facilitated: (i) the adoption of the Accelerated Action Plan for the PIMU. Stakeholders agree that this has resulted in the intensification of implementation rates, supported by a rise in meetings of the TWG's sector groups; (ii) agreement to formulate a one-year no cost extension of the programme to May 2026 in order key actions, such as the rehabilitation and extension of the East Sepik Provincial Agriculture and Livestock Training and Extension Centre, could be completed. The one-year no cost extension was subsequently endorsed by the EU Delegation soon after in January 2024 and is currently under implementation by the PIMU.
- The sixth PSC meeting in March 2024 confirmed the continuation of the Accelerated Action Plan supported by measures to strengthen internal monitoring of outputs/sub-outputs for Components 1 and 2. This resulted in formally establishing the Targets and Achievements monitoring table in Excel, which was launched by the PIMU in 2024. Analysis of the latest version of this table to 30/09/2025, confirms a significant increase in outputs/sub-outputs has been registered in the 2023-2025 period compared to 2020-2022.

However, one area where PSC decisions appear to have had little effect on accelerating implementation concerns the approval of tenders to procure equipment. A large number of stakeholders interviewed voiced concerns on the fact that all procurement has been subject to UN procedures. In particular, a large number of interviewees stated that the long procurement processes applied by each UN agency, exacerbated by the lack of equipment suppliers in PNG forcing the need for international tenders, is not suited to a programme like STREIT where the original duration of the programme was just four years and focuses on crops that do not reach maturity until (extended to five years in 2024). The main reasons justifying these concerns:

- The application of procurement procedures differs for each UN agency. This resulted in a rise in transaction costs and prevented the application of economies of scale to secure better prices. For example, procurement of computer equipment for the ICTs by ITU and FAO were done separately resulting in the acquisition of different computer equipment.
- The ITU is not an accredited UN agency in PNG. This resulted in all procurement of equipment was managed through UNDP. Stakeholders estimated that this added around six months to the procurement process.
- The Provincial Administrations have not been actively engaged in the procurement process. This has resulted in the lack of capacity development in the procurement process, confirming structural coordination weaknesses between government and the PIMU remain evident. For example, the approval of the abovementioned East Sepik Provincial Agriculture and Livestock Training and Extension Centre by the PSC in August 2023, fixed a completion date for October 2025, which the evaluation found was still in the process of finalising its foundations (although the delay was partially due to reasons beyond control of FAO or the local DAL office, such as the need to evacuate the site due to unexploded ordnance from World War II found at the site).

Evidence log summary for I6.2.1 to I6.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I6.2.1	Yes	Evidence that inter-agency and inter-institutional coordination took place frequently to agree on annual work plans, implementation, monitoring	2
I6.2.2	No	Stakeholders' views on the quality, timing and level of inclusiveness within the governance structure	3
I6.2.3	Yes	Number of priority decisions taken in PSC meetings that were subsequently implemented in a timely manner	3

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC6.3 The extent to which the programme's M&E system guided decision-making and learning within the governance structure to deliver the programme's objectives and results

Finding 35

Results-based monitoring was systematically applied at output level to track targets, but the absence of baselines and only partial alignment with most of the outcome indicators limited opportunities for learning about transformational change in the Sepik region.

The programme shows positive signs on developing a centralised M&E system to track a comprehensive set of 45 outputs (supported by sub-output targets) between 2020-2025. The launch of the web-based STREITMIS in mid-2022 followed by the integration of the Targets versus Achievements monitoring tool in 2023 has strengthened the capacity of main stakeholders to plan and report on the delivery of outputs according to the output requirements specified in the logical framework. Indeed, since 2023, the PSC has been able to track achievements linked to 45 output indicators on a quarterly and yearly basis through which implementation challenges, targets and training needs for the next annual work plan can be addressed. Stakeholders confirm that the STREITMIS is regularly used by all UN agencies as a central management tool, particularly to accelerate delivery under the Accelerated Action Plan since 2023.

Evidence shows improved tracking of output and sub-output delivery rates has emerged and that this has improved reporting on the programme's achievements, such as the significant increase in the number of cocoa seedlings planted. However, the M&E approach applied by the programme was found to have some shortcomings that have not been adequately addressed to date. First, STREITMIS does not have baselines underpinning its targets. Despite the completion of a Baseline Survey in the inception phase in 2020, none of the baseline values were found to be directly linked to EU-STREIT PNG's planned outputs at the local government/ward level in the Sepik region. As a result, important baselines linked to the programme's eight

outcome indicators were not applied in the STREITMIS to support at least mid-term and final analysis on these outcomes. Moreover, the level of traceability between output and outcome indicators was found to be low in most cases. For example, the evaluation identified important data gaps on household income, sales value, employment quality, sustained access levels to financial services and markets, and a general lack of mapping of household types around the programme-funded feeder roads.

The limited alignment between output monitoring and outcome indicators provides significant evidence to confirm the programme's ability to use M&E data as a learning tool during implementation has not been optimised. This has been exacerbated by the programme's logical framework, which despite its Specific Objectives focusing on the establishment of sustainable VCs and VC enablers requires the majority of outcome-level analysis to be conducted for the first time at the end of the programme. The evaluation considers this too late in the implementation cycle to assess the programme's contribution to economic transformation and FSN in the Sepik region, in particular which combinations of value chain and enabling interventions are most effective in contributing to economic transformation and improving FSN.

Finding 36

EU-STREIT has effectively used M&E data to support compliance-driven communications and visibility, but there is limited evidence that M&E data were used strategically to inform and influence transformational change in the Sepik region.

Evidence shows that M&E data generated through STREITMIS have been systematically used to feed the programme's Communications and Visibility Strategy, resulting in a high volume of press releases, visibility products and public events that exceeded planned targets. These communications have improved transparency, demonstrated accountability to the EU and national counterparts, and enhanced the visibility of programme activities and outputs across the cocoa, vanilla and fisheries VCs and the VC enabling actions.

However, the content and use of M&E data within communications have remained largely descriptive to inform readers about programme activities and outputs, or to support training materials. There is limited evidence that monitoring data were synthesised or analysed to communicate how programme interventions are contributing to changes in incomes, employment quality, food security and nutrition, market access or private sector investment behaviour. Nor is there much evidence that M&E-informed communications were designed to influence policy dialogue, private sector investment, or behavioural change. For example, evidence of the following types of communications were found to be highly limited in the programme, among others:

- The main drivers of change at the household level.
- Quality and sustainability of employment outcomes in the VCs and VC enabling activities
- Progress on delivering local institutional and governance change at the sub-provincial level.
- Information on the benefits of change in practices such as development of formal book-keeping records for farmer/fisher group/MSMEs, especially following the introduction of new legislation requiring such records by 2027 (reference to I1.3.1)
- Information on successful development of niche markets by some farmer groups to demonstrate opportunities for cocoa and vanilla farmers to stabilise farm gate prices (reference to JC 1.2)
- Information on the benefits and pitfalls of engaging in digital financial inclusion activities.
- Information on the cost savings and benefits of solar power at household and group levels.

16.3.1 Evidence that the M&E system had a results focus, contained baselines and targets and was updated at least on a quarterly basis

The M&E system was developed in 2021 after the completion of the baseline survey designed by all five participating UN agencies and conducted by NARI in the inception phase (2020) covering 1,394 households in total. Although it covered all the original indicators established in the logical framework of the Financing Agreement, plus indicators on FSN to track the programme's emphasis on FSN under the fisheries sub-component. However, until 2022, all monitoring of indicators relied on agency-specific monitoring using Excel spreadsheets.

In the interest of establishing a harmonised M&E system across all five UN agencies, the new M&E officer set about establishing a web-based system for M&E known as STREITMIS, which was completed and launched in mid-2022. One of the main features of the STREITMIS has been to provide stakeholder access to data on the programme's progress and results via a dashboard that provides charts, graphs and maps on the programme's interventions in the Sepik region, progress on meeting targets and general information on budget allocations.

In 2023, the PSC endorsed the application of the Targets versus Achievements monitoring tool in STREITMIS. The tool provides a comprehensive quantitative indicator framework to track targets at output and sub-output levels for each sub-component in the programme. A total of 45 output level indicators have been established for the programme's sub-components, which are updated regularly to support quarterly progress reporting. They are distributed as follows:

- Sub-component 1.1 supporting the development of the cocoa VC: 8 indicators.
- Sub-component 1.2 supporting the vanilla VC: 7 indicators.
- Sub-component 1.3 supporting the fisheries VCs: 7 indicators.
- Sub-component 2.1 supporting VC enabling policies: 4 indicators.
- Sub-component 2.2 supporting uptake of new policies and digitalisation: 6 indicators
- Sub-component 2.3 supporting renewable energy: 4 output indicators
- Sub-component 2.4 supporting rehabilitation of transport infrastructure: 5 output indicators.
- Sub-component 3.1 covering programme activities: 4 indicators.
- Sub-component 3.2 covering planning, M&E and reporting: 4 indicators.
- Sub-component 3.3 covering visibility, closure workshops and learning events: 6 indicators.

In addition, the tool tracks the 8 outcome-level and 22 output indicators established in the logical framework. Three outcome level indicators are tracked under SO1 and five under SO2 as follows:

- SO1.1: Percentage Increase in average annual sales value of cocoa/vanilla/fishery products produced by households supported by the Programme.
- SO1.2: Number of households supported in the focused VCs.
- SO1.3: Percentage increase in average annual net income of programme-supported households.
- SO2.1: Increased number of people employed by MSMEs as a consequence of the programme.
- SO2.2: Number of value chain stakeholders benefiting from improved access to VC-related finance.
- SO2.3: Number of programme households using ICT tools and services developed by the programme.
- SO2.4: Amount of renewable energy used by VC-related agripreneurs and MSMEs.
- SO2.5: Number of people/households living within 2 km of all-season rural roads rehabilitated.

An assessment of the latest STREITMIS reveals some shortcomings. First, there is a general lack of baselines. Despite the realisation of the baseline survey, the baseline material was not used, because they were not linked to the specific households and communities that the programme has targeted in the Sepik region. Consequently, many baselines figure as "0" in the STREITMIS because of the indicator definition. Second, the level of traceability between data collected at output level compared to outcome level was generally found to be low, or moderate, with only one outcome indicator traceable through the output data collected. This evidence is summarised in Table 27.

Table 27: Analysis of the level of traceability of data between outcome and outputs indicators to 30/09/2025

Outcome indicator	Achievement to 30/09/2025	Level of traceability of evidence
SO1.1 – Percentage increase in average annual sales value	Not reported (to be compiled in an end of programme survey and final evaluation).	<i>Low</i> : No interim data reported. No sales monitoring evident
SO1.2 – Number of households supported in the 3 VCs (disaggregated)	East Sepik: Cocoa = 60,949 (32% women, 40% Youth) Vanilla = 4,515 (35% women, 38% Youth) Fisheries = 6,194 (46% women, 56% Youth) Sandaun: Cocoa = 7,251 (32% women, 40% Youth) Vanilla = 1,999 (34% women, 39% Youth) Fisheries = 1,455 (9% women, 13% Youth)	<i>Low</i> : Figures cannot be directly traced to outputs in STREITMIS.
SO1.3 – Percentage increase in average annual net income of fisher households	Not reported (to be compiled in an end of programme survey and final evaluation).	<i>Low</i> : No interim data. PIMU stated purpose of fisheries VC is to increase FSN
SO2.1 – Increased number of people employed by MSMEs as a consequence of the programme	Not reported (to be compiled in an end of programme survey and final evaluation).	<i>Moderate</i> : Number of MSMEs created is traceable, but not

Outcome indicator	Achievement to 30/09/2025	Level of traceability of evidence
		number of employees, on a full-time, part-time or seasonal basis
SO2.2 – Number of VC stakeholders benefiting from improved access to VC-related financing	119,530 stakeholders	<i>Low:</i> Data on sustained financial access beyond initial uptake is not traceable.
SO2.3 – Number of programme households using ICT tools and services developed by the programme	Not reported (to be compiled in an end of programme survey and final evaluation).	<i>Moderate:</i> Figures are reported in STREITMIS but only on one-off access (not recurrent use).
SO2.4 – Amount of renewable energy used by VC-related agripreneurs and MSMEs supported by the programme	East Sepik = 781.66 kWh/Day Sandaun = 1,148.10 kWh/Day	<i>High:</i> Installation data and current daily and annual solar energy generation are traceable in STREITMIS (although split of energy use for VC and non-VC activities is missing).
SO2.5 – Number of people/households living within 2 km of all-season rural roads rehabilitated and sustainably maintained	Result will be articulated in final evaluation. 80 percent of the target population are estimated to have access to all-season roads	<i>Moderate:</i> Physical outputs on rehabilitation are traceable but no evidence that beneficiary estimates are supported by household mapping surveys.

Source: STREITMIS.

The lack of at least annual monitoring of the programme's outcome indicators through household surveys, case studies, mapping, etc. reveals the STREITMIS provides a lot of informative information on the programme's operational progress, but by limiting a lot of outcome monitoring to the programme's closure period is evidence that it is not geared to stimulating on-going learning on how far operational progress is contributing to transformational change in the Sepik region, especially at the end beneficiary and government levels. As a result, there is no concrete evidence that STREITMIS is supporting informed decision-making on key aspects of the programme that are crucial to delivering private sector-led economic transformation and enhancing FSN in PNG.

16.3.2 Stakeholders views on the level of use of M&E reports to guide planning and implementation of the programme's main activities

Stakeholder interviews provide strong evidence that the Targets versus Achievements Matrix has been used by all UN agencies as one of its main management tools since its launch in 2023 (see I6.3.1) to carry out the following tasks, among others:

- Inform the preparation of quarterly and annual progress reports.
- Set targets under their respective mandates to support the elaboration of annual work plans.
- Guide monthly work plans with a particular focus on speeding up selected activities in line with the Accelerated Action Plan also launched in 2023 (see I6.2.3) to improve delivery rates.
- Identify success stories in support of the programme's communication strategy.
- Enhance access to the programme's achievements and, at the same time, improve visibility of EU funding and One UN.

In terms of the abovementioned shortcomings of the STREITMIS, most stakeholders interviewed agreed that the STREITMIS does have a strong target-driven approach (highlighted in I6.3.1). This was justified, however, because the programme's logical framework requires this approach. Furthermore, the PSC's endorsement of the Targets versus Achievements monitoring tool in STREITMIS to support the tracking of the Accelerated Action Plan, reinforced this requirement.

As a result, stakeholders were clear on the fulfilment of their obligations to report on progress in meeting targets, but far less on the promotion of strategic learning on issues that are central to delivering on the programme's transformational objectives.

I6.3.3 Stakeholder's views on the level of use of M&E data to develop an effective communication strategy designed to inform and influence change among different audiences (political, technical, farmers/fisherfolk, the general public)

Stakeholders confirmed that M&E data have been used design and apply the Communications and Visibility Strategy, resulting in 1,812 press communications (95 percent of planned communications), 12,206 visibility items (196 percent), 23 public events (164 percent) and two learning events (67 percent). However, most of these communications have focused on informative journalism on outputs, such as the number of groups supported in the cocoa, vanilla and fisheries VCs, or on the construction/completion of rehabilitated roads, number of ICT centres established, number of new rural banking access points established, etc.

PSC minutes and annual progress reports indicate both DNPM and EU have provided feedback on visibility and messaging, which has led to adjustments in communication formats and quality. This includes the launch of human-interest stories, notably success stories which have been posted on YouTube and other social media channels. The evidence that gaps in developing an effective communication strategy remain are summarised as follows:

- Communications continue to focus heavily on describing programme activities that have been completed, rather than assessing locals' views on how the action completes is likely to improve their well-being, livelihoods, access to specified markets or public services, among others.
- A general lack of communications specifically designed to assess good practices and lessons learned relating to income generation, sales, employment quality, FSN, etc.
- Little comparative analysis across interventions to identify what aspects of the programme add most value.
- Limited evidence of communications designed to influence policy reform debates, especially on scaling investment in VCs and VC enablers in the Sepik region.
- Specific communications of interest to stimulate private sector investment based on M&E insights and data.

Evidence log summary for I6.3.1 to I6.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I6.3.1	Yes	Evidence that the M&E system had a results focus, baselines and targets and was updated	2
I6.3.2	No	Stakeholders' views on the level of use of M&E reports to guide planning and implementation	3
I6.3.3	No	Stakeholder's views on the level of use of M&E data to develop an effective communication strategy	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 7: To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?

JC7.1 The extent to which the programme's financial resources were sufficient and used in accordance with annual work plans and budgets

Finding 37

Financial reporting enabled oversight of aggregate expenditure trends in USD but did not support systematic analysis of spending efficiency in delivering outputs and sub-outputs tracked by STREITMIS at the sub-component level.

EU-STREIT PNG established robust financial reporting arrangements in line with UN accounting procedures, which enabled the PSC and the EU to monitor overall expenditure against annual plans at the aggregate programme level. Annual and quarterly progress reports provided updates on total planned and actual expenditure in USD. This met the requirements of the Contribution Agreement to provide cumulative overall expenditure on a monthly and annual basis through which the PSC could observe the low expenditure trends between 2020-2023, which prompted the adoption of the Accelerate Action Plan in August 2023. This process appears to have directly contributed to dramatically improving expenditure rates in 2024 and 2025 (to 30/09/2025).

However, financial data were not accounted for and reported in the same format as the budget presented in the annual work plans. Instead, all expenditure was controlled internally by each UN implementing partner using agency-specific budget lines, while data on outputs and sub-outputs were communicated to the PIMU to be monitored separately through STREITMIS by sub-component. As a result, there was no consistent linkage between financial inputs and the 45 output and sub-output indicators tracked by STREITMIS, nor with the outcome indicators established in the logical framework. This represents a major flaw in the Contribution Agreement, because it has precluded systematic analysis on the programme's level of efficiency in converting its resources into results. Indeed, the ET found no evidence that assessments have taken place to support the programme's governance mechanism determine how far outputs were being delivered below, at, or above planned cost, conduct value-for-money analysis and support learning to prompt proactive adaptive management according to emerging financial trends and needs.

Finding 38

Adaptive financial management was evident in a reactive manner to address immediate operational needs and accelerate implementation, rather than as a systematic, forward-looking approach to ensuring financial resources deliver good value for money.

Adaptive financial management within EU-STREIT PNG to address the overall budgeting needs of each UN agency was not required due to low expenditure rates between 2020-2023, and evidence that funding reallocations between agencies were not permitted. However, there was evidence it was applied at the operational level to respond to funding gaps and the need to refocus resources on main activities following adoption of the Accelerated Action Plan in August 2023. Indeed, this date marked a turning point for the PIMU and participating UN agencies in shifting resources to priority actions linked to the delivery of outputs tracked in the STREITMIS. Stakeholder interviews provide strong evidence that this shift contributed to the increase in expenditure recorded in 2024–2025. As a result, there is evidence that short-term financial adjustments were instrumental in speeding up the programme's implementation over the last two years.

Other examples of adaptive financial management were identified at the operational level in response to specific implementation gaps. For instance, FAO responded to the PSC's decision to expand ICT centres from 10 to 21 by assigning resources to purchase additional computer equipment to complement equipment already procured by ITU. Similarly, ITU confirmed it agreed to assign funds to support UNCDF's financial inclusion training.

However, the evaluation found no evidence that adaptive financial management was applied in a systematic or anticipatory manner at the strategic level. As a result, financial adaptation occurred mainly as a pragmatic exercise to respond to implementation shortcomings; not as a forward-looking financial management framework designed to optimise efficiency, manage risk issues, and enhance value-for-money considerations at the sub-component level.

17.1.1 Amount of funds spent annually (in Euros) to deliver outputs in relation to planned budgets for the annual work plans

Despite the integration of detailed planned expenditure by outputs under each sub-component of the programme in the annual work plans, stakeholders confirmed that annual financial reporting do not track expenditure in this manner, because it is not an explicit requirement in the Contribution Agreement. Instead,

the UN agencies control all expenditure according to UN budget lines and accounting procedures. All accounting is done in USD and remains strictly confidential, except to external auditors who are entitled to request extracts of accounting records to assess the programmes accounting procedures are complying with International Public Accounting Standards.

As a result, the PIMU provides information on total expenditure against planned expenditure in its progress reports. Table 28 shows annual planned and actual expenditure of EU funds managed under the Contribution Agreement between FAO and FAO to 30/09/2025.

Table 28: Annual planned and actual expenditure of EU funds under the Contribution Agreement to 30/09/2025 (in USD)

Date	Planned budget (USD)	Expenditure (USD)	Percentage spent
01/2020 – 12/2020	16,971,070	6,413,091	37.8%
01/2021 – 12/2021	30,980,976	11,760,029	38.0%
01/2022 – 12/2022	36,775,893	14,800,975	40.2%
01/2023 – 12/2023	31,945,942	12,589,591	39.4%
01/2024 – 12/2024	25,824,627	21,543,674	83.4%
01/2025 – 09/2025	21,311,217	9,587,519	45.0%
Total	89,470,440	76,694,879	85.7%

Source: PIMU.

Table 28 shows that significant under-expenditure was experienced during the first four years of implementation. This was partly explained by the fact that the first year was dedicated to inception activities and between 2020-2022 implementation was constrained by the Covid-19 pandemic. Nonetheless, the continuation of slow expenditure rates over the first four years indicates persistent over-estimation of annual budgeting took place between 2020-2023. Evidence of analysis on the main causes behind this underspending was not identified, but it did prompt the PSC to agree to an extension of one year under the condition that an Accelerated Action Plan was applied from August 2023 (see I6.2.3).

In terms of accumulated total expenditure to 30/09/2025, Table 28 confirms USD 76.7 million has been spent, equivalent to almost 86 percent of the programme's EU budget of USD 89,470,440 (EUR 81.3 million). According to stakeholder interviews the dramatic pick up in expenditure in 2024-2025 is attributed to several factors, including the return to normal operations in 2023 after the Covid-19 pandemic, strong commitment to implementing the Accelerated Action Plan and the maturity of several equipment procurement processes in 2024 and 2025, among others. As a result, most stakeholders are confident that the vast majority of remaining funds (USD 12.77 million) will be spent before the formal closure of the programme on 31/05/2026.

17.1.2 The level of cost-efficiency achieved to deliver outputs (measured by the programme's ability to deliver outputs below, at, or above budget)

Efforts by the evaluation team to obtain more detailed expenditure at the component level were met with significant resistance by key stakeholders. It is, consequently, not possible to assess cost-efficiency under Component 1 as planned by the evaluation team to assess how far the programme is delivering its outputs at the lowest possible cost to achieve and support learning on where its investment delivers high value for money. However, under Component 2, three UN agencies did provide figures on annual financial disbursements to suppliers and contractors to facilitate analysis on costs. Data received from ILO, UNDP and ITU on yearly expenditure on equipment and transportation infrastructure in USD to 30/09/2025 is summarised in Table 29.

Table 29: Annual expenditure on equipment and transport infrastructure to 30/09/2025 (in USD)

UN Agency	2020/2021	2022	2023	2024	2025 to 30/09/25	Balance
ILO - rehabilitated or spot improved roads	140,939	446,186	4,206,678	6,815,349	5,868,133	23,520,863
Percentage of total contracted value	0.34%	1.09%	10.26%	16.62%	14.31%	57.37%
ILO - RMG financial payments	313,113	987,520	740,712	1,047,244	552,152	0
Percentage of total overall cost	8.60%	27.12%	20.35%	28.76%	15.17%	0%

UN Agency	2020/2021	2022	2023	2024	2025 to 30/09/25	Balance
ILO/RAA - 5 Airstrip rehabilitation	-	-	-	2,660,890	1,528,910	697,007
Percentage of total overall cost	-	-	-	54.45%	31.29%	14.26%
UNDP 9 PV System purchase and delivery	-	152,092	1,082,839	471,545	94,342	0
Percentage of total overall cost	-	8.45%	60.13%	26.19%	5.24%	0%
ITU ICT equipment for 12 centres	-	-	116,618	-	99,277	0
Percentage of total overall cost	-	-	54.02 %	-	45.98%	0%

Source: ILO, ITU, UNDP.

Table 29 shows that expenditure on transport infrastructure rose significantly from 2023-2025, especially ILO's road rehabilitation actions, where over 40 percent of the total contracted value was spent in 2024–2025 alone. Similarly for UNDP photovoltaic systems, where more than 60 percent of total costs were incurred in 2023. This pattern is consistent with delayed procurement and implementation acceleration from August 2023, although the large outstanding balance for road rehabilitation and spot improvements indicates some of road rehabilitation will not be completed until 2026.

In addition, ILO, ITU and UNDP provided illustrative data on the cost structure of total expenditure (contracts) on rural infrastructure to 30/09/2025. Analysis of this data confirms that the percentage of infrastructure-related funding that directly benefits targeted end beneficiaries is low compared to the costs associated with their design, procurement, delivery, construction and commissioning. For example, design, construction and supervision of road construction contracts have consumed well over the norm of around 20 percent of the total contract cost on these actions. Similarly, for PV or ICT equipment, supply contracts show around 85 percent of the contract went on procurement, delivery, erection and commissioning of the equipment.

These data suggest that the programme has attained relatively low cost-efficiency in these sub-components. However, when considering there are significant challenges to implement transport infrastructure and capital infrastructure like solar powered ICTs in the Sepik region, it is evident that a large part of the contractual costs are eaten up by:

- Complex logistical challenges to reach the construction sites or point of delivery of equipment, especially as there are no road, rail, or direct shipping routes to Port Moresby or many other parts of PNG.
- High training costs associated with transporting beneficiaries to training sites, providing compensation for participation, provision of safety equipment, etc.
- High dependency on sourcing equipment and materials from international suppliers through international tenders due to very few national suppliers available who can provide the inputs provided at a reasonable cost.

In the light of this evidence, the evaluation considers the programme achieved moderate levels of cost efficiency in the delivery of its transport and capital infrastructure funded by the programme.

17.1.3 Evidence of adaptive financial management was applied in a timely manner to ensure budget allocations were increased/decreased to achieve results as planned

Based on stakeholder interviews and the document review, there is no evidence that adaptive financial management has been required at the strategic level to address budgeting shortfalls or emerging needs following the launch of the Accelerated Action Plan in 2023. This is partly because spending across all UN agencies was far lower than planned in the 2020-2023 period (see 17.1.1). Moreover, some stakeholders stated that EU funds had been ring-fenced across the five agencies ensuring reallocations would not be permitted, while others stated the structure of the MoUs signed by the UN agencies with their government implanting partners included clauses that left very little space to apply adaptive financial management. For example, this was evident in the MoUs signed between ILO and the Provincial Administrations and the RAA, which provided clear roles and responsibilities on the rehabilitation of the feeder roads and airstrips in East Sepik and Sandaun provinces.

Nevertheless, there were specific cases where adaptive financial management was evident at the operational level to support the achievement of results. The ET identified the following examples:

- Following the adoption of the Accelerated Action Plan in August 2024, the PIMU and participating UN agencies refocused their existing budgets on delivering priority training activities and works rather new studies, pilot initiatives and geographic expansion. Some stakeholders commented that this shift in management contributed to increased annual disbursement rates in 2024-2025 as shown in I7.1.1.
- FAO responded to DAL's need for stronger data management capacity by dedicating additional resources to develop a comprehensive AMIS plus training on its use and application before official handover in 2024. In this particular example, stakeholders stated that this development is of high strategic importance to DAL's ongoing efforts to implement its e-Agriculture Strategy 2020-2030. Similarly, it responded to calls from the PSC to increase the number of ICTs to 21 by allocating funding to support ITU equip these centres with computer equipment (see I6.2.2).
- The ITU agreed as part of its support on the development of digital rural finance services implemented by UNCDF to cover budgeting gaps relating to financial inclusion training in 2025 (see JC 6.2).

Evidence log summary for I7.1.1 to I7.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I7.1.1	No	Amount of funds spent annually (in Euros)	1
I7.1.2	No	The level of cost-efficiency achieved to deliver outputs	1
I7.1.3	No	Evidence of adaptive financial management	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC7.2 The extent to which human resources allocated and recruited (full and part-time from the UN agencies and PNG government staff) to implement the programme were adequate

Finding 39 Programme staffing levels increased progressively and reached a stable and adequate level to support delivery of the main outputs, particularly from 2022 onwards. The evidence shows that EU-STREIT PNG transitioned from a core team during the inception phase in 2020 to a fully resourced PIMU by 2023, with staffing stabilising at around 67 long-term experts on average from 2023 to 2025. This gradual expansion aligned with the shift from inception to full implementation and was appropriate given the Covid-19 constraints until 2022. Stakeholder interviews and the document review provide no indication that staffing numbers constrained implementation of the programme's seven sub-components. Furthermore, low levels of senior staff rotation in the PIMU between 2023-2025 appears to have contributed to improved implementation performance and accelerated expenditure following the adoption of the Accelerated Action Plan in August 2023. The combination of long-term national and international staff, supported by short-term experts and UN agency personnel, also appears to have been sufficient to manage the programme's geographic scope, although it was evident that the PIMU had (i) no staff posted in Maprik, which is a major market town in East Sepik, as well as a natural base to manage the programme's activities parts of in Sandaun province that cannot be accessed from Vanimo town; (ii) some skills gaps, most notably in international trade and marketing, which is crucial to the long-term development and sustainability of the cocoa and vanilla VCs.
Finding 40 While the quality of staff and technical assistance was generally high and well regarded, gaps in some specific competencies limited the programme's ability to advance higher-level transformation objectives. Across the PIMU and participating UN agencies, staff and consultants were consistently described by stakeholders as technically competent, professional and effective in delivering assigned tasks, with particularly strong performance noted in agricultural production support, digitalisation, financial inclusion and infrastructure supervision. Working relationships with provincial counterparts were reported to be constructive, supporting day-to-day implementation. However, the evaluation identified skills gaps in marketing, trade, private sector engagement and policy and regulatory development under Components 1 and 2 respectively. These gaps contributed to not fully addressing key barriers linked to market access,

commercial investment, embedding of tools and finance for initiatives such as RMG and RuTMS in the provincial administration, and advancing policy reform.

17.2.1 The level of programme staff assigned to implement the programme was adequate to implement main outputs as planned

Table 30 provides a summary of the number and type of long-term experts assigned to the PIMU between 2020 to 30/09/2025, based on stakeholder interviews and the document review. Data on short-term experts were not available at the time of writing.

Table 30: Number and type of staff employed in EU-STREIT PNG between 2020 and 30/09/2025

Org	INT/NAT	Staff position	Time	2020	2021	2022	2023	2024	2025
FAO	INT	Programme Coordinator	FT	-	1	1	1	1	1
FAO	INT	Dep Prog. Coordinator/VC & MSMEs	FT	1	1	1	1	1	1
FAO	INT	Senior Agriculture Officer	FT	1	1	1	1	1	1
FAO	INT	Fisheries Officer	FT	-	1	1	1	1	1
FAO	INT	Operations Officer	FT	1	1	1	1	1	1
FAO	INT	Admin & Finance Officer	FT	-	-	-	-	1	1
FAO	INT	Reporting & Communication Officer	FT	-	1	1	1	1	1
FAO	INT	M & E Officer	FT	-	1	1	1	1	1
FAO	INT	Procurement Officer	FT	-	-	-	1	2	2
FAO	INT	Gender and Youth Inclusion Officer	FT	1	1	1	1	1	1
FAO	INT	Value Chains/MSMEs	FT	-	-	-	1	1	-
ILO	INT	Chief Technical Advisor	FT	1	1	1	1	1	1
ILO	INT	Training Engineer	FT	1	1	1	1	1	1
ILO	INT	Civil Engineer Contracts	FT	1	1	1	1	1	1
ITU	INT	Project Officer	FT	1	1	1	1	1	1
UNCDF	INT	Financial Advisor	FT	-	1	1	1	1	1
UNCDF	INT	Finance Consultant	FT	-	-	1	1	1	1
UNCDF	INT	Country Lead & Lead Tec. Specialist	HT	1	1	1	1	1	1
TOTAL (INTERNATIONAL EXPERTS FULL/HALF TIME)				9	14	15	17	19	18
FAO	NAT	Cocoa Production Officer	FT	2	3	3	3	3	3
FAO	NAT	Cocoa Production Assistant	FT	-	-	1	1	1	-
FAO	NAT	Vanilla Production Officer	FT	1	1	1	1	1	1
FAO	NAT	Vanilla Production Assistant	FT	1	1	1	2	2	2
FAO	NAT	Coastal Fishing Operations Officer	FT	1	1	1	1	1	1
FAO	NAT	Inland Fish Farming Training Officer	FT	1	1	1	1	1	1
FAO	NAT	Riverine Fisheries Officer	FT	1	1	1	1	1	1
FAO	NAT	Aquaculture Fisheries Officer	FT	1	1	1	1	1	1
FAO	NAT	Renewable Energy/Solar Officer	FT	1	1	1	1	1	1
FAO	NAT	Senior Gender-Youth Incl. Officer	FT	2	2	2	2	2	2
FAO	NAT	IT Officer	FT	1	1	1	1	1	1
FAO	NAT	Value Chain/MSMEs Dev. Officer	FT	1	1	1	2	2	2
FAO	NAT	Reporting & Communication Officer	FT	1	1	1	1	1	1
FAO	NAT	Social Media Associate	FT	1	1	1	1	-	-
FAO	NAT	Security Officer	FT	-	1	1	1	1	1
FAO	NAT	Operations Officers	FT	1	1	1	1	1	1
FAO	NAT	M&E Officer (3)	FT	1	1	1	1	1	1
FAO	NAT	Nutrition Officer /MIS Officer	FT	-	-	-	1	1	1

Org	INT/NAT	Staff position	Time	2020	2021	2022	2023	2024	2025
FAO	NAT	Administrative Assistant	FT	1	1	1	1	1	1
FAO	NAT	Finance Assistant	FT	1	1	1	1	1	1
FAO	NAT	Procurement Assistant	FT	1	1	1	1	1	1
FAO	NAT	Office Assistant	FT	2	2	2	2	2	2
FAO	NAT	Drivers	FT	2	4	5	6	6	6
FAO	NAT	Logistics Officer	FT	-	-	-	-	1	1
FAO	NAT	Infrastructure Specialist	FT	-	-	-	-	1	1
FAO	NAT	Office Clerk	FT	1	1	1	1	1	1
ITU	NAT	Admin & Finance Officer	FT	-	-	-	1	1	
UNCDF	NAT	Finance Officer	FT	-	1	1	1	1	1
UNDP	NAT	Project Manager	FT	-	1	1	1	1	1
UNDP	NAT	Project Assistant	FT	-	-	1	1	1	
ILO	NAT	GIS Officer	FT	-	1	1	1	1	1
ILO	NAT	Finance & Admin Officer	FT	-	1	1	1	1	1
ILO	NAT	Training Officer	FT	-	1	1	1	1	
ILO	NAT	Field Engineer	FT	-	2	2	2	2	2
ILO	NAT	Facilitation Asst	FT	-	1	1	1	1	1
ILO	NAT	Finance & Admin Asst	FT	1	1	1	1	1	1
ILO	NAT	Site Engineer	FT	-	2	2	2	2	2
ILO	NAT	Monitoring and Evaluation Officer	FT	-	-	1	1	1	1
ILO	NAT	Driver	FT	1	3	3	3	3	3
TOTAL (NATIONAL EXPERTS FULL/HALF TIME)				27	43	47	52	53	49
FAO	INT	Fishery Consultant	STC	-	-	-	1	-	-
FAO	INT	Knowledge Product Development Specialist Cocoa/Vanilla	STC	-	-	-	-	-	1
FAO	INT	Knowledge Product Development Specialist Fisheries	STC	-	-	-	-	-	1
UNCDF	INT	Knowledge Product Development Specialist Financial Inclusion	STC	-	-	-	-	-	2
ILO	INT	Knowledge Product Development Specialist Transport Infrastructure	STC	-	-	-	-	-	1
FAO	INT	GI Consultant	STC	-	-	1	1	1	1
FAO	INT	M&E Specialist/Economist	STC	-	-	-	1	-	-
TOTAL (SHORT TERM CONSULTANTS)				-	-	1	3	1	6

Source: PIMU, 2026.

INT: International; NAT: National; FT: Full time; HT: Half time; STC: Short-term consultant.

Staffing data collected from the PIMU shows that a core team of 36 staff (9 international and 27 national) was assigned to steer the programme through its inception phase in 2020. There is no evidence that staffing numbers were inadequate in this phase, especially as the Covid-19 pandemic restricted the movements and meeting of personnel. Between 2021-2024 staff numbers grew year-on-year from 57 to 72 people (14 to 19 international staff) to support the implementation phase of the programme. In 2025 staff numbers totalled 67 people, marking a slight drop as some outputs were completed. There is no evidence that staffing numbers have limited the programme's capacity to manage the implementation of the seven main sub-components in this period. For example, from 2022-2025 staffing levels have largely remained stable averaging 67 long-term staff each year, supported by short-term consultants (10 in total) indicating the programme was able to sustain a high level of human resources to support delivery of its main outputs, especially since the launch of the Accelerated Action Plan in August 2023. This development also correlates with improvements in implementation performance and accelerated expenditure from 2024-2025 reported above (see I7.1.1).

According to stakeholders the long-term staffing needs of the programme have been aided by the recruitment of a large permanent team of national experts. Nevertheless, it is evident from analysis of Table 30 and field

observations that the PIMU has a strong team to promote production and capacity building but lacked staff in two key areas:

- The programme has not established any long-term staff at the district level, especially in Maprik town. This is despite the fact a large number of end beneficiaries stated the importance of Maprik market to sell their vanilla and smoked fish, as well as a centre to source building materials, household needs and public services. In addition, the ET observed Maprik is a strategic centre for accessing beneficiaries in Sandaun province that cannot be reached by car from Vanimo. For example, farmer groups based in Lumi District can only be reached by car from Maprik.
- The programme has not had a specialist in trade policy and international marketing to guide the strategic development of the VCs as previously highlighted (see JC 1.1.).

Overall, the evidence gathered shows that a large team of long-term staff have been needed to operate in the Sepik region, in particular a large team of international long-term experts from FAO (up to 12 consultants), ILO (3 consultants), ITU (one consultant), UNCDF (up to 3 consultants), while UNDP relied exclusively on national consultants in PNG. As a result, all five agencies have consultants who have had long exposure of working in the programme, which has facilitated relations with national and provincial stakeholders. This has been further aided by the use of short-term international consultants to carry out technical studies (feasibility, socio-economic, civil engineering, master planning, RuTIMS development, etc.).

17.2.2 Evidence that the quality of the staff assigned to implement the programme matched the needs of counterpart institutions and targeted beneficiaries to deliver planned results

The ET found the vast majority of the staff recruited to work in the PIMU met the quality requirements of their terms of reference, including appropriate educational background, extensive work experience in agriculture, fisheries, digitalisation, financial inclusion, solar power, rural infrastructure, M&E, gender equality, communications, etc. In addition, all international staff demonstrated a good command of the English language (comprehension, spoken and written), Notwithstanding, none of the international staff interviewed had previous work experience in PNG.

Overall, the staff assigned to implement EU-STREIT PNG broadly matched the technical and institutional needs of their respective counterpart government institutions and targeted beneficiary groups. There is no evidence to indicate that PIMU staff were reported to be technically proficient. It was decided, nonetheless, by the PSC in early 2022 that the Programme Coordinator should be changed due to slower than expected implementation rates. Stakeholder interviews confirm that the new Programme Coordinator endorsed by the PSC in May 2022 has been instrumental in accelerating the programme's implementation and management between 2023-2025. In addition, this has been aided by very low levels of staff rotation of international staff. For example, all of the senior international staff interviewed confirmed that they had been working in the programme since 2022, or earlier.

However, the evaluation identified a notable skills gap under Component 1, concerning marketing, trade and private sector engagement to develop sustainable VCs. This situation has limited the programme's ability to systematically address market access, buyer relationships and attracting commercial investment in the Sepik's region. Although this gap did not affect output delivery, it constrained the programme's capacity to fully respond to private sector needs and to advance higher-level value chain transformation objectives foreseen at the outcome level. Similarly, under Component 2, relatively little policy and regulatory works have been developed by the programme compared to the workplan and the logical framework. This signals that the choice of the international experts assigned to the programme may have underestimated the growing need for policy and regulatory competence.

17.2.3 The number of stakeholders interviewed who consider the quality of the technical assistance/consultants recruited was satisfactory and were able to complete their tasks in a timely manner

Stakeholder interviews identified no concrete evidence to indicate that there are major quality issues with the technical assistance provided by the programme to date. In fact, all the stakeholders interviewed (government official, contractors, suppliers and end-beneficiaries) during the field mission, praised the technical competence and professionalism of the people assigned to the programme by the three agencies concerned. For example, contractors engaged in works contracts praised the diligence, strength and impartiality of the construction supervisors employed by ILO even on invoicing and payments to fulfil contractual requirements and bills of quantities.

However, due to limited embedding of technical competence in the provincial administrative framework of the two provinces, has resulted in some shortcomings. These include the application of the RMG payment mechanism and RuTIMS in the provincial development plan and budget, and the registration of PV systems by NEA, among others.

Evidence log summary for I7.2.1 to I7.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I7.2.1	Yes	Level of programme staff assigned to implement the programme	2
I7.2.2	No	Evidence that the quality of the staff assigned to implement the programme matched the needs of counterpart institutions and targeted beneficiaries	2
I7.2.3	No	Number of stakeholders interviewed who consider the quality of the technical assistance/consultants recruited was satisfactory	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC7.3 The extent to which procurement of technical assistance, equipment and materials was conducted in a timely and efficient manner

Finding 41

The application of multiple UN agency procurement procedures, combined with insufficient training of PIMU staff on proactive procurement planning, limited the programme's ability to anticipate and mitigate delays arising from both lengthy procurement processes and extended lead times between contract signature and mobilisation or commissioning. This affected the programme's capacity to deliver a significant number of results on time and, in some cases, to satisfactory quality standards.

All agencies (except UNCDF, which did not procure goods or services but only relied on grant agreements with FSPs) apply their own procurement procedures largely independently of each other. While this is compliant with the Contribution Agreement, which states each organisation shall apply its own rules, it limits the effective application of the One UN approach, particularly by constraining coordinated procurement planning, harmonisation of quality standards, and opportunities for achieving economies of scale. For example, UNDP's selection of the Africa-based company, Aptechafrica, largely overlooked the following:

- The international supplier had to rely on local fitters to install and commission its equipment.
- Communication between the recipients of the equipment and the supplier was complex and often resulted in delays.
- The shipping of heavy equipment from Europe/Africa followed by the need to transport, test and commission this equipment caused delays.
- The operation and maintenance of the equipment require sourcing of spare parts that cannot be sourced in the country.

An exception appears to be ILO who developed the RMGs and the RuTIMS tool relatively early in 2021 to aid the scoping of roads to be rehabilitated and the civil works to be incorporated in the tendering documents. In addition, the RuTIMS tool allowed ILO to put in place a digital monitoring and supervision tool to track the progress of the rehabilitation contracts once implemented.

Overall, it was evident that most stakeholders interviewed found: (i) the time to conclude the tendering process was generally very long, averaging around 90–120 days; (ii) the lead time needed to mobilise contractors, to deliver equipment, and carry out testing and commissioning was as long, or longer, than the tender process itself. These developments were compounded by the fact the One UN approach does not include carrying out harmonised procurement processes that take advantage of the economies of scale to enhance efficiency.

Significant delays ranging from 6 to 12 months were observed, although this was longer in some road's contracts, with one contract reported to have experienced delays of almost 36 months due to the need to change contractor. This has affected implementation of both main components of the programme. These delays are most evident in infrastructure-related activities, especially the road rehabilitation sub-component, where there are examples of road contracts taking up to three years to complete. In several cases this had not been aided by contract cancellations and re-tendering due to poor performance, or unforeseen land conflicts and sabotage of heavy equipment by some communities earmarked for support. This was followed by the installation of the ICTs and renewable energy installations, where slow implementation was hindered by slow tendering of equipment for each ICT host (schools, or health centre) and slow mobilisation, testing and commissioning of this equipment in each school/health centre. As a result, a large number of ICT centres were still in the final process of completion during the field visits conducted by the ET in November 2025, signifying a large number of outputs (15) have still not reached their planned targets despite only six months of the programme's implementation.

Under Component 1 of the programme, delays in the delivery of outputs were generally shorter, ranging from 6-9 months, but also attracted more criticism. In particular, all three cocoa processing facilities stated that they had experienced delays caused by the delivery of incorrect, or incomplete delivery of equipment, which has set back the processing of cocoa (to be supplied by selected farmer groups supported by the programme) to 2026. Indeed, one processor has estimated it is unlikely it will process cocoa until the second half of 2026.

Finding 42

Inadequate levels of quality controls in the procurement process affected efficiency and undermined value for money.

Apart from the abovementioned delays in implementation, the evaluation identified several cases where shortcomings in procurement quality assurance affected the uptake of equipment delivered. In particular a number of end-beneficiaries informed the evaluation about the receipt of equipment that was unsuitable, incomplete or lacking the enabling conditions to operate properly. This was particularly evident following visits to two cocoa processors in Wewak and Vanimo who confirmed the receipt of obsolete processing equipment and the lack of power or internet connectivity respectively. Coastal fisher communities also voiced concerns that they could not operate the cold chain equipment received, because the solar PV systems were unreliable and prone to corrosion.

Although stakeholders generally accepted time delays as commonplace in PNG, this was not matched when quality issues hindered investment and income generation. Moreover, the delivery of defective equipment has raised concerns for the ET and beneficiaries alike that some aspects of the programme's legacy may be more associated with e-waste than sustainable VCs and enablers. This indicates that procurement challenges have affected not only results delivery but also the enabling environment needed to attract private sector-led growth.

17.3.1 Average length of time taken to fulfil procurement rules and procedures before staff, equipment, materials or other services were mobilised

Triangulated evidence from the document and stakeholder interviews confirm long procurement processes have been a major contributor of slow implementation rates in the period 2020-2023, which was not aided by the Covid-19 pandemic. In particular the ET gathered the following triangulated evidence:

- In line with the provisions of the Contribution Agreement (Article 1.3) allowing independent procurement by each UN agency, the application of five sets of procurement processes managed by each UN agency was repeatedly cited by stakeholders as a major constraint on implementation and slow disbursement of funds (see also 17.1.1). According to stakeholders directly involved in overseeing procurement, a major impediment has been the lack of adequate experience in international tendering according to UN rules and procedures, which requires proactive planning well in advance to compensate for: (i) the UN procurement process to fulfil mandatory clearance steps that typically span a period of 90-120 days before contracts can be signed; (ii) lead times for contract mobilisation, testing and commissioning of equipment, which can take well over an additional 120 days to fulfil depending on the equipment and contract. For example, the procurement of solar PV systems for public facilities took longer to complete than planned, because the commissioning of the equipment at the nine public facilities took place in several batches to comply with the agreements signed with each school/health centre concerned.
- In the specific case of ITU tenders, its lack of accreditation in PNG forced it to procure equipment through UNDP's clearing systems (see also 16.2.3). Stakeholders reported that this increased the procurement process of computing equipment and networking components by as much as six months.
- The lack of local suppliers in PNG forced the application of longer, more complex international tenders that are not well suited to programmes like EU-STREIT that were originally planned with as a four-year duration. Moreover, stakeholders confirmed that sea freight must first be cleared at the country's industrial hub in Lei city. As a result, following clearing it took an additional 8-14 days to ship the freight from Lei to Wewak or Vanimo port and then further shipment by land to the intervention site.
- The hiring of road rehabilitation contractors experienced significant delays. Not only the awarding of contracts was slow to advance, but the mobilisation and rehabilitation experienced many delays and challenges. Indeed, stakeholders reported several contracts had to be cancelled due to poor performance, or no works, because contractors disappeared without explanation. In a few cases contracts had to be cancelled after heavy equipment was damaged. In this particular case, the programme also had to take into account local land conflict issues. For example, abandoned heavy

machinery was seen abandoned during a road inspection in Vanimo Green. As a result, many road rehabilitation contracts have taken on average two years to complete, with the remainder taking 3 years to complete due to cancellation of contracts and retendering to recruit more competent contractors.

In summary, the procurement process through the UN system was found to be long and bureaucratic, in which the main principle applied is to deliver value for money. As a result, inadequate attention was given to criteria such as fitness for purpose, durability, or availability of spare parts, all of which are highly relevant in the Sepik region. In addition, mobilisation and commissioning of large equipment, was equally slow due the logistical and cultural complexities in this part of PNG.

17.3.2 Number of planned outputs and outcomes delivered on time compared to delayed outputs (over 3 months or more)

An analysis of the Targets versus Achievements monitoring tool in the STREITMIS confirms a total of 26 outputs have achieved or exceed their targets by 30/09/2025 under the programme's two main components, compared to 15 outputs that have not to 30/09/2025, This is broken down as follows by sub-components 1.1 to 2.4:

- Sub-component 1.1 (cocoa VC): four of the eight outputs achieved or exceeded their original end-of-programme targets to 30/09/2025.
- Sub-component 1.2 (vanilla VC): four of the seven outputs achieved or exceeded their original
- Sub-component 1.3 (fisheries VC): four of the seven outputs achieved or exceeded their original end-of-programme targets to 30/09/2025.
- Sub-component 2.1 (VC enabling policy reform): three of the four outputs had been achieved by 30/09/2025.
- Sub-component 2.2 (digitalisation and financial inclusion support services): four of the six outputs achieved or exceeded their original end-of-programme targets to 30/09/2025.
- Sub-component 2.3 (renewable energy): all four outputs achieved or exceeded their original end-of-programme targets to 30/09/2025, which includes output 2.3.3 (KWh/day) which exceeded its target by over 800 percent.
- Sub-component 2.4 (transport infrastructure): three of the five outputs achieved or exceeded their original end-of-programme targets to 30/09/2025.

In the specific case of Sub-component 2.4, current payment status of the road rehabilitation contracts amounts to 42.6 percent of the works, because six roads were still uncompleted at 30/09/2025. Based on the latest completion rate received from the ILO in November 2025, around 21.7 percent of the works (valued at around PGK 8,9 million) still have to be completed. The ILO team confirmed that all six roads are expected to be completed by 31/03/2026 at the latest.

17.3.3 Views of stakeholders on the length of delays in procurement and its impact on achieving planned activities and outputs

Despite the delays in the delivery of a large number of outputs (36 percent) to 30/09/2025, interviews with the majority of stakeholders and end beneficiaries did not have major complaints, explaining delays are commonplace in PNG and, therefore, an accepted part of life, which is not aided by their remoteness, tribal conflicts and lack of access to basic services. For example, no stakeholder and end-beneficiary interviewed during the field mission covering the rural infrastructure component stated the impact of delays had caused distress or negative impact, although beneficiaries along the two roads that are still under rehabilitation (Onip Rawo-Leitre road and the Passi-Krissa road in Vanimo green District, and the Yimum -Wilbowe road in Nuku district) stated the delays in completing the bridges required them to still use more expensive boat transport when it was not passable during the wet season and for this reason hoped the works can be completed before the rains arrive (January-March).

In a few specific cases the ET detected major concerns with the procurement process applied by the programme. These are summarised as follows:

- Cocoa processor A, investing in a new processing plant in Wewak, received obsolete processing equipment funded by the programme. As a result, the company stated that the equipment would need to have adapters sent by the Chinese supplier, fitted and then tested before commissioning of the equipment could proceed. As a result, the company estimated processing is unlikely to start until March or April 2026.

- Cocoa processor B, investing in new processing equipment in Vanimo, stated that he could not provide a demonstration of the new processing equipment funded by the programme, because the area suffers from a reliable electricity supply from PNG power.
- Cocoa processor C stated 90 percent of equipment had been procured, but due to delays in the delivery of one piece of equipment (cocoa butter press) all works to upgrade the factory had been put on hold. Assuming the equipment arrives by the end of 2025 and there are no technical problems, the company estimates that the new factory will be up and running in the second half of 2026.
- School principals interviewed who had agreed to the installation of an ICT centre stated a high level of satisfaction with the installation of the ICT centre but expressed concern that some computer equipment was missing and that they lacked an internet connection by DICT. This has prevented them from online upgrading of Windows 11 and, therefore, online use of the computers. According to ITU the connection by DICT is expected by February 2026.
- Vanilla growers confirmed the delay in receiving solar driers had constrained opportunities to dry their vanilla under safer, quicker and more reliable conditions. As a result, they stated they were not able to dry their vanilla to grade A levels.
- Coastal fishing groups stated the procurement of solar panels to run the freezers provided by the programme did not meet adequate quality controls, including the inability to generate solar energy in cloudy weather to run their freezers and the supply of equipment without anti-corrosive connectors. As a result, the evaluation witnessed equipment that was of no real benefit to the fisher groups and was not in use during the inspections carried out.

In summary, the evidence gathered points to a lack of adequate quality controls were in place in the procurement process resulting in the purchase of equipment from international suppliers that did not meet the needs of the end users and for this reason is likely to result in the generation of significant e-waste from 2026 onwards.

Evidence log summary for I7.3.1 to I7.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I7.3.1	No	Average length of time taken to fulfil procurement rules and procedures	2
I7.3.2	Yes	Number of planned outputs and outcomes delivered on time compared to delayed outputs	3
I7.3.3	No	Views of stakeholders on the length of delays in procurement and its impact	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 8: What are the financial, institutional, social, and environmental risks to sustaining programme results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the programme's achievements?

JC8.1 The extent to which the institutional and governance mechanisms are in place to operate, maintain and scale up the VCs in East Sepik and Sandaun provinces

Finding 43

EU-STREIT PNG has not yet concluded handover agreements as planned in its exit strategy signifying a slower than planned transfer of assets, equipment and responsibilities in the extension phase to 31/05/2026. The continuation of implementation means the institutional and governance mechanisms required to maintain and scale up the VCs and their enablers in the post-closure phase are not yet evident.

EU-STREIT PNG had not completed a set of handover agreements with national and provincial counterpart institutions and end-beneficiary groups at the time of the evaluation mission. Consequently, there is a lack of clarity on how the transfer of assets, equipment, tools, methodologies, digital systems and infrastructure will be phased in the short time remaining before programme closure on 31/05/2026. Moreover, the MoUs and Letters of Agreement signed with mandated institutions (DAL, CB, NFA, DICT, DoWH, RAA and NEA), do not provide information on their institutional responsibility in the post-programme period to ensure main activities and results are sustained.

The exit strategy approved in 2024 outlined the calendar month and year when the handovers should take place between December 2024 and May 2025. The strategy mainly focuses on procedural transfer arrangements. Despite the agreement of the extension of the programme to 31/05/2026, the exit strategy has not been updated. Instead, the programme continues implementation as business-as-usual aiming to deliver on its targets by May 2026. As a result, there is a lack of clarity on:

- Revised timelines for handover by 31/05/2026
- The supervisory arrangements to be applied during the extension
- The governance mechanisms to be established to oversee operation, maintenance and scaling up of best practices.

The programme's exit strategy has, therefore, important gaps, most notable absence of formal post-programme provincial sustainability action plan for the VCs and VC enablers in East Sepik and Sandaun provinces supported by approved financing frameworks and staffing allocations to implement the action plan.

The evidence points to a large number of handovers will take place at the last minute, replicating a similar scenario foreseen in May 2025. As a result, financial and institutional risks are considered by the evaluation to be substantial, especially as the exit strategy only foresees human resource costs of the PIMU will be absorbed in the provincial administration's development plans. Funding covering vital investment to sustain and upscale VCs and enablers has not been determined, nor the governance arrangements for shared assets like nurseries, post-harvest facilities, cold chain infrastructure and ICT centres. Moreover, at national and provincial levels, it was evident that counterpart institutions like DAL and CB did not have approved work plans and budgets in place to continue service delivery, operate the e-Agriculture strategy, or the funding needs in place to cover routine technical services currently managed by the TWG sector groups to develop the VCs.

Similarly, handover of the ICT resource centres, solar PV installations and completed transport infrastructure are not yet supported by binding institutional commitments to ensure operational and maintenance readiness is in place. Consequently, institutional mandates have not adequately addressed the institutional and governance mechanisms required to maintain and scale up the VCs and their enablers in the post-closure phase.

Finding 44

There is limited evidence that counterpart institutions at the provincial level have established the operational systems, coordination mechanisms and internal monitoring capacity required to track performance and increase accountability in the post-programme period.

Despite the embedding of the programme at provincial level, there is limited evidence that staff have developed the data-driven capacity required to take informed decisions on:

- The consolidation and scaling of the VCs and their enablers

- The implementation of policies and plans at the provincial level that fully deliver the outcomes foreseen in the ToC of EU-STREIT PNG
- Establishing effective coordination with district and sub-district authorities to deliver change at the local level
- The performance frameworks needed to deliver effective and sustained service delivery as foreseen in the handover agreement.

This includes clarifying service-delivery targets, operational procedures and accountability arrangements to be applied in the post-programme period, which are largely absent in the handover agreement.

Evidence indicates that some key services are not yet ready to take on the roles expected of them. For example:

- Extension services lack logistical support, equipment and support services.
- MIS platforms (including AMIS and LMS) lack specialists in areas such as security protocol compliance and face budget constraints.
- ICT centres lack internet connectivity and viable operating models.
- Road and airstrip maintenance systems are not yet fully identified and integrated into routine provincial and national work programmes for road and airstrip maintenance.

In addition, coordination gaps between national, provincial and district actors are evident. For example, they retain unclear roles and responsibilities in areas like data collection, validation and use in the e-Agriculture strategy (especially on MIS implementation). Weak integration between planning tools and budget processes also appears to limit the scaling of the VCs.

Finding 45

On the supply side of financial inclusion, two FSPs are likely to sustain their services in the programme area after closure, although it is uncertain whether they will expand deeper into rural areas without viability gap funding addressing thin margins (especially in the agent-based model). On the demand side, the lack of effective incentives to encourage behaviour change continue to constrain the scaling of digital financial services in the value chains.

The continuity and further scaling of financial inclusion operations in the programme area are dependent on the decisions of the three FSPs. EU-STREIT PNG has helped the FSPs to explore the sustainability of different operational modalities and strategies. In contrast, provincial and district government only play a minor role in financial inclusion, and the EU-STREIT PNG-supported actions of CEFI and CGC focus on the national policy level.

One or two of the three FSPs are likely to sustain and possibly expand their networks of bank access points. Each of the three FSPs has pursued a different approach to rolling out its network of access points in the Sepik region. The FSP with the highest average cost of setting up and running an access point – MamaBank's community-based, staff-run branches – has created the most sustainable network (albeit with the lowest number) of access points, and vice versa. While the operations of two FSPs might continue at least at the scale achieved at programme closure, it is uncertain whether they can expand to more remote areas (which would further reduce average travel distances for their clients). The high agent turnover in deep rural areas faced by FSPs is a global industry challenge caused by thin margins. Without viability gap funding ("smart subsidies") or higher transaction volumes, there is some risk that the FSPs partnering with EU-STREIT PNG end up consolidating their access points in central locations, similar to commercial banks.

Through new bank access points and the promotion of mobile money platforms, the programme has laid the foundation for digitisation of financial transactions in the VC. In practice, however, this process is likely to be slow as preferences for cash have been persistent especially among farmers. The capacity of FSPs to leverage additional demand for digital financial services among farmers and in the general population without external support is limited.

18.1.1 Evidence that the counterpart government agencies at the national and subnational levels have taken steps to guarantee the continuity of support services and address economic, environmental and social factors that are affecting the sustainability of the VCs

The PIMU prepared an exit strategy in 2024, outlining the main activities to be carried out before the programme's closure foreseen on 31/05/2025. The evidence collected from the field in relation to the following key elements in the strategy is summarised as follows:

Table 31: Progress in implementation of the EU-STREIT PNG's exit strategy

Exit plan for sub-component (Date and action)	Progress on implementing the exit plan	Estimated advance (%)
Subcomponents 1.1 and 1.2 (cocoa and vanilla VCs)		
By end of May 2025: handover all extension services linked to capacity building, training, promotion of MSMEs to the Provincial DAL divisions, the CB, the SIB and academia through Letters of Agreement.	The handover process had not been completed by November 2025, nor specific environmental and social safeguards are explicit in the LoAs.	75%
By end of December 2024, progressive transfer of all cocoa and vanilla production promoted by the programme (nurseries, budwood gardens, vanilla gardens, etc.) to DAL, CB and SIB and the farmer groups.	The handover process to farmer groups has not started as many farmers' groups were still receiving support on the production of cocoa seedlings to reach the target of 4 million units. Handover of extension services to CB has not been formalised, but fundraising exercises to fund the CB's cocoa services in East Sepik are evident. There is no evidence that handover of training and extension services to SIB has started, because the SIB has been inactive until November 2025. Integration of specific environmental and social safeguards still need to be developed with SIB. There is limited evidence the majority of cocoa and vanilla groups have the book-keeping skills to operate as official MSMEs recognised by the IPA.	75%
By end of May 2025 all post-harvest infrastructure and market systems (fermentaries, solar dryers, GI process, etc.) to be handed over to MSMEs and CB/SIB.	The handover process of post-harvesting equipment to MSMEs to dry/cure cocoa/vanilla has been delayed, because not all equipment procured had arrived, or been distributed at the time of the evaluation mission.	65%
Subcomponent 1.3 (fisheries VC)		
By December 2024 training systems and institutional capacity transferred to Provincial Fisheries and Marine Resources Divisions and academia.	The training and capacity building has not been transferred to provincial authorities because a lot of fishing gear had not been delivered at the time of the evaluation mission. Evidence that provincial staff have the capacity and resources to cover complex logistical challenges to reach remote coastal, riverine and aquaculture groups is limited.	75%
Between May 2024 and May 2025 all assets funded by the programme (hatcheries, nurseries, fishing gear, feed systems, post-harvest cold chain infrastructure and equipment, etc.) handed over to MSMEs and fishing groups.	The official handover of fishing gear is still in progress and there is limited evidence the fisher groups have the book-keeping skills to operate as official MSMEs.	70%
By May 2025 all support to fish markets and market linkages rehabilitated and transferred to provincial authorities and private operators.	Handover process is on-going because cold-storage equipment such as reefers had only recently arrived in November 2025 and had not been fully tested and commissioned.	65%
Subcomponent 2.1 (e-Agriculture Strategy)		
By end of December 2024 the e-Agriculture strategy for East Sepik and Sandaun is transferred to DAL for implementation under the supervision of ITU. The e-Agriculture Strategy has been approved and the MIS (AMIS, CB-MIS, LMS, Provincial MIS for East Sepik and Sandaun, AMAMAS,) handed over to DAL, the Cocoa Board, the University of Technology (UniTech) in Lei, Provincial Administrations and DAL respectively in December 2024.	All MIS have been designed and handed over by ITU. However, NICTA subsequently blocked the use of all MIS because their security protocols did not comply with new legislation. The evaluation observed that only the AMIS had these protocols officially in place in November 2025. Resources to cover population of data in all MIS remains unresolved by DAL.	75%

Exit plan for sub-component (Date and action)	Progress on implementing the exit plan	Estimated advance (%)
The application of LMS to provide remote training through the ICTs as planned in 2025 has not started due to the abovementioned lack of compliance with NICTA's latest standards.	LMS still awaiting updated safety protocols to start online training with farmers through the ICTs	60%
Subcomponent 2.2 (Digitalisation, ICT Resource Centres)		
By December 2024 all the ICT Resource Centres are equipped, staff trained, and formally handed over to the Provincial Administrations to start applying their sustainability business plans.	Stakeholders confirmed that the handover of the ICTs has taken place where they are fully equipped and have been tested. However, the majority were still awaiting the delivery of equipment, missing parts, and testing. Moreover, none had internet connections, which are foreseen to be installed after handover in the first quarter of 2026 under the supervision of DICT. Interviews confirm that the banking infrastructure and digitalisation have been completed, although not all access points are functioning.	50%
By March 2024 digitalisation of payment flows and basic banking infrastructure are completed.	UNCDF staff engaged in this sub-component finished their contracts in the first half of 2025. Financial access points have been established, offline and mobile money accounts have been opened, and related financial products and services have been made available by the three FSPs. However, payments in the VCs have not been digitalised yet at large scale due to persistent preferences for cash and low financial and digital literacy notably among farmers, which has made it difficult for the programme to achieve a critical mass of active mobile money users (see I3.2.3).	60%
By end of December 2024 the financial inclusion policy, dashboard and pilot assessments have been finalised.	The policy and the dashboard have been developed and handed over to CEFI. The dashboard has been populated with data and piloted but not yet fully employed in practice to monitor the policy.	80%
By end of March 2025, commercial sustainability of access points and agri-finance products expected.	In total, the sustainability of many of the access points (of one FSP in particular) remains precarious while financial transaction rates remain low, although this varies across FSPs. Two of the three FSPs are well positioned to sustain (and potentially scale up) their network of access points without external funding. However, there is little evidence of concrete investment plans to expand financial access points deeper into rural areas (see I8.1.3, I3.2.0a).	75%
Subcomponent 2.3 (Solar PV systems)		
By December 2024, the solar PV systems have been installed on government buildings, ICT Resource Centres, processing facilities, and rural service points and formally handed over to respective government entities and community groups	All major solar PV systems had been installed and handed over, but many households were still awaiting the delivery of solar kits generating on average 0.5 kWh.	80%
By May 2025 all operation and maintenance arrangements have been specified in the handover agreements.	There is evidence that O&M manuals, spare parts inventories, and trained local technicians are specified, but resources needed to apply and maintain them was not fully evident.	50%
Sub-component 2.4 (transport infrastructure)		
Between June 2024 and May 2025, all training curricula and capacity development are embedded in PNG-UniTech and TVET systems.	Full integration of the LMS curricula and capacity development is still ongoing within UniTech.	80%

Exit plan for sub-component (Date and action)	Progress on implementing the exit plan	Estimated advance (%)
By December 2024 routine road maintenance systems engaging RMGs have been adopted by DoWH and subnational governments, supported by 5-year Road Transport Master Plans (RTMP)	Despite development of the format for the 5-year RTMPs and some pilot testing, the RTMPs have not yet been fully adopted by the DoWH.	80%
Between January and May 2025, RoIMS, standards, and manuals upgraded and are handed over.	RoIMS standards and manuals have been produced and handed over to DoWH, which includes environmental safeguards, but official nationwide adoption and application of these standards is not evident.	60%
By May 2024 airstrip rehabilitation and maintenance is mainstreamed under RAA.	Rehabilitation of all five airstrips has been completed, and a maintenance plan is in place although this does include an environmental and social management plan. Establishment of local maintenance groups and handover agreements with RAA are not evident.	90%
Overall estimated progress		70%

Source: Field and documentary evidence collected by the Evaluation Team in November 2025.

Overall the evidence shows that the programme's exit strategy is based heavily on concluding transactional handover agreements with limited attention to post-closure operational sustainability. The exit strategy does not, therefore, amount to a strategy ensure main activities/outputs achieve longer-term outcomes as foreseen in the Theory of Change produced by the evaluation (see Annex C), which are crucial to delivering the programme's long-term impact (general objectives) in the post-programme period. This indicates that the exit strategy has shortcomings, the most significant being, among others:

- The strategy was not updated after the extension period of one year was agreed to 31/05/2026 to provide clarity on the programme's role in supervising the handover process in 2025-2026. As a result, there is no clarity yet on the future application of the mandates of DAL, CB, SIB, NICTA/DICT and MoWH are expected to play in continuing the promotion of private sector led development for the VCs, or on the maintenance and expansion of VC enablers.
- The handover of assets to the farmer and fisher groups remains unclear as to who will oversee their correct use and maintenance (especially the cold chains) or the governance arrangements to be applied to manage shared assets and how they will be supervised by the CB, SIB and NFA. For example, the financial sustainability of the cold chains (including O&M) for the fisheries groups is unclear.
- There is no clarity yet on the service-delivery targets to be monitored after handover, especially by the provincial administrations and DAL. For example, it is not clear how DAL will implement the AMIS in coordination with the MIS for the provincial administrations. Similarly, it is unclear which cocoa groups will supply quality cocoa in the quantities required by the three processors engaged in the programme. In the case of vanilla, there is no marketing strategy in place. There is no action plan specified for the RuTIMS tool to be finetuned so that it is adapted to: (i) the administrative processes and procedures applied by DWITS for rural road maintenance contracting; (ii) engage the RMG groups post programme.

18.1.2 Evidence that the local mechanisms are in place and minimum staff and logistic capacity can be sustained to support the development of the VCs post programme closure

Interviews with staff from the provincial administrations of East Sepik and Sandaun provinces indicate that the signing of MoUs between the UN agencies and the provincial administrations of East Sepik and Sandaun has enabled the programme to embed the planning and implementation of outputs under Component 1 as follows:

- Development of agricultural aspects of cocoa and vanilla VCs in DAL's provincial offices
- Development of cocoa VC in CB's provincial office for East Sepik
- Fisheries development in NFA's provincial offices.

Mechanisms exist, therefore, at the provincial level to ensure trained staff can take over the programme's administrative duties in their respective areas of responsibility. On logistical capacity, stakeholder interviews confirm the programme's vehicles will be transferred to the provincial administrations to support their staff get into the field, with the main focus being to support future operations of provincial officers linked to DAL, CB and NFA.

However, the evaluation found no evidence of that the provincial authorities will provide funding and human resource guarantees on how they will support a dedicated team to operate, maintain and upscale the VCs. For example, there is no evidence that the agriculture and fisheries extension services have a funding strategy and action plan integrated in the policy framework of each province.

The evaluation also identified gaps at the national and district levels that are likely to affect the uptake of new methodologies and tools promoted by the programme. The most significant are:

- The lack of formal agreements with the SIB due to the internal problems of the institution until November 2025
- The lack of evidence on how DAL will fund the application of the E-Strategy it has adopted
- How the NFA intends to roll out EU-STREIT PNG's value chain study methodology for the fisheries sector
- At the district level, the evaluation found capacity levels and availability of financial resources are very limited, indicating insufficient capacity exists at this level of government to support the consolidation, sustainability and upscaling of the VCs.

18.1.3 Number of counterpart institutions that have agreed with the programme the work plan and budget to continue the operation and maintenance of the VC enabler outputs delivered/in the process of finalisation

Interviews with staff from the provincial administrations of East Sepik and Sandaun provinces indicate that the signing of MoUs between the UN agencies and the provincial administrations of East Sepik and Sandaun has enabled the programme to embed the planning and implementation of all its sub-components under Component 2 to deliver outputs linked to the following national institutions:

- Digital finance: Department of Finance
- Digitalisation: DICT
- Renewable energy: NEA
- Road transport infrastructure: DoWH
- Airstrip rehabilitation: RAA.

Mechanisms exist, therefore, at the provincial level to ensure trained staff can take over the programme's administrative duties in their respective areas of responsibility. On logistical capacity, stakeholder interviews confirm the programme's vehicles will be transferred to the provincial administrations to support their staff get into the field, especially provincial staff linked to the DoWH.

However, the evaluation found no evidence of that EU-STREIT PNG has obtained funding and human resource guarantees from the two provincial administrations that will support a dedicated team to operate, maintain and upscale the VC enablers. For example, there is no evidence that the RMGs set up by the programme will receive the funding they need to carry out routine rural road maintenance as foreseen.

Similarly, the adoption of sustainability plans for the ICTs by school principals and health clinic personnel are designed to raise internal revenue to fund operations and maintenance. However, stakeholders voiced concerns that they are not ready for handover until they have generated internal income and are able to pay an IT specialist to oversee the ICT centres operate smoothly. However, the ITU confirms the ICT centres are scheduled to have internet access installed by DICT the first quarter of 2026.

The continuity of the rural banking access points in the programme depends largely on the three FSPs decisions as to how far each one is financially viable. The national counterparts – CEFI and CGC – are active at the policy level but are not involved in the operations in the Sepik region. The provincial administrations have received Training of Trainers courses on digital and financial literacy but have no specific role in maintaining financial inclusion programme outputs. EU-STREIT PNG discussed with all FSPs their business development strategies in the Sepik region, specifically in relation to the stabilisation and expansion of the network of bank access points. In the agent-based models, these discussions explored ways to reduce agent churn through measures such as revised commission structures and increased in-person support from the FSPs to their agents. Interviews with different stakeholders suggest that one, probably two, of the three FSPs are well positioned to scale up their operations in the two provinces even without EU-STREIT PNG funds. One of them, MamaBank, has also explicitly included financial literacy training in its customer acquisition strategy. However, there is little evidence of strong commitment or concrete roadmaps of the FSPs to expand financial access points deeper into rural areas. Some have considered, but not yet systematically applied new strategies (for example, complementing staff-run access points with agents, or cross-subsidising access points in remote locations with revenues from more central locations).

The evaluation also identified gaps at the national and district levels that are likely to affect the uptake of new methodologies and tools promoted by the programme. The most significant are:

- At the district level the evaluation found capacity levels and availability of financial resources are very limited, indicating insufficient capacity exists at this level of government to support the consolidation, sustainability and upscaling of the VC enablers. This is not aided by the fact the district councils are not directly linked to the provincial administrations but to government at the national level.
- The lack of clarity on specific dates when DICT will oversee internet providers will provide internet connections at all the ICTs.
- The ICT centres showed insufficient signs that they have the capacity to convert training into coordination action to support the income generating activities of the ICTs.
- In financial inclusion, CEFI and CGC are interested in continuing to deploy the IT solutions developed in 2025 (financial inclusion dashboard and psychometric credit decisioning system respectively). However, both solutions were not tested beyond the pilot phase before support from UNCDF ended. The long-term utility of the dashboard will still need to be explored by CEFI, and the Global Psytech system will have to be tailored to individual financial institutions (and be used at such scale that CGC can finance the master license from 2026).
- Solar PV systems are currently using their savings from grid or genset power consumption for to cover household needs. There is insufficient evidence that a percentage of these savings are being used to create a sustainability fund to cover O&M and general upkeep of the solar PV systems installed (retainer contract with electrician, estimation of equipment replacement needs over time).
- Unclear eligibility criteria for the small household PV systems to be installed in 2026 and how they will be maintained.
- The lack of evidence that the DoWH will provide the funding for the RuMIS to allow accurate estimation in the provincial Master Plan, in line with provincial and national procedures and budget procedures. Moreover, interviews confirm that DWITS is willing to consider establishing rural road budget, but it does not have the tools to estimate the budget required before it can be passed on to DoWH and DNPM for consideration.
- The MoU with the RAA to cover the sustainable maintenance of the rehabilitated airstrips has not been approved by the provincial government to end of November 2025.

Evidence log summary for I8.1.1 to I8.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I8.1.1	No	Counterpart government agencies have taken steps to guarantee the continuity of support services and address economic, environmental and social factors	2
I8.1.2	No	Local mechanisms in place and staff and logistic capacity available to sustain VCs post-EU STREIT PNG	2
I8.1.3	No	Counterpart institutional agreements with the programme on work plans and budgets to continue the operation and maintenance of the enablers.	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC8.2 The extent to which the financial conditions are in place to sustain the programme's actions and results

Finding 46 There is little concrete evidence that sufficient post-programme funding is in place to support the consolidation, maintenance and upscaling of the three VCs and their enablers. This has not been aided by the limited anchoring of the programme's investments in government programmes and grassroots initiatives. The evaluation identified no evidence that the programme has designed a post-programme sustainability action plan with counterpart agencies that can be included in the handover agreements to signed with the national/provincial authorities in the coming months, nor with the producer groups/MSMEs supported by EU-STREIT PNG. Instead, the current focus centres on: (i) national authorities like DAL, NFA and DoWH taking over the MIS developed by the programme and national policy initiatives and consultations; (ii) the provincial administrations absorbing the programme's general administrative and training costs, which will be supported by the construction of the new training centre and offices currently ongoing in Wewak; (iii) the CB providing its extension services to develop the cocoa VC.
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Although stakeholder interviews at the national and provincial levels confirm that the majority are willing to sustain and upscale the VCs, this willingness has not translated into financed commitments or viable investment pathways as foreseen in the revised ToC for EU-STREIT PNG prepared by the ET in the inception phase. In particular, stakeholders were unable to inform the evaluation on how they intended to operate, maintain and upscale key aspects of EU-STREIT PNG following its closure on 31/05/2026. Moreover, the evidence available indicates that the extension phase of the programme between June 2025 to May 2026 was not designed to embed and implement costed work plans to sustain EU-STREIT PNG's main activities and results within wider government and private sector plans and budgets linked to the implementation of the MTDP IV between 2025-2026.

This situation also provides evidence that the programme has had limited success in leveraging EU funding to mobilise the follow-on public and private-led investment that is needed in the post-programme to consolidate the VCs and enablers. For example, field inspections witnesses in several cases that inadequate levels of financial support are already affecting the establishment of sustainable vanilla and fish VCs due to insufficient levels of quality control, supervision and identification of alternative markets and funding mechanisms to cover the operation and maintenance needs of the rural infrastructure funded by the programme. Private VC financing – in particular loans to farmers – has only tentatively improved under the programme as the lack of collateral and formal income history of farmers continue to constrain their access to credit.

Fiscal constraints, limited access to blended finance and the treatment of EU-STREIT PNG funding as parallel grant-funded assistance have all contributed to a lack of mobilisation of new funding. With the exception of the fund-raising events conducted by the CB, there is little concrete evidence that government has proactively mobilised and/or allocated resources to support the maintenance and scaling of VC enablers. Except for financial inclusion outputs (that can, in principle, be sustained through private and public sector revenue generated from the outputs themselves), dependency on external resources still largely prevails in government circles regarding the promotion of ICT resource centres, solar PV systems, or MIS platforms. Indeed, some stakeholders stated that the construction of ICTs funded by government would probably take more than 5 years to complete.

Finally, at the grassroots level, the evaluation found little evidence that producer groups, MSMEs or committees responsible for VC enablers have established formal post-closure action plans or mobilised their own funds to sustain operations and governance. Many groups expressed their willingness to invest, but only one group interviewed provided concrete evidence that they had mobilised funds to fund communal and business development. In most cases this was largely explained by capacity gaps in financial management, governance and marketing, resulting in too much reliance on the programme's funding.

Finding 47

On the specific case of RMGs the draft provincial Master plans prepared with the support of the programme and RuTIMS, their financial sustainability is in doubt because they are not fully aligned with DWITS administrative and approval processes.

The evidence gathered on the rehabilitated roads inspected is that the continuity of road maintenance post-programme is unlikely, despite the decision by DoWH to create a new national budget line explicitly for road maintenance in 2024. Three specific gaps appear to remain. First, there is no evidence that a suitable funding mechanism is in place to fund the RMGs promoted by the programme in the Sepik region. Instead, the RMG instrument set up by the programme has mainly focused on upholding ILO employment standards, which do not align with current provincial and local regulations. As a result, only registered road maintenance companies can participate in road maintenance works, meaning individuals who are members of the RMGs are excluded from providing simple road maintenance services.

Second, the completion of a Master Plan for roads in East Sepik and Sandaun provinces has not been formally approved by their provincial administrations. This is mainly due to the lack of engineering capacity at the provincial level to guide DWITS. Thus, they are not embedded in the provincial plans through which financial resources can be mobilized for priority road construction and rehabilitation investment.

Third, the funding of the RuTIMS application is unlikely unless administrative reforms take place at the provincial and district levels that ensure it is officially recognised as an official tool to guide road maintenance planning in the post-programme period.

18.2.1 Amount of funds allocated/mobilised to finance the operation, maintenance and scaling of the VCs for cocoa, vanilla and fisheries

The evaluation did not identify evidence that national or subnational counterpart institutions have allocated dedicated public funds to finance the operation, maintenance or scaling of programme initiatives in post-closure. Thus, EU funds do not appear to have been used to leverage public programmes linked to relevant

SPA/DIPs under the MTDP IV (see EQ 1) nor private investment in some key areas of the programme. They include, among others:

- Extension, inspection and quality control/phytosanitary services for cocoa and vanilla
- Marketing strategies and private sector investment incentives that build on, for example, the expansion of PGK 1.1 million (USD 257,000) in short-term loans provided by the three FSPs in the programme area (see I3.2.3)
- Operation and upgrading of ICTs and solar PV energy systems
- Road and airstrip maintenance.

The absence of quantified funding allocations for post-closure operation and maintenance indicates that financial sustainability is a major risk in the post-closure period of EU-STREIT PNG, given the VCs and VC enablers will require new cash injections to sustain and scale up VC development. In addition, the evaluation found little progress has been made in targeting the private sector to invest in the vanilla VC building on lessons learned from, for example, the programme's funding of AgUnity platform which was piloted with over 500 vanilla farmers in 2025.

18.2.2 Level of willingness of the PNG government at the national and subnational levels to allocate public investment and/or blended finance to support the sustainability, resilience and upscaling of the VCs and VC enablers in PNG

The evaluation detected a high level of willingness at both national and provincial levels to allocate resources, but that this is coupled with low sentiment that new resources can be obtained from conventional public funding, or blended finance promoted by the EU's Global Gateway initiative. However, the evaluation did witness fund raising events carried out by the CB have been successful.

Stakeholder interviews suggest that fiscal constraints at both national and provincial levels have also played a part in limiting the government's ability to commit additional resources. This may not be aided by the fact that EU-STREIT PNG investments are considered as donor-funded grants rather than investment capital designed to attract greater public, private and non-governmental investment. Consequently, there is little concrete evidence to confirm that EU-STREIT PNG did not succeed in fully integrating the investments made for VCs within PNG's national and provincial medium-term public investment frameworks linked to the MTDP IV. As a result, the resilience and scalability of the VCs have not attracted replacement funding to the EU's funding when it ends.

In the case of the VC enablers, there is evidence that the DoWH has succeeded at the national level in creating a new budget line specifically dedicated to road maintenance. In addition, this includes the development of an administrative mechanism to ensure all maintenance works carried out in the country can only be done by registered companies. Although the new budget line has not received funding to date, it signifies an important step has been made in supporting rural road maintenance in PNG for the first time.

This development contrasts with the RMG funding mechanism promoted by the programme, which is designed to enable local people to carry out general road maintenance. Consequently, in order to receive funding from the abovementioned road maintenance framework, there is a need to adapt the RMG instrument so that the RMG members form their own local road maintenance company.

In financial inclusion, the programme outputs recently handed over to the public counterparts at national level, CEFI and CGC, will not require (much) public funding, which is coherent with the fact that these two institutions operate almost without government funding³¹. The Financial Inclusion Dashboard is fully administered in-house by CEFI without license fees. The external developer (an individual consultant in Belgium) has handed over the source code to CEFI, which can be adapted by CEFI's in-house IT analysts. The IT equipment for the dashboard was sourced by the Bank of PNG. CGC expects to receive revenues from sub-licensing the psychometric credit decisioning system to financial institutions in the country. It plans to allocate these revenues, if sufficient, to purchasing the master license from Global Psytech from 2026 onwards (the first annual license was still financed by EU-STREIT PNG in 2025).

However, areas where willingness to allocate funding remain unclear under Component 2 are summarised as follows:

- In financial inclusion, the continuity of programme outputs is not financed directly by the national and local government partners. The 3 FSPs are private sector organisations that operate without government funding, and the evaluation has no quantitative data on the planned investments of

³¹ CEFI is largely funded through grants of the Bank of PNG (see CEFI Annual Reports). CGC is also funded by the Bank of PNG, as well as through fees from issuing credit guarantees. The Bank of PNG funds itself mainly through financial market operations, rather than government funding.

these FSPs in the Sepik region. See 18.2.1 for information on the FSPs' work plans (business strategies) employed at the end of, and after the programme.

- Funding to finalise the two Master Plans that need to be embedded into provincial plans in order to mobilize resources for priority investments. Due to the acute scarcity of engineering capacity at the provincial level, funding of civil engineering expertise to support DWITS carry out this activity is also required.
- Funding to finetune the RuTIMS application to meet the needs of administrative provincial and district rural road maintenance processes remains unresolved.
- Funding for: (i) the registration of all PV systems by NEA to facilitate tracking of the transition to renewable energy in the two provinces and elsewhere in PNG; (ii) the establishment of a database for certified electricians based in the provinces to ensure all ICTs can access local maintenance expertise in the case of a breakdown of the system or parts need replacing in the solar PV system; (iii) the establishment of datalogger in each ICT to enable the ICT's to monitor PV system performance and improve maintenance planning.
- Funding for the future maintenance needs of the ICT resource centres that cannot be covered through the application of their business plans, such as equipment upgrades and replacement of faulty equipment.
- Funding of a study for the Department of Provincial and Local Level Affairs to explore the feasibility of launching a digital Ward Record Book designed to track and monitor rural agricultural production at ward level across the provinces.

18.2.3 Evidence that the producer groups, processors and other groups in the VCs or responsible for the VC enablers have established a post-closure action plan and mobilised their own funds to operate their committees, conduct monitoring, reporting and auditing and promote their products

The evaluation found no concrete evidence of formal post-closure action plans have been adopted by the producer groups and MSMEs interviewed, or committees responsible for VC enablers. This is despite the fact most cocoa producer groups stated that they would be prepared to: (i) invest in expanding the number of fermentaries within their cluster group; (ii) invest in moisturiser and PH testers. The main barriers to formalising formal post-closure actions plans, and mobilisation of funds are linked to the following factors:

- The lack of access to technologies like moisturiser and PH testers.
- The need for more follow-up training and extension services to develop financial management skills, develop effective governance structures and marketing skills before they feel comfortable in mobilising funds for post-programme initiatives.
- The ToT promoted by the programme had not coordinated adequately with the extension officer based at the District Office level. Consequently, their knowledge on EU-STREIT PNG was low and for this reason developing post-programme initiatives with producer groups (especially vanilla groups) are challenging to develop.
- The strong emphasis on equipment provision had resulted in creating a high level of dependency on the programme's resources to sustain the VCs.
- The financial inclusion component, except for very few VC groups acting as mobile money agents, does not rely on VC groups or local committees to deliver, manage, and oversee its outputs. Oversight (especially reporting and monitoring) of financial inclusion outputs will continue to be done by the three FSPs themselves and, at an aggregated level, by CEFI using the Financial Inclusion Dashboard created by the programme.

Under these circumstances there was little evidence that the programme had instilled a culture of business investment that is needed to deliver positive economic transformation outcomes. However, in one particular case the evaluation found strong evidence that the culture of economic transformation was already in process, suggesting rural economic transformation is deliverable in the Sepik region. This concerned a cocoa producer group that did provide evidence of significant resource mobilisation to fund: (i) a health clinic; (ii) improvements to a school; (iii) the construction of a road bridge (witnessed in the field visit to the community). In addition, the group stated its intention to raise funds to buy cocoa processing equipment to supply chocolate producers in the UK and Europe.

Evidence log summary for I8.2.1 to I8.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I8.2.1	No	Amount of funds allocated/mobilised to finance the operation, maintenance and scaling of VCs	1
I8.2.2	No	Levels of public investment and/or blended finance to support the sustainability, resilience and upscaling of the VCs and VC enablers in PNG	1
I8.2.3	No	Evidence that the producer groups, processors and other groups in the VCs or responsible for the VC enablers have established a post-closure action plan and mobilised their own funds	0

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC8.3 The extent to which environmental and social safeguards have been integrated into the sustainability strategy and action plan for the post-closure period of the programme

Finding 48

Environmental and social safeguards are partially reflected in the proposed exit strategy covering the period December 2024 to May 2025, but there is no sustainability strategy and action plan developed yet in which these safeguards could be integrated and applied in the post-closure period.

Document review and stakeholder interviews confirm that the environmental and social safeguards embedded during implementation have been partially integrated into the exit strategy, particularly for the cocoa and vanilla VCs. These include commitments to continuing rehabilitation-based production approaches to avoid expansion into forested areas, expansion of low-energy technologies like solar dryers, and application of community-based management of their production systems. Social safeguards drawn from EU, UN and FAO frameworks are also partially reflected, notably ILO labour standards in rural road maintenance arrangements and FAO safeguard frameworks in the handover of value chain assets.

However, the exit strategy does not include a structured plan of action in the post-programme period to enhance the consolidation, sustainability and potential upscaling of the VCs and enablers. Under these circumstances, it is unlikely the handover agreements will provide clear governance arrangements, roles and procedures to implement environmental safeguards. Notably, provisions to protect ecosystem health (soils, water resources, biodiversity conservation, waste and e-waste management, application of externally certified standards, etc.) and specific social safeguards that uphold land rights, decent employment and prevent child labour are unlikely to be addressed, despite their importance in sustaining the VCs.

Consequently, evidence of safeguard ownership by national and provincial institutions appears to be weak, with no evidence of formally adopted frameworks and budgets to guarantee their application in the post-closure period. This gap is particularly evident in the fisheries VCs, where safeguard integration mainly focuses on the continued use of resource-efficient equipment and technologies. Accompanying ecosystem-based management, habitat conservation, or waste management measures are not evident. As such, although safeguards are mentioned, they lack a consolidated, coherent sustainability framework that is results-oriented and aligned with national policies and plans in the post-programme period.

In summary, these gaps represent a moderate to substantial risk to sustainability of the VCs and enablers in the post-programme period, particularly for the fisheries VCs, the solar-powered ICTs and the RMGs. All three fisheries activities remain particularly vulnerable due to a lack of clear provisions to strengthen environmental risk management, social inclusion targets, and safeguard compliance monitoring. Meanwhile, the ICTs lack O&M plans and the RMGs remain unsustainable initiatives unless they evolve into local companies and are supported by environmental management plans.

Finding 49

The absence of systematic vulnerability risk assessments, preparedness mechanisms and locally resourced mitigation measures indicates that losses from climatic events, environmental degradation and social exclusion are unlikely to decline in the post-programme period, particularly for women, youth and resource-dependent communities.

Despite EU-STREIT PNG's emphasis during implementation on inclusive, rights-respecting and gender-aware planning, there is limited evidence to date that these principles will be integrated into the handover agreements that will govern the future development of the VCs and enablers by the CB, SIB, provincial administrations and other government, non-state and private sector actors in the Sepik region. Currently there is no concrete evidence that a sustainability strategy and action plan has been prepared specifying how inclusiveness, gender equality and women's and youth empowerment are to be applied, financed and

monitored after the programme's closure. As a result, stakeholders and end beneficiaries lack clarity on post-programme responsibilities, governance arrangements and safeguard ownership.

The limited involvement of end beneficiaries in sustainability planning, combined with partial institutional knowledge transfer, suggests a moderate to substantial risk that the VCs will not consolidate or upscale in an inclusive and resilient manner. In particular, explicit measures to embed gender equality, youth participation and human-rights-based approaches into post-closure governance and service delivery were found to be largely absent. This is likely to weaken the prospects of sustaining the gains achieved under EU-STREIT PNG, especially among women, youth and other vulnerable groups whose livelihoods are heavily reliant on natural resources.

Finally, there is insufficient evidence that systematic vulnerability risk assessments informed the handover agreements, nor that preparedness and mitigation measures have been clearly defined to reduce loss of life and the number of people affected by climatic events in the post-closure period. The lack of alignment with national climate risk assessments and the absence of post-closure mechanisms such as early warning systems, emergency response arrangements or climate-resilient resource management frameworks represent a significant gap in establishing long-term climate resilience in the Sepik region.

18.3.1 Evidence that environmental and social safeguards have been identified in the sustainability strategy and action plan

Interviews and document analysis indicates that the environmental and social safeguards embedded in the programme's implementation have largely been carried through in the exit strategy, particularly for the cocoa and vanilla VCs. For example, it emphasises the continuation of rehabilitation-based production models, and community-based management approaches to avoid expansion into forested areas, maintain CPB-tolerant and improved germplasm systems, and continue the use of low-energy post-harvest technologies such as solar dryers. This does not equate, however, to the integration of an explicit environmental management plan that outlines the specific governance measures to be taken to protect natural resources (see section 5.1). These include specific environmental measures to protect/restore soil health, the management of water resources, and capturing and applying local knowledge on seeds, biodiversity and land management, among others.

In terms of social safeguards, EU and UN guidelines are partially reflected in the exit strategy and are likely to figure in ILO's handover arrangements for rural roads, although the rights of individuals to participate in RMGs do not have a legal framework, indicating an urgent need to form local RMG companies before the programme closes in May 2026 (see 18.2.3). Similarly, FAO's Voluntary Guidelines on the Responsible Governance of Tenure, Framework on Environmental and Social Management (2022) and Environmental and Social Management Guidelines (2015) are likely to be reflected by FAO in its handover arrangements with farmer and fisher groups participating in the three VCs. However, monitoring and enforcement of safeguard measures to cover incidents such as forced land evictions, are likely to be contentious issues for which specific funding may not be forthcoming considering the funding limitations in the Sepik region.

The application of climate, environmental and social safeguards in the exit strategy for the fisheries VCs does not adequately address the gaps that currently exist in these VCs, especially among riverine and coastal fisher groups. These include measures to conserve habitats and fish stocks, consolidate the cold chain activities with reliable solar power and water resources management, including water quality controls for aquaculture initiatives (see section 5.2) apply effective waste management.

The integration of safeguards linked to climate adaptation and mitigation measures are explicitly mentioned in the exit strategy for Components 1 and 2. For example, the cocoa and vanilla VCs are required to apply CSA aided by the application of the AMAMAS and expansion of solar dryers for cocoa and vanilla which the evaluation found have a high impact on reducing carbon emissions and need for firewood (see EQ 5). As such, the intention to integrate climate resilience in the cocoa and vanilla VCs is supportive of the PNG's climate objectives, even though this is not explicitly mentioned. Meanwhile, emphasis on sustaining and expanding climate-proofed transport infrastructure represents an explicit intention to fulfil one of the government's central objectives of establishing climate resilient infrastructure in PNG (CCDA).

This gap also reveals a potential wider gap in the handover agreements to be signed in the coming months, namely existing government systems and institutional mandates to implement and monitor environmental and social safeguards lack specific environmental, climate and social indicators, baselines and targets (quantitative and qualitative).

As a result, any integration of environmental and social safeguards in the handover agreements, will need resources and capacity to implement them in support of the long-term sustainability of the VCs as well as open up opportunities to develop GI and externally certified standards or ecosystem-based management frameworks. The role and type of engagement CSOs, and environmental platforms could play in the post-programme period is also unclear at this stage. In summary, these gaps confirm a consolidated sustainability

strategy or action plan with safeguards is still needed to establish robust and long-lasting handover agreements.

Table 32: Analysis of weaknesses in the exit strategy on the handover process covering environmental and social safeguards post EU-STREIT PNG (to 30/09/2025)

Risks	Weaknesses in the exit strategy on the handover process	Sustainability risk level
Environmental risks	No consolidated sustainability strategy or post-closure action plan that explicitly identifies governance measures to promote application of GI and externally certified standards or ecosystem-based management frameworks that are needed to add value to the cocoa vanilla and fisheries VCs. No documented plans for effective waste management (including e-waste management of ICT and solar equipment). Environmental management of rehabilitated roads and airstrips is limited.	Substantial
Social risks	Evidence of safeguard ownership by national or provincial institutions is limited, indicating there is no formally adopted or budgeted framework in place to continue applying environmental and social safeguards after programme closure. Limited evidence that safeguard practices on labour standards, gender inclusion, etc. are embedded in provincial operational guidelines or budgets. Exclusion of specific provisions to engage local chiefs, ward and local level government officials in national and provincial consultations on issues linked to gender quality, empowerment of women, youths and other marginal groups.	Moderate
Climate risks	Not formally articulated or institutionalised within a sustainability framework agreed with counterpart institutions	Moderate

Source: ET. Risk levels: High, substantial, moderate, low.

18.3.2 Stakeholder and end beneficiaries' views on the sustainability strategy and action plan post programme in particular its level of inclusiveness, knowledge transfer, promotion of gender equality and respect for basic human rights (in particular on access to ecosystem services)

Stakeholder interviews and field consultations confirm discussions on the development of a sustainability and action plan had no yet taken place and, in fact, expressed that they were more preoccupied with an extension of the programme stating they needed more training and skills development in key areas such as husbandry and post-harvest skills, before taking on a sustainability action plan in the post-programme period of EU-STREIT PNG. Moreover, the consistent request for more support observed in the field mission indicates a major challenge before agreeing and implementing a sustainability action plan is the need to reduce the high level of dependency they have on the programme to access training, knowledge transfer, equipment, infrastructure and inputs. This has resulted in very few having a clear understanding on the need for a post-programme plan to sustain their VCs and enablers, or develop the mid and downstream aspects of the value chain with the private sector.

Additionally, many stakeholders stated that knowledge transfer has focused on operational skills rather than institutional or governance capacities that are key to sustainability of the VCs. These include:

- Limited training on how to manage collective assets like solar dryers, ICT centres, solar equipment, and rural roads.
- Insufficient data and preparation of local committees to take over and develop the STREITMIS for by the provincial administrations.
- Partial transfer of responsibilities from the PIMU and UN agencies to the provincial administrations and producer groups/MSMEs, aided by the fact the PIMU still has resources whereas the provincial administrations do not.

As such, stakeholder interviews and site visits demonstrated that there are gaps in capacity to develop and apply sustainability planning, notably data collection to support the shift to data-driven decision making. Indeed, several provincial officials showed few signs that they were ready to take over all the technical aspects of the programme to maintain a government presence in rural areas and to advance private sector-led development. Also significant is the lack of evidence among end beneficiaries that they are able to apply effective risk management. For example, the general lack of basic book-keeping skills indicates limited capacity to manage financial risks related to liquidity, cash flow and turnover within MSMEs. Similarly, the lack of dashboards for the solar systems installed at a selection of ICTs is likely restrict the application of an effective operation and maintenance plan to optimise their life cycle (i.e. more than 20 years).

In terms of EU-STREIT PNG's specific support to gender and youth inclusion in the exit strategy, only stakeholders linked to the UN agencies appeared to be aware that the exit strategy explicitly mentions inclusion

of women and youths in the future handover of, for example, training and capacity-building of MSMEs, to ensure skills development, mentorship, and participation in agribusiness adopts an inclusive stance. Meanwhile, other stakeholders and end beneficiary groups expressed uncertainty about how far inclusive practices would continue without the support of EU-STREIT PNG. The evaluation concludes that any future sustainability action plan would need to ensure it is also gender-responsive in any handover agreements.

Finally, on the integration of human rights in the exit strategy, the evaluation identified no explicit evidence of key issues such as the articulation of rights holders and duty bearers in relation to customary tenure, clan governance, and collective decision making, which are constitutionally recognised in PNG. Additionally, based on the evidence provided in I8.3.1 there is no concrete evidence that issues such as the prevention of child labour in the cocoa blocks, are addressed, even though this was cited as a possible area of concern in the UN Joint Programme.

In the case of the human rights of fisheries groups, the coastal groups expressed concern on the increasing encroachment of industrial tuna fishing vessels in their waters, especially since the introduction of gigger boats and outboard motors funded by the programme. On this specific case the evaluation did not identify any evidence on the social safeguard measures to be put in place to manage this risk in the exit strategy.

I8.3.3 Evidence of adequate vulnerability risk assessment and mitigation measures applied to ensure loss of life and number of people affected by climatic events in the VCs is prevented/goes down in the post closure period respectively

Building on the evidence collected under I5.4.2 and I8.3.1 and I8.3.2, the evaluation considers the lack of active participation of CCDA in the programme has resulted in a lack of adequate alignment of the exit strategy with the CCDA's legislative framework notably the linkages between CSA and the National Adaptation Plan 2022-2030, or solar energy and the Climate Change (Management) Act, 2015. As a result, there is a high risk that official monitoring will not be established in the future handover agreements to anchor the post-programme's monitoring on GoPNG targets such as:

- NAP: Reducing deforestation and forest degradation rates by 25 percent by 2030
- NAP: Increasing the share of renewables in the energy mix to 78 percent by 2030
- NAP: Develop climate-resilient codes and standards for transport and infrastructure by 2030.

In addition, the exit strategy has not been built on a systematic vulnerability risk assessment, based on the CCDA-UNDP-AF study realised in 2017. This has resulted in a lack of adequate analysis on the following risks that threaten the sustainability of the VCs and enablers in the post-closure period:

- Climate hazards (flooding, storm surge, landslides, sea-level rise, drought)
- Identifying specific risks linked to each of the VCs, which include: CPB, root and stem rot affecting vanilla vines and overfishing, especially of coral reef cleaners like parrot fish
- Producer and population groups that are most vulnerable to climate hazards (women, youth, coastal fishing households, people with disabilities).

This situation has resulted in a general lack of dialogue in the TWG and PSC on post-closure mitigation and preparedness mechanisms. For example, the evaluation identified the following actions are absent and, therefore, likely to affect the consolidation and upscaling of the VCs and enablers in the Sepik region:

- Early warning systems integrated into the AMAMAS to support proactive action on reducing losses of crops, assets and lives in the most vulnerable areas/communities, such as settlements on low-lying islands, coastal areas and riverbanks in the Sepik River basin.
- Communications and training on nature-based solutions to build resilience to climate and weather shocks.
- Water management technologies to both conserve water resources and maintain water quality standards in a flood or other emergency affecting water supplies.
- Development of a provincial emergency and climate fund.

Evidence log summary for I8.3.1 to I8.3.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I8.3.1	No	Evidence that environmental and social safeguards have been identified in the sustainability strategy and action plan	1
I8.3.2	No	Stakeholder and end beneficiaries' views on the sustainability strategy and action plan post programme	2
I8.3.3	No	Evidence of adequate vulnerability risk assessment and mitigation measures applied	1

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

EQ 9: To which extent has the Action added value over and beyond what could have been achieved by the Member States' acting on their own?

JC9.1 The extent to which EU support added value compared to Member State-funded interventions in PNG in the agriculture and agribusiness sector

Finding 50

The added value of EU support in PNG has been demonstrated primarily through its ability to leverage French cooperation and contribute to launching the Global Gateway initiative in PNG to establish joint-implementation approaches and strategically aligned EU infrastructure investments. However, this leverage has not translated into targeted or coordinated support to develop the cocoa and vanilla VCs, beyond infrastructure rehabilitation to date.

The EU's added value in PNG is demonstrated through its capacity to mobilise and align complementary sources of EU and MS financing that provide new opportunities to replace standalone programme interventions with joint implementation approaches. This is illustrated by the Forestry, Climate Change and Biodiversity (FCCB) programme, which is co-led by PNG, the EU and France and designed to receive EU grant finance (EUR 54.7 million) and French technical leadership and institutional support. This joint-implementation approach shows the EU's ability to act as a catalyst for coordinated European engagement at scale, to achieve broader geographic coverage and policy influence than would be possible through traditional EU or MS interventions.

Similarly, the EU Delegation has demonstrated increased political and strategic leverage through global initiatives like the Global Gateway, launched in 2021 to mobilise public and private investment to develop sustainable, high-quality infrastructure and strengthen global partnerships in areas such as energy, transport, digital, health, and education worldwide. To date, this has resulted in EU-STREIT PNG contributing to the Global Gateway initiative by funding the rehabilitation of the East Sepik Provincial Division of Agriculture and Livestock Training and Extension Office in Wewak. This indicates a comparative EU advantage in linking development cooperation with wider economic and infrastructure frameworks that, in the case of EU-STREIT, supports value chain consolidation by improving extension services.

However, it also shows that initiatives like the Global Gateway can only support infrastructure developments rather than wider needs in PNG, such as market access or private-sector engagement in the cocoa and vanilla value chains. Indeed, the absence of a formal Team Europe Initiative or coordinated private-sector-led approach in the Sepik region, opportunities to translate EU political leverage and pooled financing into targeted support that supports economic transformation in the Sepik region appears to have been missed. As such, this has limited the overall impact of EU added value on agricultural value chain transformation.

19.1.1 Evidence of the EU's capacity to deliver improved coordination between MS-funded programmes linked to VC development in the agriculture and fisheries sectors (2019-2025)

The evaluation was unable to identify concrete evidence that the EU has delivered improved coordination between Member State-funded programmes supporting value chain development in the agriculture and fisheries sectors in PNG, or regionally, between 2019–2025. This is despite the fact EU-STREIT PNG provides a platform for dialogue with France in PNG (the only MS with on-going cooperation in PNG) or with other MS that are associated in regional initiatives. This includes projects delivered through the Pacific Regional Indicative Programme, which funds regional agricultural research and development initiatives implemented with local institutions, such as NARI in PNG.

Interviews with national stakeholders also reveal that delivering synergies with France, the only MS that has a bilateral programme in PNG, remains challenging for several reasons. First, there is a lack of coherence on programming cycles and development priorities. Second, financing instruments and reporting requirements operate in parallel, because there is no formal coordination mechanism or joint results framework managed by the EUD through which interventions and resources could be aligned to promote, for example, improved trade in cocoa and vanilla products with the private sector in France, including its Overseas Territories in the Pacific, or in other EU countries.

19.1.2 Extent to which EU actions delivered wider coverage of PNG's VC services for cocoa, vanilla and fisheries (in terms of inputs, technical assistance, actions) than through MS bilateral programmes

The evaluation found no evidence that there are MS bilateral programmes covering the agriculture in PNG to compare their geographical spread compared to EU-STREIT PNG. Nonetheless, a rapid review of France's bilateral cooperation programme shows that President Macron's visit to PNG in 2023, resulted in the French

government agreeing to pledge approximately EUR 20 million in complementary financing from France through its contribution to the 'Forests, Nature and Climate' country package (see also 11.3.3). This commitment has established the FCCB programme a joint EU–France cooperation initiative that combines EU grant financing (EUR 54.7 million) with French funding that will cover technical leadership to support forest governance, climate resilience and biodiversity conservation in three provinces (East Sepik, Sandaun and Northern Oro province), plus national level support. Although the FCCB does not include direct support to the cocoa, vanilla and fisheries VC like EU-STREIT PNG, it does provide evidence that joint EU-France cooperation – whereby the EU provides core finance, and France (through Expertise France and the French Development Agency) provides finance for technical assistance, institutional support and policy expertise – is an effective arrangement to cover a wider geographical area than standalone EU-funded programmes like EU-STREIT PNG.

According to some stakeholders interviewed this joint implementation in effect simulates a Team Europe approach/initiative (TEI) given funding, implementation and political engagement are shared to maximise scale, coherence and visibility of EU-Member State cooperation in countries like PNG. In addition, the evaluation found that this type of joint-implementation approach is not popular with UN agencies as it represents an alternative approach to implementing EU and EU Member States cooperation programmes that directly threatens the One UN approach.

In summary, EU actions like EU-STREIT PNG do not necessarily cover wider geographical areas than joint-funded programmes in PNG, even when the former has a larger budget. Moreover, when comparing bilateral cooperation of non-EU countries like Australia, which has an aid programme of around EUR 400 million, there is further evidence that its ACIAR bilateral programmes cover far larger geographical areas than EU-STREIT PNG, although these programmes cover agricultural trade, biosecurity and market access, rather than rural development promoted by the programme. As such, the EU's added value lies not in its geographical reach but rather in the volume of technical support it can provide within a specific geographical area like the Sepik region.

19.1.3 Evidence that EU (especially the EEAS) has greater clout to leverage its political influence in delivering synergies between MS programmes, mobilising Team Europe initiatives and promoting institutional, legislative and other reforms compared to MS bilateral programmes in PNG

In contrast the EU Delegation has demonstrated its pivotal role in launching the Global Gateway initiative in PNG, through EU-STREIT's funding of the East Sepik Provincial Division of Agriculture and Livestock Training and Extension Office in Wewak (EUR 0.49 million). This has provided an important precedent to leverage future investment from the Global Gateway in PNG to:

- Translate its policy priorities at the country level into visible, strategic infrastructure investments that directly supports the EU's long-term cooperation objectives beyond individual programmes and projects like EU-STREIT PNG.
- Position its development cooperation in PNG within a broader economic framework that supports economic transformation in rural areas by ensuring VCs receive support in developing improved enabling infrastructure that is crucial to enhancing rural connectivity and directly supports the countries priorities on climate action.
- Enhance its added value as a coordinator of EU funding through which the public and private sectors of the EU Member States can join forces to apply Team Europe initiatives (TEI) to support economic transformation by supporting the development of the cocoa and vanilla VCs with the European private sector.

However, there is no evidence that the Team Europe approach has been explored in the programme to identify potential private sector led initiatives in the Sepik region.

Evidence log summary for 19.1.1 to 19.1.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
19.1.1	No	Evidence of the EU's capacity to deliver improved coordination between MS-funded programmes linked to VC development	3
19.1.2	No	Extent to which EU actions delivered wider coverage of PNG's VC services for cocoa, vanilla and fisheries	3
19.1.3	No	Evidence that EU (especially the EEAS) has greater clout to leverage its political influence in delivering synergies between MS programmes, mobilising Team Europe initiatives	2

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

JC9.2 The extent to which national and provincial stakeholders view EU support to STREIT added value when compared to bilateral initiatives of the EU MS

Finding 51

The EU is perceived by many stakeholders as having a strategic comparative advantage in mobilising resources and shaping policy dialogue, but this advantage has not translated into demonstrable added value in delivering synergies, results on cross-cutting objectives, or coordinated action with French cooperation programmes covering the agriculture sector and cross-cutting objectives linked to women/youth empowerment in rural PNG.

The evidence available indicates that the EU's main comparative advantage over Member States between 2019-2025 lies at the strategic level. This includes the EU's capacity to mobilise larger-scale funding, assemble multi-country technical assistance, and engage in policy dialogue aligned with national priorities. However, perceptions of this advantage are less evident at the operational level, where stakeholders stated the mechanisms in place to translate strategy into results and create formal synergies with MS (and non-EU) bilateral programmes were either weak, or non-existent. This appears to have contributed to no concrete examples of coordinated agricultural action being identified to date.

Moreover, although stakeholders acknowledge the EU and the UN's emphasis on inclusive, rights-based and gender-focus on implementation, there is insufficient evidence to demonstrate the EU/UN's added value in this area compared to MS bilateral cooperation.

Overall, the evidence base across indicators I9.2.1 to I9.2.3 remains weak and unsubstantiated without a specific study on this topic through which measurable, sector-specific coordination or results on the ground could be assessed.

I9.2.1 Stakeholder views on the EU's comparative advantage in providing resources, developing synergies and delivering results compared to the MS in PNG between 2019-2025

A limited number of stakeholders interviewed had adequate experience to provide a clear answer on this indicator. Nonetheless, those that did perceive the EU to have a comparative advantage over MS in:

- Mobilising larger-scale financial resources to fund EU flagship interventions.
- Bringing together technical assistance from different EU countries to work together on applying multi-year programmes like EU-STREIT PNG.
- Leveraging complementary funding from relevant EU aid initiatives like the Pacific Regional Indicative Programme, which funds regional agricultural research and development initiatives implemented or EU global programmes like the Global Gateway or the Food and Nutrition Security and Sustainable Agriculture (2021-2027).

National stakeholders also acknowledged that the EU has a stronger capacity to engage in policy dialogue to align cooperation with national development priorities. However, some stakeholders found that the EU's comparative advantage at the strategic level is not supported by adequate mechanisms to deliver results at the ground level. As a result, perceptions of effective coordination and synergy-building vis-à-vis MS interventions at the bilateral level were considered as weak and in need of improvement.

I9.2.2 Stakeholder views on the added value of EU support to cross-cutting objectives on gender equality, women's empowerment, basic human rights, inclusion, etc. compared to the number of people who benefitted from bilateral cooperation of the MS in PNG between 2019-2025

The evaluation was unable to obtain stakeholder views on the EU's added value on cross-cutting objectives (gender equality, women's empowerment, inclusion, basic human rights) compared with the outcomes of French bilateral cooperation in PNG.

Stakeholders (both men and women) were only able to express their appreciation for the EU and UN's emphasis on inclusive planning and rights-respecting principles during programme implementation. In particular, they confirmed gender, youth and other marginalised groups were acknowledged in training and participation efforts and access to the programme's grievance mechanism. However, gaps remain in embedding gender equality and women's empowerment into a dedicated sustainability plan, which has not been elaborated by November 2025.

I9.2.3 Stakeholder views on the EU's ability to establish synergies with MS (and non-EU) programmes compared to the bilateral programmes of the MS operating in the same sector between 2019-2025

Reference to I9.1.3 confirms that trends in the EU and French cooperation in PNG are both moving towards coordinated action and formal synergies, but that this has not resulted in specific synergies in the agriculture sector.

Evidence log summary for I9.2.1 to I9.2.3

Indicator	Baseline data available	Evidence gathered/analysed	Quality of evidence*
I9.2.1	No	Stakeholder views on the EU's comparative advantage in providing resources, developing synergies and delivering results compared to MS	2
I9.2.2	No	Stakeholder views on the added value of EU support to cross-cutting objectives on gender equality, women's empowerment, basic human rights, inclusion, etc. compared to MS	1
I9.2.3	No	Stakeholder views on the EU's ability to establish synergies with MS (and non-EU) programmes compared to the bilateral programmes of the MS	0

* 0 = Low or no evidence; 1 = some evidence; 2 = sufficient evidence; 3 = conclusive evidence

Annex F. List of organisations consulted

Table 33 presents the list of organisations at national, provincial and district levels consulted by the ET. The VC groups and VC enablers visited during the field mission are listed separately in Annex G.

Table 33: List of organisations consulted

Organisation	Programme component (output)
EU, EU Member States, and UN agencies	
Delegation of the European Union (EUD)	Cross-cutting
Embassy of France	Cross-cutting
Expertise France	Cross-cutting
UN Resident Coordinator	Cross-cutting
Food and Agriculture Organization (FAO)	Cross-cutting (mainly 1.1 / 1.2 / 1.3)
United Nations Capital Development Fund (UNCDF)	2.1 / 2.2
International Telecommunication Union (ITU)	2.1 / 2.2
United Nations Development Programme (UNDP)	2.3
International Labour Organization (ILO)	2.4
Government of PNG and other public sector organisations	
Department of National Planning and Monitoring (DNPM)	Cross-cutting
Department of Provincial and Local-Level Government Affairs	Cross-cutting
National Youth Development Authority (NYDA)	Cross-cutting
Investment Promotion Authority (IPA)	Cross-cutting (mainly 1.1 / 1.2 / 1.3)
National Agriculture Quarantine and Inspection Authority	1.1 / 1.2 / 1.3
National Agriculture Research Institute	1.1 / 1.2 / 1.3
Department of Agriculture and Livestock (DAL)	1.1 / 1.2
Cocoa Board (CB)	1.1
National Information and Communication Technology Agency (NICTA)	2.1 / 2.2
Centre for Excellence in Financial Inclusion (CEFI)	2.1 / 2.2
Credit Guarantee Corporation (CGC)	2.1 / 2.2
Department of Works and Highways (DoWH)	2.4
Rural Airstrips Agency (RAA)	2.4
Provincial administration – East Sepik	Cross-cutting
Provincial administration – Sandaun	Cross-cutting
District administration – Angoram	Cross-cutting
District administration – Vanimo Green	Cross-cutting
Private sector	
Federice Estates	1.1
Weave Cocoa	1.1
Paradise Foods / Queen Emma Chocolate	1.1
West Sepik Investment	1.1
AgMark	1.1
Women's Micro Bank / Mama Bank	2.2
Digicel Pacific / CellMoni	2.2
Nationwide Microbank / MiBank	2.2
Wonou	2.4
Western Sons	2.4
SSB Construction	2.4
NGOs/CSOs	
Foundation for Women in Agriculture and Development	Cross-cutting
Help Resources, Living Child, Project Sepik	Cross-cutting

Annex G. List and map of field locations visited

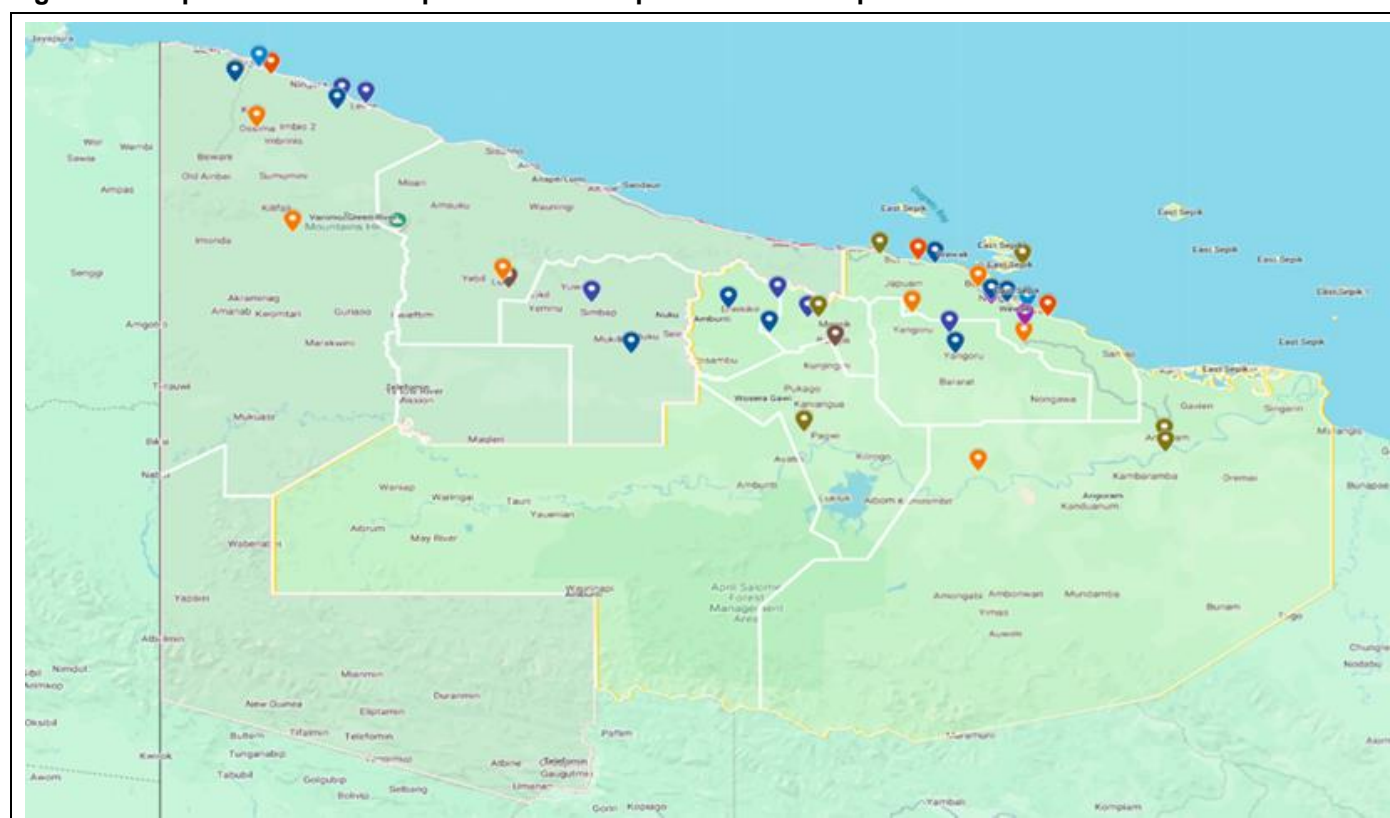
Table 34 shows the list of field sites visit by the evaluation team.

Table 34: List of site visits in East Sepik and Sandaun provinces

	Cocoa groups (Output 1.1)		District	
1	Hawaiin Central Cooperative Society		Wewak	
2	Kobaibus Community Group		Wewak	
3	Ramangs Cocoa Development		Wewak	
4	Homboku Financial Solutions		Yangoru/Saussia	
5	Mupa Cocoa Cooperative		Angoram	
6	Bawa Agro Commodities		Maprik	
7	Wainam Agro Services		Nuku	
8	Hambini Village Development Group		Ambuntti/Drekier	
9	Kulu Obas Integrated Farming		Vanimo/Green	
10	St. Mary Cocoa and Vanilla Growers		Vanimo/Green	
11	Fugumi Cocoa Business		Vanimo/Green	
12	Balkon Integrated Farming		Leitre	
13	Rawo Cocoa Group		Leitre	
14	Pasi Cocoa Nursery		Vanimo	
	Vanilla groups (Output 1.2)		District	
1	Mandigen Vanilla Business Group		Wewak	
2	Synbychri Gold Vanilla		Wewak	
3	Kunai Oasis Women's Group		Yangoru/Saussia	
4	Homboku Financial Solutions		Yangoru/Saussia	
5	Bawa Agro Commodities		Maprik	
6	Wainam Agro Services		Nuku	
7	Hambini Village Development Group		Ambuntti/Drekier	
8	Kulu Obas Integrated Farming		Vanimo/Green	
9	St. Mary Cocoa and Vanilla Growers		Vanimo/Green	
	Fisheries groups (Output 1.3)		Types	District
1	Molowia Agro Farmers		Aquaculture	Wewak
2	Maikap Fishing Group		Coastal	Wewak
3	Homboku Financial Solutions		Aquaculture	Yangoru/Saussia
4	Sustainable coastal, riverine and inland fisheries management Group, Angoram Station		Riverine	Angoram
5	Kandangapma Women's Business Group		Riverine	Angoram
6	Kambaruwak Agriculture Group		Aquaculture	Wosera Gawi
7	Niogawi Business Group		Riverine	Wosera/Gawi
8	Pasi Hatchery		Aquaculture	Vanimo Green
9	Haii Entrepreneurs Fishing Group		Coastal	Vanimo/Green
	Bank access points (Output 2.2)			District
1	CellMoni agent A			Vanimo Green
2	CellMoni agent B			Vanimo Green
3	CellMoni agent C			Vanimo Green
4	Mama Bank Access Point A			Wosera-Gawi
5	Mama Bank Access Point B			Aitape/Lumi
6	Mama Bank Access Point C			Vanimo Green
7	MiBank agent A			Vanimo Green
8	MiBank agent B			Vanimo Green
	Resource centers (Output 2.2)			District
1	Brandi Secondary School			Wewak
2	Maprik Secondary School			Maprik
3	Lumi Secondary School			Aitape/Lumi
4	Don Bosco School			Vanimo

5	St Mary Primary School, Leitre	Vanimo
6	St Francis Secondary School	Nuku
7	Drekikier Technical Secondary School u	Drekikier
8	St John Bosco Secondary School Dagua	Wewak
9	Hawaian Technical Secondary School	Wewak
Solar energy systems (Output 2.3)		District
1	Dagua Health Post, Dagua	Wewak
2	Brandi Secondary School	Wewak
3	St. Ignasius School	Aitape/Lumi
4	Don Bosco School	Vanimo
Roads/waterways (Output 2.4.)		District
1	Banak – Woutogik Road, Boikin Dagua	Wewak
2	Yawasoro – Niengwanjie Road, Wewak rural	Wewak
3	Yarapi- Suambukau Road	Wewak
4	Salaki – Palpal Road	Angoram
5	Angoram – Marienberg Road	Angoram
6	Waterways clearance, Angoram Station	Angoram
7	Munji – Haripmo Road, Munji	Yangoru/Saussia
8	Tuanages – Asanakor Road	Maprik – Ambuti - Drekikier
9	Bonohoi-Endibi-Tuanges/Tuanges-Asanakor Road	Maprik
10	Nanaha – Tau Road, Drekikier	Ambuntti/Drekikier
11	Balif – Araseli Road	Ambuti - Drekikier
12	Yawasor – Kunger Road	Ambuti - Drekikier
13	Walkasa – Maimai – Wanwan Road	Nuku
14	Yiminum – Wilbowe Road	Nuku
15	Passi – Krissa Road	Vanimo Green
16	Onip – Rawo- Leitre	Vanimo Green

Figure 10: Map of site visits completed in East Sepik and Sandaun provinces



Source: ET and PIMU.

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Annex I. Terms of Reference

GLOBAL PRICE SPECIFIC TERMS OF REFERENCE

PART A

Final Evaluation of the Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (EU-STREIT PNG) Programme

**FWC SEA 2023 - LOT 16 EVALUATION AT INTERVENTION LEVEL
INTPA/2022/EA-OP/0102**

**CONTRACTING AUTHORITY:
THE EUROPEAN UNION DELEGATION TO PAPUA NEW GUINEA**

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PART A

1 BACKGROUND INFORMATION

1.1 Papua New Guinea country background

Papua New Guinea (PNG) is characterized by high linguistic and cultural diversity, with over 850 indigenous languages and more than 1,000 ethnic groups across its 600 islands. As of 2024, the country's population of approximately 11.78 million is predominantly rural, with 85% residing outside urban areas. Although a resource-rich country, almost 40% of the population lives in poverty. The country is a resource-dependent, lower middle-income country, categorized by the Asian Development Bank (ADB) as a small island developing state in a fragile and conflict-affected situation¹. The World Risk Report 2016 ranked PNG as 10th globally due to its high exposure to natural disasters and social and economic vulnerability.

PNG's economy is based on a dual structure: i) the agricultural, forestry, and fishing sector, which engages most of the labor force, and ii) the minerals and energy extraction sector, which accounts for the majority of export earnings and Gross Domestic Product (GDP)². The agricultural sector employs about 80% of the population and contributes 27% to the GDP. The sector is dominated by smallholder farming systems. Cocoa, vanilla, and fisheries are significant value chains for both income generation and household food security. Among these, cocoa represents a significant value chain, with the Sepik regions (East Sepik and Sandaun) increasing their contribution to national cocoa production from 10% in 2006 to 33.5% in 2014, with over 90% of production coming from smallholder farmers. Vanilla is another key crop, with PNG being the world's 5th largest producer in 2016 (502 tonnes), and the Sepik region contributing between 50-70% of the country's total production. The fisheries sector, while smaller in commercial terms, plays a crucial role in food security and local economies, particularly in riverine and coastal communities, where it serves both as a vital protein source and provides regular income through traditional trading systems, such as fish-for-sago exchanges between riverine/coastal and inland areas.

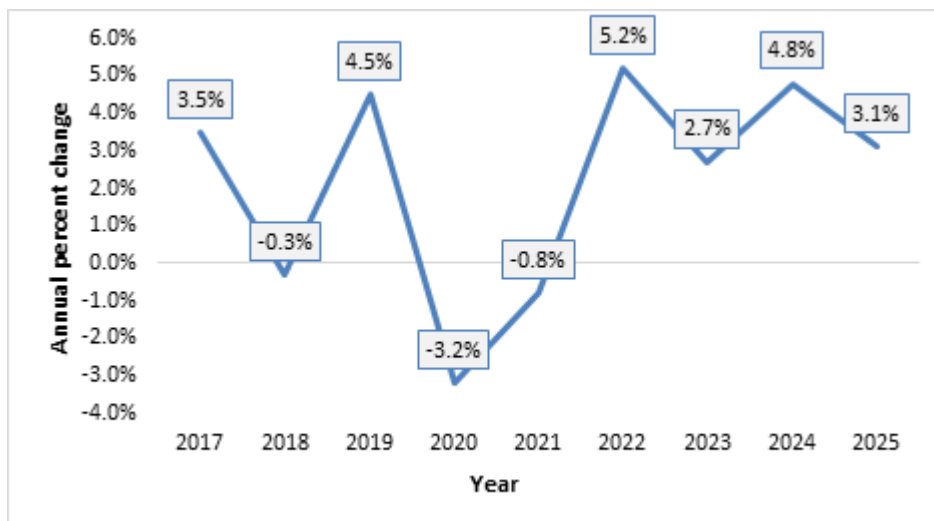
PNG's development indicators reflect significant socio-economic challenges. The country's economy has experienced significant fluctuations in recent years, reflecting both global economic trends and domestic challenges. Real GDP growth has been volatile (Figure 1). Starting from 3.5% in 2017, the economy contracted in 2018 (-0.3%) due to a major earthquake affecting the extractive sector. A strong recovery followed in 2019 (4.5%), but the COVID-19 pandemic caused contractions in 2020 (-3.2%) and 2021 (-0.8%). The economy rebounded strongly in 2022 (5.2%), surpassing pre-COVID levels. Growth moderated to an estimated 2.7% in 2023 due to reduced global demand and domestic supply constraints. Despite these challenges, the economic outlook for PNG remains broadly positive. Projections show 4.8% growth for 2024, driven by non-extractive sector performance, particularly agriculture, with a slight moderation to 3.1% expected in 2025³.

Figure 1: Papua New Guinea Real GDP Growth (2017-2025)

¹ [Asian Development Bank and Papua New Guinea: Fact Sheet \(adb.org\)](https://www.adb.org/publications/papua-new-guinea-fact-sheet).

² [Overview: Development news, research, data | World Bank](https://www.worldbank.org/en/overview).

³ [May-2024-PNG-Economic-Update-Invest-in-your-children-ONLINE.pdf \(worldbank.org\)](https://www.worldbank.org/en/publications/may-2024-png-economic-update-invest-in-your-children-online).



Source: Developed internally with data from International Monetary Fund (IMF)⁴.

Gender inequality remains a significant challenge in PNG, though there have been some recent improvements. PNG's ranking in the UNDP Gender Inequality Index (GII) improved from 159th out of 160 countries in 2021 to 151st out of 166 in 2022. While this represents a positive shift, this improvement only brings the country back to its 2016 levels. This fluctuation highlights the fragility of progress in gender equality. The country's persistent position near the bottom of global rankings underscores the substantial work still needed to achieve gender equality in areas such as economic participation, education, and political representation. Gender-based violence (GBV) is particularly prevalent, with over two-thirds of women experiencing some form of violence in their lifetime. PNG's progress in human development has been stagnant in recent years. In 2015, PNG ranked 154th on the Human Development Index (HDI), the second lowest in the Pacific region. By 2022, PNG's position had slightly deteriorated to 155th out of 191 countries. Additionally, 57% of the population experiences multidimensional poverty⁵.

The STREIT programme is aligned to PNG's development priorities, which are anchored in two key strategic documents: [PNG Vision 2050](#) and the [PNG Development Strategic Plan \(PNGDSP\) 2010-2030](#). These long and medium-term national strategies aim to improve economic and social development, prosperity, and livelihoods through strategic investments in transport, utilities, education, health, and business incentives. They are operationalized through the PNG Medium Term Development Plans (MTDP), which link various levels of government planning from National to Ward level. Additionally, the Strategy for Responsible Sustainable Development for Papua New Guinea (StaRS) articulates a paradigm shift towards a more diversified economy, prioritizing sustainable agriculture, fisheries, and tourism while integrating economic, social, and environmental objectives. This planning framework, which integrates national, provincial, district, and local level plans, provides a comprehensive roadmap for PNG's progress towards achieving the Sustainable Development Goals.

Infrastructure deficits remain a major impediment to development in PNG, with a large portion of the population lacking access to basic services. While there has been a slight improvement in electricity access, increasing from 13% in 2020 to 20.9% in 2023, the majority of the population still lacks reliable power supply despite the country's abundance of renewable energy resources. As of 2022, road infrastructure is particularly challenging, with only 40% of the 8,738 km national road network sealed. Rural accessibility is low, with just 68% of the rural population living within 2 kilometers of an all-season road. This limits connectivity and economic development. As of 2023, telecommunications access is limited, with only 15%

⁴ [World Economic Outlook \(April 2024\) - Real GDP growth \(imf.org\)](#).

⁵ [2023 Global Multidimensional Poverty Index \(MPI\) | Human Development Reports \(undp.org\)](#).

of the population having reliable access. Sanitation services are also problematic, and 20% live in households where no adults finished primary school. These persistent infrastructure gaps significantly hinder economic opportunities and poverty reduction efforts across the country.

The escalation of security issues, especially in the aftermath of the 2022 elections, has added another layer of complexity to PNG's development challenges. The Highland regions, in particular, have witnessed severe unrest, with election-related violence spilling over into 2023 and beyond. This ongoing conflict has had devastating consequences, resulting in more than 400 fatalities and forcing over 30,000 people from their homes. The situation underscores the delicate balance between governance, security, and social cohesion in PNG, highlighting the need for comprehensive strategies to address these interconnected issues⁶.

PNG is prone to multiple natural hazards, which are being exacerbated by climate change. The country regularly faces threats from earthquakes, volcanic activity, tropical cyclones, and severe weather events, leading to frequent flooding and landslides. These disasters not only cause immediate loss of life and property but also disrupt essential services and economic activities, hampering long-term development efforts. Climate change is intensifying these risks, with rising sea levels threatening coastal communities and changing weather patterns affecting agricultural productivity. The country's limited capacity to predict, prepare for, and respond to these hazards further compounds its vulnerability.

Despite improvements in some indicators from 2019 to 2024, challenges remain. The rural-urban disparity persists, exacerbated by PNG's difficult terrain. Economic growth has translated into limited per capita income growth. PNG's economic potential is constrained by macroeconomic volatility, low productivity growth, and reliance on natural resources. The country's vulnerability to natural disasters and climate change, particularly in agriculture and energy sectors, presents additional challenges. Sustained political commitment and increased resources are required to achieve long-term positive change.

1.2 The intervention to be evaluated⁷

This evaluation covers one intervention financed by the EU in the Agriculture sector as follows:

Title of the intervention to be evaluated	Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (STREIT PNG)
Budget of the intervention to be evaluated	- EU contribution: EUR 81 000 000⁸ - FAO co-funding: EUR 300 000 - Total amount: EUR 81 300 000
CRIS and/or OPSYS number of the intervention to be evaluated	- CRIS number: FED/2019/410-934 - OPSYS number: INTV-11736
Dates of the intervention to be evaluated	Start date: 01/01/2020
	End date: 31/05/2026

1.2.1 Rationale for the provision of the EU support

The EU Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (STREIT PNG) programme is fully inscribed in the strategy of cooperation between the EU and GoPNG. Its commitment to inclusive development, local governance of development, and protection of natural resources – by fostering rural development through the transition from subsistence to input intensive, market-driven agricultural production - is consistent with the priorities of the EU-PNG Multiannual Indicative Programme

⁶ [2024 Papua New Guinea Crisis Response Plan 2024.pdf \(iom.int\)](#).

⁷ The term 'intervention' is used throughout the Terms of Reference as a synonym of 'programme'.

⁸ InforEuro exchange rate of August 2019- 1.1154 EUR/USD

2014-2020 (11th EDF) that indicates that the EU supports country reforms in areas that have a strong multiplier effect, specifically by promoting the socio-economic inclusivity of rural areas. Its strategy bridging the gap between the smallholder farmers and the market by promoting innovation and aggregating the offer of agricultural products strengthens the competitiveness of the rural economy. The agriculture allocation in its entirety is committed through STREIT PNG.

The formulation phase of the STREIT PNG programme started in 2016 and was based on in-depth consultations organized by the EU Delegation with a range of stakeholders in the country. FAO participated in five scoping and design missions, and other UN Partners also undertook in-country preparation missions. During the design of the STREIT programme, PNG was implementing its Medium-Term Development Plan III 2018-2022 (MTDP III), which aligns with the country's overarching development framework, the PNG Vision 2050. The programme established multiple links with the MTDP III. It adopted a multi-sector approach, focusing on key areas such as nutrition, trade, electricity and digital development, roads and transport, employment, and financial inclusion. This comprehensive strategy was intended to support the efforts of Provincial, District, and Local governments in addressing critical development challenges. By its alignment with the MTDP III, the STREIT programme aims to contribute to PNG's long-term vision of achieving sustainable and inclusive economic growth.

The intervention aimed to address development challenges in the Sepik Provinces (Sandaun and East Sepik), amongst the poorest areas in PNG, focusing on three specific value chains: cocoa, vanilla, and fisheries.

The rationale for EU support stemmed from:

- The urgent development needs of the Sepik region, which has not previously benefited from large-scale support from the government or development partners.
- High rates of malnutrition in the area, with the region scoring second highest in PNG for stunting and underweight children.
- Excellent agro-ecological potential for developing existing crops, especially in the Torricelli foothills.
- The presence of an existing road network, albeit in need of maintenance, connecting producing areas to market centers.
- The opportunity to build on and complement other ongoing development initiatives in the region.

1.2.2 Description of the intervention approach, intervention logic and theory of change

The STREIT PNG programme adopts a holistic approach to rural development. The programme's overall objective is to increase sustainable and inclusive economic development in rural areas, structured around two integrated outcomes:

1. Increasing economic returns and opportunities from selected value chains (cocoa, vanilla, fishery).

With the following results:

Output 1.1: Increased sustainable production and inclusiveness of the Cocoa value chain

Output 1.2: Increased sustainable production and inclusiveness of the Vanilla value chain

Output 1.3: Increased sustainable production and inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)

2. Strengthening and improving the efficiency of value chain enablers, including the business environment and supporting sustainable, climate-proof transport and energy infrastructure development.

With the following results:

Output 2.1: Conducive business, trade, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established

Output 2.2: Value chain support services strengthened and resilient to climate change impacts

Output 2.3: Increased production of, and access to renewable energy systems

Output 2.4: Improved and climate-proof rural transport infrastructure

The programme is implemented within the framework of FAO's Strategic Objectives, particularly SO4 (Enable inclusive and efficient agricultural and food systems) and SO2 (Make agriculture, forestry and fisheries more productive and sustainable). It also aligns with Papua New Guinea's Country Programming Framework (2016-19) priority areas. The programme explicitly contributes to eleven Sustainable Development Goals (SDGs), demonstrating its multi-faceted approach to rural development and its alignment with global development priorities.

The inception phase began on January 1, 2020, following the signing of two key agreements:

- The Financing Agreement (FA FED/2018/039-995) was signed on February 7 and June 4, 2019, between the Directorate of Development Cooperation (DG DEVCO) of the European Union (EU) and the Ministry of Planning and Monitoring of PNG, allocating a budget of €85.6 million for 60 months.
- Subsequently, the Contribution Agreement (CA FED/2019/410-934) was signed on December 5-6, 2019, between the EU Delegation to PNG and FAO, along with partner UN agencies (ILO, UNCDF, UNDP, ITU), allocating €81.6 million for 53 months, including €0.3 million co-financing from FAO.

Full-fledged field work delivery commenced on April 19, 2021. The programme was initially set to conclude on May 31, 2024, but has been extended until November 2025. It first focused on the Sepik Provinces (Sandaun and East Sepik).

The programme targets a range of value chain stakeholders as beneficiaries, including local agripreneurs, MSMEs, farm families, and their organizations, with a particular focus on women and youth. By prioritizing women and youth, the programme aims to address gender disparities and promote inclusive economic growth, recognizing these groups as key drivers of sustainable rural development. Direct benefits of the programme include increased income for producers, traders, and local MSMEs and enhanced adaptive capacity to climate change, food security, and nutrition. Indirect benefits encompass improvements in policy, regulatory, business, and digital environments.

Theory of Change and intervention logic

The intervention logic is built on four mutually reinforcing pillars: improving the business enabling environment, providing support services for value chain development, establishing climate-proof physical infrastructure, and fostering community engagement with a focus on women and youth. The Theory of Change (ToC) emphasizes the interconnectedness of individual, collective, and institutional capacity building to drive improvement in the rural economy. It recognizes the importance of value chain governance and its connection to broader local development governance, while incorporating considerations for sustainability and climate change impacts. The programme aims to create capacities at individual, community, and institutional levels, connecting local initiatives to national ones. The strengthening of capacities is directed not only at production but also at participation in value chain governance and advocacy of interests at different geographical levels.

The intervention strategy centers on promoting access to innovation to strengthen the three selected value chains. This approach leverages capacity building, production asset development, and infrastructure enhancement to strengthen production renewal and offer aggregation, thereby improving smallholders' position within the value chains. By focusing on these specific value chains, the programme aims to create a ripple effect of economic growth and development throughout the target regions.

The programme's national scale links the strengthening of the regulatory framework to assistance for producers and their partners, aiming to create conditions that facilitate access to inputs and trade of produce. The intervention logic acknowledges the challenges in uptake of innovation and investment, emphasizing the need for local leadership and partnership with actors rooted in target areas. This approach is expected to reduce risks associated with integrating rural producers with service providers and prompt the replication of successful experiences at a larger scale.

The programme's logframe has evolved through consultative processes with key stakeholders, particularly the European Union Delegation (EUD) and the Department of National Planning and Monitoring (DNPM). While maintaining all original indicators from the Programming Document, the logframe was refined to ensure indicators are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART). This refinement process has helped strengthen the monitoring and evaluation framework while staying true to the programme's core objectives. The updated logframe maintains the same hierarchical structure with overall objectives focused on increasing sustainable and inclusive economic development, specific objectives targeting economic returns from value chains and strengthening enablers, and detailed output indicators tracking progress across all programme components. The revised logframe is available in Annex I.

Program overview and implementation progress

Within this joint UN programme, UN agencies implement key technical activities across all three value chains and contribute to the enabling environment. Under Outcome 1, FAO's role centres on delivering climate-smart agriculture practices, processing equipment such as solar dryers, and certification systems across cocoa, vanilla, and fisheries value chains. Under Outcome 2, FAO contributes to the enabling environment by supporting local agro-food enterprise development and trade through policy development, including drafting the National Agriculture Development Plan, supporting the Food Security Policy development, and preparing the eAgriculture Strategy. FAO also manages an Agripreneur Innovation Fund to support local value chain entrepreneurs and delivers business development services in partnership with local institutions.

The program works across three distinct value chains with tailored interventions. The *cocoa value chain* component aims to increase sustainable production and inclusiveness in the Sepik region, where cocoa is a significant economic driver. The programme addresses critical challenges such as the widespread infestation of cocoa pod borer (CPB), which has reduced productivity by up to 80%. Interventions include establishing bud gardens for CPB-tolerant varieties, improving fermentaries and drying facilities to reduce smoke taint, introducing climate-smart agriculture practices, and developing certification systems. The programme also supports market coordination and improved producer capacity through farmer clusters and collective marketing groups.

The *vanilla value chain* development focuses on enhancing quality and market access in a region that produces 50-75% of PNG's vanilla. The programme supports improvements across the entire chain, from production to market linkages. Key interventions include providing improved planting materials, enhancing curing and drying processes through renewable energy solutions, strengthening quality control standards, and developing certification systems. Special attention is given to women and youth engagement, particularly in pollination and processing activities, while addressing critical challenges like security risks in transport and marketing.

The *fisheries value chain* represents a smaller component that primarily focuses on food security and nutrition rather than commercial development. With fish being an essential protein source in riverine and coastal communities, the programme supports sustainable community-based management of resources, introduces improved fishing techniques, and provides solar-powered cold storage facilities. The emphasis is on increasing the availability of quality fish products to address malnutrition, particularly stunting, which is prevalent in the Sepik region.

Key Achievements

As of September 2024, the programme has reached approximately 499,000 people through assistance to 83,200 households across more than 750 farmer groups in the Sepik region. The following results have been achieved under the two outcomes:

Outcome 1:

- Training of 33,750 lead farmers in cocoa, vanilla, and fisheries who are now cascading knowledge to other farmers
- Empowerment of 567 nurseries through provision of materials (including 4.32 million polybags)
- Planting of over 2.48 million CPB-tolerant cocoa seedlings
- Establishment of 20 vanilla treatment sheds
- Distribution of 669,000 healthy vanilla vines
- Improvement of inland fish farming through distribution of 98,200 fingerlings and support to 280 fisher groups
- Development of premium export market linkages for cocoa and vanilla farmers and SMEs in Australia, New Zealand, and North America

Outcome 2:

- Rehabilitation of 158 km of farm-to-market roads (13 roads), creating over 202,700 decent local employment (Person Days)
- Rehabilitation and maintenance of 5 airstrips in collaboration with Rural Airstrip Agency Limited
- Training of 1,025 government engineers, contractors, and workers, and establishment of Road Transport Information Management System (RoTIMS)
- Facilitation of 115,000 bank accounts and establishment of 260 Bank Access Points
- Installation of 9 solar sites at public facilities
- Establishment of 7 Digital Resource Centers providing ICT services to beneficiaries (with 4 more in progress)

1.3 Stakeholders of the intervention

The programme is implemented as a United Nations Joint Programme (UNJP) in partnership with the Government of Papua New Guinea. FAO is both the Administrative Agent and the Convening Agency of the UNJP.

As the Convening Agency (CA) FAO is accountable for the coordination of programmatic activities and narrative reporting, compilation of annual work plans, monitoring of annual targets, convening and reporting on the Project Steering Committee (PSC) meetings and facilitating evaluation

As the Administrative Agent (AA), FAO is responsible for the financial and administrative management of the EU funds in compliance with the Rules and Regulations of FAO, the General and Special Conditions of the Contribution Agreement signed with the EU as well as the conditions of the Memorandum of Understanding (MOU) signed between the United Nations (UN) agencies. The AA will manage contributions received from EU and disburse the funds based on the PSC's decisions and instructions, as well as consolidate periodic financial reports and final financial reports for submission to the donor.

FAO therefore leads the implementation and coordinates activities with the following partner agencies: International Labour Organization (ILO), International Telecommunication Union (ITU), United Nations

Capital Development Fund (UNCDF), and United Nations Development Programme (UNDP). The UN Resident Coordinator oversees the UN agencies' actions.

This multi-agency approach addresses various themes contributing to value chain competitiveness, including road infrastructure (ILO), access to finance (UNCDF), renewable energies (UNDP), and Information and Communications Technology (ICT) services (ITU). It ensures a comprehensive strategy that tackles multiple aspects of rural development simultaneously, from agricultural production to enabling infrastructure and services.

Key national partners include relevant government departments such as the Department of National Planning and Monitoring (DNPM), the Ministry of Agriculture (MoA) and its Department of Agriculture and Livestock (DAL), and semi-state bodies like the Cocoa Board and National Fisheries Authority. The programme also collaborates with other EU-funded projects, such as SPOTLIGHT on Gender-Based Violence (jointly implemented, UNICEF, UNDP, UNFPA), and aligns with ongoing FAO and UN Partner Agency initiatives. This collaboration extends to projects like the National Agriculture Policy supported by the FAO Technical Co-operation Programme, the UNDP-led GEF programme on Climate and Energy, and the Pacific Financial Inclusion Programme (PFIP) implemented by UNCDF, ensuring synergy and complementarity among various development efforts in the region.

The following table describes the key stakeholders of the intervention and their interaction with the intervention.

Stakeholder groups	Stakeholder	Role and involvement in the intervention
Implementing partners	Food and Agriculture Organization (FAO)	As Convening Agency and Administrative Agent, FAO manages coordination and implementation of the project with UN partners. FAO provides technical and capacity building support specifically focused on increasing sustainable production and inclusiveness of the cocoa, vanilla and fisheries value chains.
	International Labor Organization (ILO)	Leads the road and infrastructure component, focused on upgrading roads, bridges, jetties and airstrips. The infrastructure work aims to create an enabling environment for farmers to increase income and profit, providing opportunities to participate in value-added markets to become agripreneurs under the three value chains supported by the Programme.
	UN Capital Development Fund (UNCDF)	Focuses on improving access to finance and financial awareness among value chain producers through four areas: Policy and regulation, value chain-focused financial product and services, improving and expanding the distribution channel of financial services, and building capacities of financial service providers to cater to agri-value chain actors.
	United Nations Development Programme (UNDP)	Manages the renewable energy component by contributing to the development of energy policies and installing renewable systems in public facilities. UNDP provide solar power to value chain actors to increase productivity, while supporting climate resilience through improved access to renewable energy technologies.
	International Telecommunication Union (ITU)	Promotes communication tools and technologies for improving digital services. ITU implement the Information and Communication Technology (ICT) component and work closely with partner UN agencies and other stakeholders in Papua New Guinea.
	Department of National Planning and Monitoring (DNPM)	Central agency responsible for the overall coordination and monitoring of all Development Programmes in the country.

National partners		Hosts the National Authorized Officer of the European Development Fund
	Department of Agriculture and Livestock (DAL)	Lead counterpart. Provides technical assistance to farmers and facilitates the implementation of the value chains.
	Ministry of Agriculture (MoA)	Frame policies that orientate production and irrigation investments and provide extension services to farmers. Work closely with NGOs, private sector bodies and community-based organisations in assisting the farmers.
	Department of Works and Highways (DoWH)	Provides rural infrastructure services and it is as key partner at national and provincial level on maintenance and improvement of roads and riverine infrastructure.
	National Fisheries Authority (NFA)	The NFA is mandated for fisheries development in PNG and is a key partner both at the national and also provincial level. Fisheries activities of STREIT are integrated into the work plans of NFA.
	Department of Transport and Infrastructure	Provide transport policy, strategy and planning advice across all three modes of transport (air, land, and sea)
	Local Government Authorities (LGA)	Province and district level authority in charge of socio-economic development at local level.
	National Information and Communication Technology Agency (NICTA)	Regulates the ICT industry by ensure it contributes meaningfully to the long-term economic and social development of PNG.
	National Agriculture Quarantine and Inspection Authority (NAQUIA)	Certifies agricultural, fisheries, and livestock commodities, and provides biosecurity services.
	Climate Change and Development Authority (CCDA)	Coordinates the Climate Change related policies and actions in the country.
Semi-state partners	Department of Community Development (DCD)	Develops policy and legislation that promote community development initiatives, services and programmes. Is responsible for women, gender and community engagement and empowerment.
	Cocoa Board	Leading national body on cocoa sector development. It licences exporters/fermenters/dry-bean cocoa dealers/etc. and monitors these value-chain players to ensure that fair pricing is maintained
	Spice Industry Board	The Spice Industry Board (SIB) is a DAL extension service / regulatory body, providing support to a 9 crops (including vanilla) value chains. It only has 6 staff at national level.
End beneficiaries	Producers	Cocoa and vanilla producers, fisherfolks in the East and West Sepik region
	Traders	Cocoa and Vanilla traders, at national and international level
	Agripreneurs/local MSME	Engaged in the selected value chains in East and West Sepik region

1.4 Previous internal and external monitoring (incl. ROM), evaluations and other studies undertaken

#	Title and date of the exercise	Key findings or recommendations
1	Baseline survey (2021)	Sampling and methodology. The baseline survey covered 1,394 households (905 in East Sepik and 489 in West Sepik) across nine districts (East Sepik: Ambunti-Dreikikier, Angoram, Maprik, Wewak, Wosera-Gawi, Yangoru-Saussia, West Sepik: Aitape-Lumi, Nuku, Vanimo-Green). The households were selected using a stratified random sampling. Given the program's target

	beneficiary population of 83,200 households, the sample size of 1,394 complete responses represents approximately 1.7% of the total beneficiary population. The survey did not include a control group. The sampling frame was stratified by provinces, districts, and local level Government areas, with districts further categorized based on agricultural production activities (cocoa, vanilla, fisheries). While the geographic coverage was comprehensive some districts were underrepresented due to accessibility challenges during the wet season. For instance, Yangoru-Saussia district had only 48 completed surveys, potentially affecting the representativeness of data from that area. <u>EU-STREIT PNG's baseline survey findings:</u> Demographics and education. Less than half of survey respondents completed primary education, with lower levels among females. Average household size is six persons with landholdings of 1.60 ha. Over 80% of households are male headed, reflecting the patrilineal nature of societies in both provinces. Value chains. Production practices for cocoa and vanilla require improvement, particularly in Climate Smart Agriculture (CSA) adoption and post-harvest handling practices in the value chains. Coastal fishing provides a source of food and income for coastal communities. Although coastal fishing is highly profitable, adoption of best fishing and post-harvest practices is still lacking and requires intervention programs to improve on this value chain. Fisheries. Riverine fishing dominates in West Sepik with 70% of households participating, focusing on tilapia, pacu, and "raba maus". Coastal fishing shows high profitability but lacks best practice adoption, with tuna representing 60% of catches. Aquaculture faces significant challenges with 89.8% of fishponds operating at artisanal level, constrained by limited access to fingerlings and commercial feed supply. The development of aquaculture in the Sepik region has been hampered by lack of access to quality fingerlings and limited supply of commercial feed within the country, as well as limited technical capacity both at the fish farmer's and government levels. Infrastructure. Access to reliable electricity remains severely limited, reaching only 15% of the population, while over 73% of rural residents have limited or no access to energy sources. Solar power has emerged as the primary electricity source, with 73.48% coverage across both provinces. Transport infrastructure significantly impacts economic activity, with 50% of households needing to sell their produce outside their communities. The survey indicates strong community support for road improvements, with 70% believing better roads would increase access to consumer goods and 62% expecting increased trade opportunities. Enhanced road infrastructure would also improve public transport services to remote villages. ICT services. Despite ICT's crucial role in supporting individual activities, business processes, and organizational operations, approximately 60% of the population lacks access to any ICT services in the program area. This digital divide significantly impacts the region's development potential and ability to participate in modern economic activities. Financial services. Financial exclusion remains a critical challenge, with more than 70% of households lacking access to formal banking and financial institutions. This gap in financial services particularly affects rural, low-income populations in the Sepik region. The survey emphasizes the importance of expanding financial inclusion to the district level to better serve these underserved communities.
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		Gender. Traditional male-dominated decision-making is evolving, with 70% of households now making joint financial decisions between men and women. Men make sole decisions in less than 20% of cases, while women lead decision-making in fewer than 10% of households. Nutrition. Household diets predominantly consist of roots, tubers, and dark green leafy vegetables, comprising 80-90% of overall food intake. Dietary diversity measurements reveal concerning levels: the Household Dietary Diversity Score stands at 5.79, Women's Score at 4.79, and Children's Score at 3.01, indicating significant nutritional challenges across all population groups.
2	Mid Term Evaluation of the Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (June 2023)	Relevance. The STREIT PNG programme aimed to transition the East and West Sepik provinces from subsistence to market-driven agricultural production, aligning with PNG Vision 2050. It transferred innovative production techniques to smallholder farmers using a value chain approach, supported by improvements in rural transport, communication, financial services, and access to renewable energy. However, the programme lacked a crucial component to strengthen the planning and management capacities of local administrations and beneficiary communities. This gap hindered the programme's ability to be locally driven and produce synergies with other local development activities. Effectiveness. Progress had been notable but uneven across components due to varying start dates, sizes, and operational modalities. The Cocoa value chain and road maintenance showed significant advancements, benefiting many farmers and fishers. However, ICT adoption was slow due to underdeveloped infrastructure and low digital literacy. The financial component successfully supported the creation of new individual and collective accounts, facilitating economic transactions for farmers, while the renewable energy component prioritized solar energy despite initial delays. Fishery and aquaculture components faced delays due to late starts and import complexities. The programme also assisted in developing e-Agriculture strategies and establishing resource centers for value chain actors. Efficiency. The programme's complex setup and COVID-19 restrictions had initially delayed field activities. The execution of larger components, particularly value chains and roads, was slow in the initial phases, negatively affecting budget execution. However, expenditure rates had improved as the programme progressed, with full staff deployment and the easing of COVID-19 restrictions. Road rehabilitation faced additional challenges due to unfavorable weather conditions. While direct revenues from value chains were projected to be less than half of the STREIT investments, the overall development process was expected to generate additional revenues that would exceed the initial investment. The programme's communication efforts had reached a significant portion of both the Sepik region inhabitants and the broader PNG population, although exact reach was difficult to determine due to overlapping media channels. Impact. The adoption of improved varieties and technologies, combined with procurement delays, had not yet produced substantial economic impact. While the programme was approaching its target for households assisted across the three value chains, the expected impact was slowly growing. The review highlighted a positive trend among committed farmers' groups, who had expanded their initiatives to non-project communities, sharing cocoa clones and innovative practices. However, marginal farmers in remote areas faced persistent challenges, with some reverting to previous cropping practices. This indicated persistent barriers preventing full exploitation of the programme's assets and enabling services, especially in isolated areas.

		Sustainability. While most producers and assisted communities were eager to intensify and expand production in cocoa, vanilla, and fish, the sustainability of initial results remained uncertain. The enabling services were not yet operating on a cost recovery basis, which was crucial for long-term viability. Economic benefits for assisted farmers were minimal at the time, though overall outlooks were positive. The sustainability challenge lay in the multiple environmental and socio-economic problems faced by beneficiaries, which could discourage their commitment to market-oriented production. The MTR found that enhancing the management skills of smallholder organizations and establishing cost recovery modalities for innovation transfer and maintenance were critical for ensuring the programme's lasting impact and informing its exit strategy. Recommendations 1. Development perspective of technology transfer. Expand the capacities of lead farmers to transform them into community agricultural workers, extending their role beyond training fellow beneficiaries. Action taken: Strengthen targeted capacity of farmer groups, lead farmers/executive committee members, extension service providers including government, and MSMEs. Promote fee-based services for cocoa budders and clone seedling, fingerling providers to ensure continuity after programme phase-out. 2. Value chains technical packages. Elaborate and include water-economy practices in producer assistance. These include small ponds to store water and community fishing ponds. Action taken: Strengthen aquaculture training including appropriate site selection, pond design, and water access/availability. Working closely with government fisheries authorities and promoting feed formulation with locally available ingredients. In dialogue with stakeholders for fish feed mill establishment. 3. Exchange of experiences. Increase visits to successful beneficiaries to spread lessons learned, showcasing achievements of champions and innovative practices while addressing challenges faced by producers' groups and MSMEs. 4. Action taken: Promote internal and external exposure/study visits including farmer-to-farmer, MSMEs and other actors across the value chain. Develop appropriate communication materials for dissemination through different mediums and channels. Budget management. Establish an agreement among UN agencies to advance funds using accumulated financial reserves, thereby speeding up the execution of tasks. Action taken: Implement measures to synchronize planning and budgeting timeline with advance request and disbursement of funds. 5. Cooperation with GoPNG institutions. Associate other institutions and provincial administrations dealing with the programme in the performance of field monitoring missions. Action taken: DNPM to facilitate implementation. Technical Working Group members to facilitate Programme integration into organizational workplans. 6. No-cost extension. Elaborate a plan for the no-cost extension of the value chains strengthening and road rehabilitation components, focusing on sustainability and completing ongoing works while entrusting ancillary activities to relevant staff and local partners. Action taken: Prepare workplan and budget after stakeholder consultation.
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		7. Value chain governance. Adopt a comprehensive approach to value chain governance by organizing meetings of individual value chain actors, developing cost recovery modalities, and collaborating with producers' groups, local administrations, and technical agencies. Action taken: Facilitate dialogues with Greater Sepik Business Forum and authorities. Develop business models and policy briefs for discussion at various levels. 8. Rural roads maintenance. Organize workshop on rural road maintenance modalities. Action taken: Support government to establish sustainable maintenance system, developing policy on worker remuneration, securing commitment to annual funding and continuing technical training. 9. Enabling services. Implement comprehensive enabling services across four key areas: (1) Assist partners in e-Agriculture strategies and digital services implementation; (2) Support resource centers in developing training work plans and capacity building; (3) Help establish financial service points at district level through CellMoni; and (4) Train local teams on solar system maintenance. 10. Information management systems. Explore the opportunity of transferring tasks performed by the programme's Information Management System to those under design for the Cocoa Board and National Fisheries Authority. Action taken: Conduct needs assessment, MIS development for Cocoa Board and NFA, and develop government department capacity. For transport, develop RoTIMS system and transfer to NDoWH, updating specifications and guidelines.
3	Internal monitoring	The STREIT programme has an internal monitoring system (STREITMIS) that collects data on all activities conducted in the field, such as capacity building, input distribution, study tour/exposure visits, Letters of Agreement, meetings etc. Each activity is accompanied by scanned copies of the beneficiaries' lists as means of verification, ensuring transparency and accountability. Additionally, the STREITMIS has details of Programme MSMEs, staff and demographic information. Note to the applicants: the methodology proposed should therefore focus on qualitative methods and take into account that quantitative information on above indicators will be available through the internal monitoring system of the STREIT programme.
4	Other studies	- Fostering Sustainable and Inclusive Cocoa Value Chain in Papua New Guinea: Impacts of the Rural Entrepreneurship, Investment and Trade Support program for East Sepik and West Sepik, <i>Draft Dec. 2024</i>. - Policy Brief: Fostering Sustainable and Inclusive Cocoa Value Chains in Papua New Guinea: Impacts and Lessons from the EU-STREIT PNG Programme, <i>Draft Dec. 2024</i>. - Transforming Papua New Guinea's Vanilla Value Chain: Impacts of the European Union- Support to Rural Entrepreneurship, Investment and Trade programme for East Sepik and West Sepik, <i>Draft Dec. 2024</i>. - Policy Brief: Unlocking the Potential of Papua New Guinea's Vanilla Sector: Impacts and Lessons from the EU-STREIT PNG Programme, <i>Draft Dec. 2024</i>. - Role of Enabling Services on Transformation of Cocoa and Vanilla Value Chain in Papua New Guinea, <i>Draft Dec. 2024</i>. - Aquaculture and Livelihoods: A Socioeconomic Impact Study in the Sepik Region, <i>Ongoing</i>.

	- Riverine and Coastal Livelihoods: Assessing the Impact on Communities in the Sepik Region, <i>Ongoing</i>. - Maturity Assessment of EU-STREIT PNG MSMEs, <i>Ongoing</i>. - Socio-economic Impact Study of ILO-STREIT Rural Road Rehabilitation and Maintenance Work in East and West Sepik Provinces of Papua New Guinea, <i>Final Dec. 2024</i>. - Assessment of Renewable Energy Sites at Public Facilities in Sepik, <i>Ongoing</i>. - Bridging the Digital Divide: How Resource Centers Are Transforming Farming Communities, <i>Ongoing</i>. - Impact Assessment of Financial Inclusion, <i>Ongoing</i>. <i>Note: Gender is incorporated in the value chain reports.</i>
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2 RESULTS

Type of evaluation	Final evaluation
Coverage	The intervention in its entirety
Geographic scope	Sepik Provinces (Sandaun and East Sepik)
Period to be evaluated	1/1/2020 to 31/12/2025 (full implementation period)

2.1 Global Objective of the evaluation

Systematic and timely evaluation of its programmes and activities is an established priority⁹ of the European Commission¹⁰ and a key policy requirement of FAO Office of Evaluation¹¹.

The focus of evaluations is on the assessment of achievements, the quality, and the results¹² of interventions in the context of an evolving cooperation policy, with increasing emphasis on result-oriented approaches and the contribution towards the achievement of the Sustainable Development Goals (SDGs).¹³

From this perspective, evaluations should look for evidence of why, whether and how the EU intervention has contributed to the achievement of these results and seek to identify the factors driving or hindering progress.

The OED Evaluation Manual¹⁴ emphasizes that evaluations serve to assess the extent to which FAO has contributed to expected results while ensuring factual accuracy, validating findings and analytical conclusions, and providing recommendations that are realistic and actionable. This evaluation will adhere to OED's established quality control criteria, ensuring findings are well substantiated by evidence from relevant sources, triangulated, and supported by logical analysis and reasonable judgments. The evaluation will maintain clear presentation of findings, conclusions and recommendations without ambiguity and

⁹ COM(2013) 686 final "Strengthening the foundations of Smart Regulation – improving evaluation"; EU Financial regulation 2024 (art. 34 Evaluations); Regulation (EU) 2021/947; Regulation (EC) No 1905/2006; Regulation (EC) No 1889/2006; Regulation (EC) No 1638/2006; Regulation (EC) No 1717/2006; Council Regulation (EC) No 215/2008.

¹⁰ SWD(2021) 305 final "Better Regulation Guidelines".

¹¹ Charter of the FAO Office of Evaluation, 2010.

¹² Reference is made to the entire results chain, covering outputs, outcomes and impacts. Cfr. Regulation (EU) No 236/2014 "Laying down common rules and procedures for the implementation of the Union's instruments for financing external action"

¹³ The New European Consensus on Development 'Our World, Our Dignity, Our Future', Official Journal 30th of June 2017.

¹⁴ OED Evaluation Manual.

subjectivity in language, while ensuring that conclusions are directly supported by findings and answer the main evaluation questions.

The **global objective** of this evaluation is twofold:

- to provide the relevant services of the European Union and development partners, the interested stakeholders and the wider public with an overall independent assessment of the performance of the Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (STREIT PNG), paying particular attention to its different levels of results measured against its expected objectives and to the reasons underpinning such results;
- to identify key lessons learned, conclusions and related recommendations in order to inform decision makers on how to improve current and future interventions.

2.2 Specific objectives of the evaluation

The **specific objectives** for this evaluation are:

- To inform the exit strategy of the intervention to ensure the sustainability of its results
- To draw lessons that can be replicated in other donor-funded interventions in similar thematic areas and country context
- To be accountable for the use of EU and FAO resources in relation to the results of the intervention

The evaluation will assess the intervention using the standard DAC evaluation criteria, namely: relevance, coherence, efficiency, effectiveness and sustainability. In addition, the evaluation will assess the intervention through an EU specific evaluation criterion, which is the EU added value.

The definitions of the DAC and the EU evaluation criteria are contained for reference in Annex III.

Furthermore, the evaluation team should consider whether **gender equality and women's empowerment**¹⁵, **environment** and **adaptation to climate change** were mainstreamed (when relevant); the relevant **SDGs** (Main: SDG2; Significant: SDG1, SDG5, SDG7, SDG8, SDG9, SDG12, SDG13, SDG15 and SDG17) **and their interlinkages** were identified; the principle of **Leave No One Behind** (this includes persons with disability, indigenous peoples, children, and the elderly) and the **Human Rights-Based Approach** was followed during design, and the extent to which they have been reflected in the implementation of the intervention, its governance and monitoring.

The specific Evaluation Questions (EQs), as formulated below, are indicative. They outline what the evaluation should focus on, have a primary impact on the methodology that the evaluators will develop, and determine the findings that will be produced by the evaluation.

Following initial consultations and document analysis, and further to the finalisation/reconstruction of the intervention to be evaluated, the evaluation team will discuss these with the evaluation managers and the Evaluation Reference Group and propose in their Inception Report a complete and finalised set of Evaluation Questions. This will include an indication of specific judgement criteria and indicators, as well as the relevant data collection sources and tools.

Once agreed through the approval of the Inception Report, the Evaluation Questions will become contractually binding.

¹⁵ Read more on Evaluation with gender as a cross-cutting dimension in the [Guide on evaluation with gender as a cross-cutting dimension](#).

Evaluation Question 1 (Relevance and targeting) - To what extent were the project objectives, selected value chains, and geographical targeting relevant and suited to the priorities and needs of the PNG government, European Union, UN implementing partners and the beneficiaries, and contextual factors influences these choices?

Evaluation Question 2 (Effectiveness – SO1) - To what extent has the project increased economic returns and opportunities for cocoa, vanilla and fisheries value chains actors? In particular, what are the results achieved for the following expected outputs:

1. Increased sustainable production and inclusiveness of the Cocoa value chain
2. Increased sustainable production and inclusiveness of the Vanilla value chain
3. Increased sustainable production and inclusiveness of the Fisheries value chain (coastal, riverine and aquaculture)

Evaluation Question 3 (Effectiveness – SO2) – To what extent has the project strengthened and improved the efficiency of value chain enablers? In particular, what are the results achieved for the following expected outputs:

1. Conductive business, trade, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established
2. Value chain support services strengthened and resilient to climate change impacts
3. Increased production of, and access to renewable energy systems
4. Improved and climate-proof transport infrastructure

Evaluation Question 4 (Gender and youth) – How has the programme impacted gender equality and empowered women and youth in terms of participation, decision-making, and benefits within the cocoa, vanilla, and fisheries value chains, and what factors influenced these outcomes?

Evaluation Question 5 (Environment and adaptation to climate change) - How effectively did the project identify and address environmental and social risks, and to what extent did it promote environmental sustainability and adaptation to climate change?

Evaluation Question 6 (Action governance / coordination / M&E) – To what extent were the project governance structure appropriate and efficient, including in the context of UN Joint Programmes / One UN Approach? How efficient were the coordination and M&E of the programme?

Evaluation Question 7 (Efficiency) - To what extent did the programme demonstrate efficient use of resources and capacity to deliver, both financially and technically?

Evaluation Question 8 (Sustainability) – What are the financial, institutional, social, and environmental risks to sustaining project results in the long term, and how effectively have these risks been addressed or mitigated? What additional measures are needed to protect and enhance the project's achievements?

Evaluation Question 9 (EU added value) - To which extent does the Action bring additional benefits to what would have resulted from Member States' interventions only?

2.2.1 The main users of this evaluation will be DNPM, EU, FAO and all implementing partners

#	Users of the evaluation	Key uses (how they will use the evaluation)
1	EU services including: the EU Delegation in PNG, geographic unit.	EU services future programming, improve current implementation of related interventions.

2	National counterparts (relevant Departments, Ministries) DNPM Department of Agriculture and Lands (DAL) Department of Works (DoW) DTTI, Department of Information and Technology (Ex- DCIE) National Fisheries Authority (NFA) The National Information and Communications Technology Authority (NICTA) Department of Commerce and Industry Cocoa Board Spice Board Provincial Government of East Sepik Provincial Government of West Sepik	Sustainability Designing of future interventions Improve current implementation of related interventions
3	Implementing partners: FAO UNDP ILO UNDCF ITU UNRC	Learning within the organization Improving future programming and implementation on similar thematic area or country context

2.3 Requested services including suggested methodology

2.3.1 Structuring of the evaluation and deliverables

The evaluation process will be carried out in 4 phases and various activities:

1. Inception phase
2. Interim phase (desk and field activities)
3. Synthesis phase
4. Dissemination phase

1. Inception phase

Objectives of the phase: to structure the evaluation and clarify the key issues to be addressed.

Main activities:

- Initial review of background documents (see Annex III).
- Remote kick-off session between the EU Delegation, DNPM, FAO OED, the Reference Group and the evaluators. Objectives of the meeting: i) to arrive at a clear and shared understanding of the scope of the evaluation, its limitations and feasibility; ii) to clarify the expectations of the evaluation; iii) to illustrate the tentative methodology to be used; iv) any other relevant objectives.
- Initial interviews with key stakeholders.
- Finalisation or reconstruction of the Intervention logic/Theory of Change (IL/ToC). This involves a careful consideration of the existing log frame and of the documentation available on the

intervention and its context and requires an assessment of the evidence (between the hierarchy of results e.g., outputs, outcomes, and impact) and the assumptions necessary for the intervention to deliver change as planned. The reconstructed intervention logic should be presented in the form of a simplified diagram that articulates the four levels: inputs, outputs, outcomes, and impact. Additional layers can be added to map activities or distinguish between shorter-term and medium-term outcomes. A concise narrative should accompany the diagram, explaining the main causal links across the results chain and highlighting key contextual, operational, hypothetical, and environmental assumptions made.

- Finalisation of the Evaluation Questions (EQs) listed in section 2.2.1, based on the reconstructed Intervention Logic/Theory of Change while working in collaboration with the evaluation manager and the Evaluation Reference Group.
- Finalisation of the Judgment Criteria (JCs), Indicators, the main evaluation criteria, and related sources of information.
- Build the Evaluation Matrix to present the framework for collecting, classifying, and making evaluation findings accessible based on the finalised evaluation criteria, EQs, JCs, Indicators, and related sources of information. To establish the Evaluation Matrix, the evaluators may refer to the example in Annex IV.
- Finalisation of the evaluation methodology, based on and driven from the contextual realities including the identified sensitivities, definition of judgement criteria and indicators for each Evaluation Question, as well as the selection of data collection tools and sources. The methodology should be gender sensitive, contemplate the use of sex- and age-disaggregated data, and assess if, and how, the intervention has contributed to progress on gender equality. It should also contemplate the inclusion of tools or indicators specifically designed to measure gender equality, inclusivity, and other cross-cutting issues.
- Workplan of subsequent phases.
- Identification of the expected risks and limitations of the methodology, and of the envisaged mitigation measures.
- Preparation of the Inception Report; its content is described in Annex V.
- Remote presentation of the Inception Report to the EU, FAO and the Reference Group, supported by a slide presentation.
- Revision of the inception report (as relevant) following receipt of comments from EU, DNPM and FAO.

Deliverables and meetings:

- Meeting (remote): kick off session
- Inception report
- Slide presentation to present the inception report to the EU, FAO and Reference Group members.
- Meeting (Remote): presentation of Inception Report

2. Interim Phase

This phase is entirely devoted to gathering and analysing the information required to provide preliminary answers to the EQs. Work in this phase will consist of desk and field activities:

Objective of the phase: to analyse the relevant secondary data and conducting primary research.

Main activities:

- Completion of in-depth analysis of relevant documents and other secondary sources, to be done systematically and to reflect the methodology as described in the Inception Report.
- Selected interviews to support the analysis of secondary data, as relevant (remote or face-to-face).
- Formulation of the preliminary responses to each Evaluation Question, with analysis of their validity and limitations.
- Identification of the issues still to be covered and of the preliminary hypotheses to be tested during primary research.
- Remote or face-to-face presentation in PNG of the preliminary findings emerging from the desk review (incl. gaps and hypotheses to be tested in the field) to kick-off the in-country portion of this Interim Phase, supported by a slide presentation.
- Completion of primary research following the methodology described in the Inception Report. The team of experts is required to spend at least 30 days in the field.
- Guarantee of adequate contact, consultation with, and involvement of the different stakeholders, including the relevant government and local authorities and agencies, throughout the Interim Phase.
- Use of the most reliable and appropriate sources of information, respecting the rights of individuals to provide information in confidence, and being sensitive to the beliefs and customs of local, social and cultural environments, throughout the Interim Phase.
- Preparation of a slide presentation of intermediate/preliminary (Desk and Field) findings and preliminary conclusions (to be tested with the Reference group and other stakeholders as relevant for validation purposes).
- Presentation of the intermediate/preliminary (Desk and Field) findings and preliminary conclusions in PNG to the Reference Group, DNPM, EU and FAO, supported by the slide presentation.

Deliverables and meetings:

- Meeting: presentation of preliminary findings (to be tested) emerging from the desk work
- Slide presentation
- Meeting (face to face, in Port Moresby): debriefing on intermediate/preliminary (Desk and Field) findings

3. Synthesis Phase

Objectives of the phase: to report on results from the evaluation (final answers to the Evaluation Questions (final findings) and formulate conclusions and recommendations.

Main activities:

- Analysis and synthesis of the evidence and data collected during the previous phases to provide a final answer to the Evaluation Questions, ensuring gender, inclusivity and cross-cutting themes are systematically incorporated into findings and recommendations.
- Preparation of the Draft Final Report; its content is described in Annex V.
- Remote presentation of the Draft Final Report to EU, DNPM, FAO and the Reference Group, supported by a slide presentation.

- Preparation of a response to the comments to the draft report received from the evaluation manager, preferably in a table format.
- Revision / finalisation of the Final report in light of comments received from EU, DNPM, FAO and the Reference Group. While potential quality issues, factual errors or methodological problems should be corrected, comments linked to diverging judgements may be either accepted or rejected. In the latter instance, the evaluators must explain the reasons in writing (free format).
- Drafting of conclusion, lessons learned and recommendations in an online form accessible in the [Funding and Tender Opportunities Portal inside the Monitoring & Evaluation component](#).
- Inclusion of an executive summary (free text format) in the Final Report (see Annex V).

Deliverables and meetings:

- Draft Final Report
- Meeting [Remote]: presentation of the Draft Final Report
- Final Report (including response to comments)
- Executive summary of the Final Report
- Slide presentation of Final Report
- Conclusion, lessons learned and recommendations in an online form accessible in the [Funding and Tender Opportunities Portal inside the Monitoring & Evaluation component](#)

The evaluators will make sure that:

- their assessments are objective and balanced, statements are accurate and evidence-based, and recommendations are realistic and clearly targeted to relevant authorities.
- when drafting the report, they will acknowledge clearly where changes in the desired direction are known to be taking place already.
- the wording, inclusive of the abbreviations used, considers the audience as identified in section 2.1 above.

4. Dissemination Phase

Objective of the phase: to support the communication of the evaluation results. In particular to share key achievements, lesson learned and recommendations which can inform similar on-going or future interventions in the sector; to share more broadly key messages emerging from the evaluation, to showcase key results and underlying success factors.

The targeted audience will be EU Delegation, DNPM, FAO and the Reference Group.

Main activity of evaluators/contractor:

Organisation and facilitation of a dissemination seminar (including preparation of a slide presentation) to promote knowledge transfer and discuss conclusions and recommendations of the evaluation. The seminar will take place **face-to-face** in Port Moresby and will last half a day (max 40 participants for face-to-face).

References: the evaluation team should take inspiration from the INTPA work on Dissemination of Evaluation Results: six (6) 'how-to' guides on the production of [dissemination seminars](#) and some [examples of dissemination products from the EU](#).

Deliverables and meetings:

- Dissemination seminar (Port Moresby)

Throughout the evaluation and following the approval of the Inception Report, if any significant deviation from the work plan could compromise the quality of the evaluation or jeopardise the completion of the specific contract within the contractual timeframe, these elements are to be immediately discussed with the evaluation manager and, regarding the validity of the contract, corrective measures taken.

2.3.2 Evaluation ethics

All evaluations must be credible and free from bias; they must respect dignity and diversity and protect stakeholders' rights and interests. Evaluators must ensure confidentiality and informant anonymity, adhering to professional standards, ethical guidelines, and moral principles in line with the 'do no harm' principle. The approach of framework contractors to observe these obligations must be explicitly addressed in the specific Organisation and Methodology, and implemented by the evaluation team throughout the evaluation, including during dissemination of results.

2.3.3 Management and steering of the evaluation

Management Group

The evaluation is jointly managed by the EUD, DNPM and FAO/OED. The progress of the evaluation will be followed closely by the evaluation managers with the assistance of the Reference Group.

The main functions of the Management Group are:

- to review and validate the inception report;
- to ensure that the evaluation team has access to, and has consulted with, all relevant information sources and documents related to the intervention;
- to discuss and comment on notes and reports delivered by the evaluation team. Comments by individual group members are compiled into a single document by the evaluation manager and subsequently transmitted to the evaluation team;
- to provide feedback on the findings, conclusions, lessons and recommendations from the evaluation;
- to review and validate the draft and the final report;
- to facilitate dissemination of the evaluation findings

Reference Group

The reference group consists of the PSC (Project Steering Committee). It comprises a wide network of organizations across multiple sectors. At the government level, it includes the Department of National Planning and Monitoring (DNPM), Department of Agriculture & Livestock (DAL), Department of Information and Communication Technology (DICT), Department of Works and Highways, Investment Promotion Authority (IPA), and the National ICT Authority of PNG (NICTA), along with provincial administrations from both East and West Sepik, including their respective divisions of Works, Commerce, and Agriculture and Livestock. Key regulatory bodies participate through the Cocoa Board of PNG, Regional Cocoa Board, National Fisheries Authority, Spice Industry Board, and Provincial Fisheries offices from both provinces. At the international level, it includes the European Union Delegation, UN Resident Coordinator Office (UNRC), and implementing UN agencies including the Food and Agriculture Organization (FAO), International Labour Organization (ILO), United Nations Development Programme (UNDP), UN Capital Development Fund (UNCDF), and International Telecommunication Union (ITU), with the EU STREIT PNG Programme coordinating these diverse stakeholders.

To effectively manage input from this large and diverse Reference Group during key evaluation stages, a streamlined consultation process will be implemented. The Management Group will coordinate Reference

Group consultations at specific evaluation stages through structured written procedures, with clear deadlines and instructions. To ensure timely decision-making, feedback will be collected through a cascading approach: representatives from each sector (government, regulatory bodies, UN agencies) will consolidate inputs from their respective organizations before submission to the Management Group.

The main functions of the Reference Group are:

- to review indicative Evaluation Questions;
- to ensure that the evaluation team has access to, and has consulted with, all relevant information sources and documents related to the intervention;
- to provide feedback on the draft report
- to support the development of a proper follow-up action plan after completion of the evaluation.

At the Contractor level

Further to the requirements set out in section 3.3 of the Global Terms of Reference of the Framework contract SEA 2023, the Framework Contractor must ensure that an effective quality assurance takes place for each individual assignment and must provide its staff members/experts with the necessary support to guarantee the quality and timely delivery of the outputs. As such, the contractor is responsible for the quality of the process, the evaluation design, the inputs, and the deliverables of the evaluation. In particular, it will:

- support the Team Leader in their role, mainly from a team management perspective. In this regard, the contractor should make sure that, for each evaluation phase, specific tasks and outputs for each team member are clearly defined and understood;
- provide backstopping and quality control for the evaluation team's work throughout the assignment;
- ensure that the evaluators are adequately resourced to perform all required tasks within the timeframe of the contract.

2.3.4 Specific aspects to be addressed by the contractor

Contractors will describe in their offer:

- how their proposed strategy/approach will address the cross-cutting issues mentioned in these Terms of Reference; it should be gender sensitive, contemplate the use of sex- and age-disaggregated data and be able to demonstrate how interventions have contributed to progress on gender equality.
- a [methodological approach](#) to face external constraints such as difficulties or the impossibility of accessing the field. Papua New Guinea faces known security challenges, particularly in the Highlands region, in remote areas. The evaluation team should assess how these contextual factors might affect data collection and field visits. Indeed, given the country context, this evaluation may be impacted by difficulties in accessing the field due to security constraints or health-related issues. The to-be-selected contractor will bear the duty of ensuring that the evaluators will respect, at all times, the relevant international, national and local guidance regarding travel limitations and will exert due care in preventing the spread of diseases and avoiding any unreasonable, unnecessary risks. The evaluation team should factor these potential constraints into their methodology and planning, especially when considering field visits to remote or potentially insecure areas. The specific contract Organisation and Methodology should contain a clear and detailed description of the methods that the evaluation will use to address potential difficulties in accessing the field.

These may include the combination of face-to-face and remote methods of data collection, if relevant¹⁶.

- accurately describe their approach to selecting project sites to visits, and beneficiaries for KII and Focus Group Discussions.
- their approach to data protection and security in a particularly sensitive context, such as in environments affected by conflict, fragility, and violence.
- specify how they intend to use a specific methodological approach such as participatory evaluation techniques, or specific methods such as the need for the reconstruction of a missing baseline.
- elaborate on the methodology for the development and administration of qualitative data collection or any specific exercise that is expected to be key in your evaluation.
- develop at least one evaluation question with relevant Judgment Criteria (JC), indicators, and methods of data collection and analysis.

2.4 Required outputs

The required expected outputs are:

Expected output(s)	Main activities involved (see also §2.3.1)	Indicators of performance and quality	Main expected deliverables to be approved to complete the expected output
Output 1: successful completion of the inception phase	• Kick off meeting • Preliminary interviews • Reconstruction / finalisation of the intervention logic • Refinement of the EQs and drafting of the evaluation matrix • Evaluation methodology	Cf. section 6	• Meeting (remote): kick off session • Inception report • Slide presentation to present the inception report to the EU, DNPM, FAO and Reference Group members. • Meeting (Remote): presentation of Inception Report
Output 2: successful completion of the interim phase	• Data collection including data collection tools such as Key Informant Interviews (KIIs) and Focus Group Discussion (FGDs) guides • Field visits	Cf. section 6, or other, to be added as relevant (relevant stakeholders interviewed, ...)	• Meeting: presentation of preliminary findings (to be tested) emerging from the desk work • Slide presentation • Meeting (face to face, in Port Moresby): debriefing on intermediate (Desk and Field) findings
Output 3: successful completion of the final synthesis	• Drafting final report	Cf. section 6	• Draft Final Report • Meeting [Remote]: presentation of the Draft Final Report • Final Report (including response to comments) • Executive summary of the Final Report • Slide presentation of Final Report

¹⁶ The Framework Contractors are invited to consult the wealth of resources available through the two ESS/INTPA initiatives Evaluation in Hard-to-Reach Areas and Evaluation in Crisis: <https://europa.eu/capacity4dev/devco-ess>.

			Conclusion, lessons learned and recommendations in an online form accessible in the Funding and Tender Opportunities Portal inside the Monitoring & Evaluation component
Output 4: successful completion of dissemination phase	Presentation of final report	Cf. section 6	Dissemination seminar (in Port Moresby)

3 LOGISTICS AND TIMING

Please refer **also** to Part B of the Terms of Reference.

4 REQUIREMENTS

Please refer **also** to Part B of the Terms of Reference for expertise requirements.

All costs, other than the costs for the experts of the evaluation team will be reflected in a dedicated budget line(s) under the chapter “Other costs” of the framework contractor’s financial offer.

The “**other costs**” to be included in the contractor’s financial offer must include:

- Provision for qualitative data collection and analysis in the country (other than the working days of the experts of the team), including if necessary for the use of remote data collection techniques and/or a team of locally available experts.
- The costs associated with 2 travels to Port Moresby for meetings with DNPM, EU Delegation and FAO (debriefing on preliminary findings, and dissemination seminar) for at least 2 members of the team and to 30 days for the field activities mentioned in section 2.3.1.
- The costs linked to the dissemination seminar to be held in Port Moresby:
 - Costs for the participation of the relevant experts of the evaluation team (at least the Team leader + another expert);
 - Costs for a moderator
 - Rental fees for a suitable venue, and provision of conference equipment
 - Catering costs, covering warm and soft beverages and biscuits for coffee/tea breaks during the seminar

5 REPORTS/DELIVERABLES

The table below outlines the evaluation team's key deliverables, their content, language, and respective timelines. The Framework contractors when drafting the timetable of activities in their offer, must include not only the timing of submission of reports but also that of other key deliverable as per section 2.3.1.

Title	Content	Language	Submission timing or deadline
Inception Report	See Annex V	English	Within 3 weeks after the contract starts
Desk/Interim Report	See Annex V	English	Within 8 weeks after the contract starts

Intermediary desk and field presentation	See Annex V	English	Within 12 weeks after the contract starts
Draft Final Report	See Annex V	English	Within 18 weeks after the contract starts
Final Report (together with the response to comments)	See Annex V	English	15 calendar days after receiving comments on Draft Final Report
Executive summary of the Final Report	See Annex V	English	Together with Final Report
Draft conclusion, lessons learned and recommendations	See online form in Funding & Tenders Portal		Together with Final Report
Slide presentation for the Dissemination Seminar		English	Between 10 to 20 days after receiving comments on Draft Final Report

5.1 Use of the “EU Funding & Tenders Portal” by the evaluation contractors and experts, and of EVAL-OPSYS by the evaluation manager

The selected contractor will **submit all the deliverables by uploading them to the “EU Funding & Tenders Portal” (except when the format of the deliverable is not supported by the portal, e.g., for videos, in which case the deliverable will be submitted via a way to be communicated by the evaluation manager).** These documents will be linked by the evaluation manager to their related phase in **the EVAL-OPSYS**. The selected contractor will also need to draft conclusion, lessons learned and recommendations in the online form accessible in the Funding and Tender Opportunities Portal inside the Monitoring & Evaluation component, which consists notably of conclusions, lessons learned and of recommendations that can be later clustered and prioritized.

6 MONITORING AND EVALUATION

6.1 Definition of performance and quality indicators

Performance will be assessed by the evaluation manager during the whole evaluation exercise based on the following criteria:

- Quality of the methodological approach and analysis
- Precision and clarity of writing
- Communication skills
- Flexibility and availability
- Respect of deadlines

6.2 Content and quality of reporting

The deliverables associated to each output must match quality standards and include essential elements as per contents outlined in Annex-V. So, for example, the text of the reports must be presented in a manner that is easily understandable, free of jargon, logically organised with well-structured chapters and, where appropriate, illustrated with maps, graphs, and tables; a map of the area(s) of intervention is required (to be attached as annex). In particular, the quality of the draft versions of the inception and final report will be assessed by the evaluation manager using a comprehensive set of indicative quality criteria presented in Annex VI. These criteria include the quality of analysis, precision and clarity of writing, methodological rigor and communication skills. Other deliverables will be assessed using similar quality criteria, adapted to the specific structure, format, and content as outlined in Annex V.

The contractor must deliver all publishable deliverables including the final report in full compliance with the Commission's corporate visual identity, by applying the rules on graphics set out in its Visual Identity Manual, including its logo. The rules, the manual and further information are available at this address: https://ec.europa.eu/info/resources-partners/european-commission-visual-identity_en.

6.3 Comments on the deliverables

For each report, the evaluation managers (DNPM, EU and FAO) will send the contractor consolidated comments received from the Reference Group or the approval of the report. The revised reports addressing the comments will be submitted on a date to be agreed with the evaluation managers (DNPM, EU and FAO). The evaluation team should provide a separate document ("comments matrix") explaining how and where comments have been integrated or the reason for not integrating certain comments if this is the case.

7 PRACTICAL INFORMATION

Please address any request for clarification and other communication to the following addresses: delegation-papua-new-guinea-cris-fwc-offers@eeas.europa.eu with copy to: Monica.VAZQUEZ-PABLO@eeas.europa.eu

8 ANNEXES

ANNEX I: LOGICAL FRAMEWORK MATRIX (LOGFRAME) OF THE EVALUATED INTERVENTIONS

	Results chain	Indicators ²	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	To increase sustainable and inclusive economic development of rural areas	OO1 - Proportion of the population living below \$1.90 (PPP) per day by sex, age, employment status and geographical location (urban/rural) (SDG 1.1.1, EURFL1T1)**	68%	50%	Household Income & Expenditure Survey(HIES) /Secondary source/Endline survey	
		OO2 - Prevalence of stunting (moderate and severe) in children aged below five years (EURFL1T9)	4East Sepik = 43.6% Sandaun = 41.2%	East Sepik = 40% Sandaun = 40%	WHO/Secondary source/Endline survey	
		OO3 - Renewable energy (excluding biomass) as a proportion of total energy production (SDG 7.2.1, EURFL1T12) (Region+ PNG)*	East Sepik = 0% (Note: Total production = 11.63 MW/Day, and RE Baseline = 0 MW/Day) Sandaun = 0% (Note: Total production = 4.19 MW/Day and RE Baseline = 0 MW/Day)	East Sepik = 1% (Note: Total production = 18 MW/Day, and RE Target = 0.18 MW/Day) Sandaun = 4% (Note: Total production = 6.75 MW/Day, and RE Target = 0.27 MW/Day)	Baseline and endline survey	
Specific objective(s): Outcome(s)	SO1: Increased economic return from three selected value chain	SO1.1: Percentage Increase in average annual sales value by Programme supported households of cocoa/vanilla/fishery products	East Sepik (PGK) 5 Cocoa = 0% Vanilla = 0% Fishery - Riverine = 0% - Coastal = 0% - Aquaculture = 0% Sandaun (PGK) Cocoa = 0% Vanilla = 0% Fishery - Riverine = 0% - Coastal = 0% - Aquaculture = 0%	East Sepik (PGK) Cocoa = 65% Vanilla = 70% Fishery - Riverine = 65% -Coastal = 65% - Aquaculture = 35% Sandaun (PGK) Cocoa = 65% Vanilla = 70% Fishery - Riverine = 65% - Coastal = 65% - Aquaculture = 35%	Baseline/End line/ Household Income & Expenditure Survey (HIES)	Price of high end quality cocoa and vanilla remains at current level at least. Local market price of fisheries produces in the Sepiks remains at current level. No major climatic or natural disasters hits the

	SO2: Strengthened, climate resilient and more efficient value chain enablers	SO1.2: Number of households supported in the focused value chains (disaggregated by sex, age of the household head, region, and positioning in the value chain)	East Sepik Cocoa = 0 Vanilla = 0 Fisheries = 0 Sandaun Cocoa = 0 Vanilla = 0 Fisheries = 0	East Sepik Cocoa = 25,350 (40% women, 60% Youth) Vanilla = 6,240 (30% women, 60% Youth) Fisheries = 3,840 (45% women, 60% Youth) Sandaun Cocoa = 16,900 (40% women, 60% Youth) Vanilla = 4,160 (30% women, 60% Youth) Fisheries = 2,560 (45% women, 60% Youth)	Baseline/End line/ Household Income & Expenditure Survey (HIES)	areas of implementation of the Action Rural development remains a priority for PNG
		SO1.3: Percentage Increase in average annual net income reported by Programme supported households of the cocoa/vanilla and fishery products value chains, (disaggregated by sex, region and household head)	East Sepik (PGK)6 Cocoa = 0% Vanilla = 0% Fishery - Riverine = 0% - Coastal = 0% - Aquaculture = 0% Sandaun (PGK) Cocoa = 0% Vanilla = 0% Fishery - Riverine = 0% - Coastal = 0% - Aquaculture = 0%	East Sepik (PGK) (60% Youth) Cocoa = 50% Vanilla = 50% Fishery - Riverine = 25% - Coastal = 25% - Aquaculture = 25% Sandaun (PGK) (60% Youth) Cocoa = 50% Vanilla = 50% Fishery - Riverine = 25% - Coastal = 25% - Aquaculture = 25%	Baseline/End line/ Household Income & Expenditure Survey (HIES)	
		SO2.1 Increased number of people employed by MSMEs as a consequence of the Programme (disaggregated by sex and age)	Total = 0 Cocoa (Full-time) Male = 0 Female = 0 Vanilla (Full-time) Male = 0 Female = 0 Fishery (Full-time)	Total = 7,133 Cocoa (Full-time) (60% Youth) Male = 3,897 Female = 2,493 Vanilla (Full-time) (60% Youth) Male = 129	Baseline and endline survey	

			Male = 0 Female = 0	Female = 45 Fishery (Full-time) (60% Youth) Male = 313 Female = 256		
		SO2.2: Number of value chains stakeholders benefitting from improved access to value chain related financing supported by the Programme, (disaggregated by sex and age)	Total = 0 East Sepik = 0 Sandaun = 0	Total = 100,000 East Sepik = 60,000 Sandaun = 40,000	Regular Programme Monitoring/Baseline and endline	
		SO2.3: Number of Programme households using ICT tools and services developed by the Programme (knowledge and market information-MIS/FIS and LMS), (disaggregated by sex and age of the households head)	Total = 0 East Sepik Male = 0 Female = 0 Sandaun Male = 0 Female = 0	Total = 25,105 East Sepik (60% Youth) Male = 10,806 Female = 7,204 Sandaun (60% Youth) Male = 4,257 Female = 2,838	Baseline/Endline survey	
		SO2.4: Amount of renewable energy (excluding biomass that may induce land-use change) used by VC related agripreneurs and MSMEs in the Programme area Supported by the Programme	East Sepik = 0 KW Sandaun = 0 KW	East Sepik = 79 KW/Day Sandaun = 72 KW/Day	Baseline/Endline survey	
		SO2.5: Number of people/households who live within 2 km of all-season rural roads rehabilitated with Programme support and sustainably maintained (SDG 9.1.1)	Total = 0 East Sepik = 0 Sandaun = 0	Total = 112,056/18,676 East Sepik = 89,302/14,884 Sandaun = 22,753/3,792	Baseline/Endline survey	
Outputs	Output 1.1: Increased sustainable production and inclusiveness of the Cocoa value chain	O1.1.1 Number and proportion of farming households producing cocoa using programme-promoted sustainable and/or climate-smart management practices (sex and age of the households head)	Total = 0 Male = 0 Female = 0 Youth = 0	Total = 30,000 (55%) HH Youth = 60%	Baseline and endline survey	No new serious pest and disease threat for cocoa is developing in the area of intervention

	Output 1.2: Increased sustainable production and inclusiveness of the Vanilla value chain	O1.1.2 Increased Profitability (Internal Rate of Return (IRR)) of cocoa smallholder farmers and fermentaries using sustainable and/or climate-smart management practices supported by the Programme (disaggregated by age)	Increased IRR is 0% for smallholder farmers Increased IRR is 0% for fermentary	Increased Average IRR is 10% for smallholder farmers Increased Average IRR is 30% for fermentary	Baseline and endline survey	No serious pest and disease threat for vanilla is developing in the area of intervention
		O1.1.3 Proportion of managerial positions of groups held by women for cocoa based activities supported by the Programme	0	25% of managerial position held by women in cocoa groups supported by the Programme	Baseline and endline survey	
		O1.2.1 Number and proportion of smallholder farming households producing vanilla using sustainable management practices supported by the Programme (disaggregated by sex and age groups)	Total = 0 Male = 0 Female = 0 Youth = 0	Total = 10,000 HH (28%) Male = 6,000 Female = 4,000 Youth = 60%	Baseline and endline survey	
		O 1.2.2 Area under vanilla where sustainable and/or climate-smart management practices are applied in proportion to total areas under vanilla in the implementation area	0 (as this indicator only refers to farmers supported by the Programme)	800 Hectares	Baseline and endline survey	
	Output 1.3: Increased sustainable production and inclusiveness of the Fishery value chain (coastal, riverine and aquaculture)	O 1.2.3 Proportion of women in managerial positions for vanilla based activities	0	25% of managerial position held by women in vanilla groups supported by the Programme	Baseline and endline survey	No serious disease outbreak for fishery livestock is developing in the area of intervention. No climatic disaster is
		O1.3.1 Number and proportion of smallholder fisher households producing fishery products using sustainable fishing practices supported by the Programme (disaggregated by sex and age groups)	Total = 0 Male = 0 Female = 0 Youth = 0	Total = 6,400 (51%) Aqualculture = 4,000 (45% female, 60% Youth) Coastal = 1,200 (45% female, 60% Youth) Riverine = 1,200 (45% female, 60% Youth)	Programme MIS/regular Programme monitoring	

	Output 2.1: Conducive business, policy and regulatory environment for sustainable rural agripreneurs and MSMEs established	O1.3.2 Number of productive smallholder fishery partnerships established supported by the Programme	0	320 partnerships	Programme MIS/regular Programme monitoring	affecting the industry.
		O1.3.3 Number of quality control systems for fishery products and value chain processors and traders established and operational	0	1 System	Programme MIS/regular Programme monitoring	
		O2.1.1 Provincial Platforms for Public Private Sector dialogue on sustainable and inclusive cocoa, vanilla and fisheries development established and functional	0	FAO = 2 UNDP = 1	Programme MIS/regular Programme monitoring	National Government and Provincial and district authorities remain engaged in the various processes envisaged.
	Output 2.2: Value chain support services strengthened and resilient to climate change impacts	O2.1.2 E-agriculture and climate-smart strategy implemented in the Programme area	0	Strategy = 2	Programme MIS/regular Programme monitoring	
		O2.1.3 Improved availability and accessibility of financial products and services for VC stakeholders	Access Point = 132 Service/Product = 0	Access Point = 264 Services/Product = 3	Programme MIS/regular Programme monitoring	
		O2.2.1 Number of agriculture specific financial products developed and available to rural population	Product = 0	Product = 3	Regular Programme monitoring	
	Output 2.3 Increased production of, and access to renewable energy systems	O2.2.2 Enrolment/uptake by region residents (disaggregated by sex and age and implementation agency) of programme-supported MSME-focused training initiatives (financial/business/management/ICT)	Total = 0 ITU = 0 UNDP = 0 ILO = 0 (Uptake = 0%)	Total = 1,784 ITU = 300 UNDP = 500 ILO = 984 (Uptake = 70%) (incl. 1,000 farmers trained on financial literacy by FAO under component 1).	Programme MIS/regular Programme monitoring	Financial Institutions remain engaged and willing to venture in novel areas
		O2.2.3 Number of relevant ICT mobile applications available to MSME and value chain stakeholders (extension services, market information, value	0 Application	3 Application	Programme MIS/regular Programme monitoring	

	Output 2.4: Improved and climate-proof rural transport infrastructure	chain specific, financial etc.) supported by the Programme				Beneficiary population will remain interested and engaged in upgrading their skills and in adopting new technologies Cost of renewable energy systems (solar, minihydro) remains competitive The Department of Works and the local districts remain engaged for road assessment and road improvement with communities
		O2.3.1 Number of renewable energy generation public facilities (except biomass) in operation in the Programme area established with Programme support	East Sepik = 0 Facilities Sandaun = 0 Facilities	East Sepik = 3 Facilities Sandaun = 3 Facilities	Programme MIS/regular Programme monitoring	
		O2.3.2 Annual amount of electricity [in MW] generated from renewable energy sources established with Programme support in the Programme area (disaggregated by location)	Total = 0 MW East Sepik = 0 MW HH level = 0 MW Enterprise level = 0 MW Public facility = 0 MW Sandaun = 0 MW HH level = 0 MW Enterprise level = 0 MW Public facility = 0 MW	Total = 164 MW East Sepik = 65 HH level = 15 Enterprise level = 14 Public facility = 37 Sandaun = 99 HH level = 15 Enterprise level = 12 Public facility = 73	Programme MIS/regular Programme monitoring	
		O2.3.3 Number of MSMEs in the Programme area having access to programme-supported renewable energy system (except biomass)	Total = 0 Fermentary = 0 Vanilla (dryers) = 0 Fishery (ice making) = 0 Banks = 0	Total = 300 Fermentary = 50 Vanilla (dryers) = 200 Fishery (ice making) = 30 Banking Access Points = 20	Programme MIS/regular Programme monitoring	
		O2.4.1 Number and length of rural roads and other access ways rehabilitated (spot improvement/specific maintenance) under the Programme	Roads = 0 Airstrips = 0 Jetties = 0	Roads = 15 (264 km) Airstrips = 5 Jetties = 3	Programme MIS/regular Programme monitoring	
		O2.4.2 Number and total length of rural roads regularly maintained under community-based management agreements in the Programme area	0	Roads = 18 Length = 315 km	Programme MIS/regular Programme monitoring	
		O2.4.3 Income earned by community members from community-based	USD 0 Million Women = 0%	USD 4 Million Women = 50%	Programme MIS/regular	

		road management and maintenance agreements in the Programme area (disaggregated by sex and age)	Youth = 0%	Youth = 35%	Programme monitoring	
		O2.4.4 Number and length of rural roads and other access ways where climate-change projections have been integrated in the Programme area	Road = 0 Airstrips = 0 Jetties = 0	Road = 18 (315 km) Airstrips = 5 Jetties = 3	Programme MIS/regular Programme monitoring	

ANNEX II: INFORMATION THAT WILL BE PROVIDED TO THE EVALUATION TEAM

The following is an indicative list of the documents that the Contracting Authority will make available to the selected evaluators shortly after the contract signature:

- Legal texts and political commitments pertaining to the intervention(s) to be evaluated.
- Programming documents (e.g. Country Strategy Paper PNG and Indicative Programmes (and equivalent) for the periods covered).
- FAO PNG Country Programme Framework
- Relevant national/sector policies and plans from National and Local partners and other donors
- Intervention(s) design studies.
- Intervention(s) feasibility/formulation studies.
- Baseline survey report and endline survey report
- Intervention(s) financing agreement and addenda.
- Description of the action and/or Organisation and Methodology
- Intervention's quarterly and annual progress reports, and technical reports.
- European Commission's Result Oriented Monitoring (ROM) Reports, and other external and internal monitoring reports of the intervention.
- Intervention's mid-term evaluation report and other relevant evaluations, audit, reports
- Relevant documentation from national/local partners and other donors
- [Guidance for gender sensitive evaluations.](#)
- Calendar and minutes of all the meeting of the Steering Committee of the intervention(s).
- Any other relevant document.

Note: The evaluation team has to identify and obtain any other document worth analysing, through independent research and during interviews with relevant informed parties and stakeholders of the intervention.

ANNEX III: THE EVALUATION CRITERIA

This Annex presents the latest definitions of the OECD DAC evaluation criteria, sourced from “Evaluation Criteria: Adapted Definitions and Principles for Use” ([DCD/DAC\(2019\)58/FINAL](#)). It is imperative that the evaluation team adheres to these definitions in their analysis, along with their explanatory notes, and the OECD DAC guidance document, which can be accessed online [HERE](#).

Unless otherwise specified in chapter 2.2, the evaluation team will evaluate the intervention(s) using the standard DAC evaluation criteria and the EU added value, which is a specific EU evaluation criterion. Below are their brief definitions:

DAC CRITERIA

- **Relevance:** the “extent to which the intervention objectives and design respond to beneficiaries’, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.”
- **Coherence:** the “compatibility of the intervention with other interventions in a country, sector or institution.”
- **Effectiveness:** the “extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.”
- **Efficiency:** the “extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.”
- **Sustainability:** the “extent to which the net benefits of the intervention continue or are likely to continue.”

EU-SPECIFIC CRITERION

- **EU added value:** the extent to which the intervention brings additional benefits to what would have resulted from Member States' interventions only in the partner country. It directly stems from the principle of subsidiarity defined in the Article 5 of the Treaty on European Union (<https://www.europarl.europa.eu/factsheets/en/sheet/7/the-principle-of-subsidiarity>).

ANNEX IV: THE EVALUATION MATRIX

The evaluation matrix (hereinafter: the matrix) will accompany the whole evaluation by summarising its **methodological design (Part A**, to be filled and included in the Inception Report) and **documenting the evidence analysed** to answer each EQ (Part B).

The full matrix (parts A and B) is to be included in all reports.

Use one set of tables (Parts A and B) for each Evaluation Question (EQ) and add or delete as many rows as needed to reflect the selected judgement criteria and indicators. Delete the guidance and the footnotes when including the matrix in the reports.

PART A – Evaluation design

EQ1: “XXX?”				
Evaluation criteria covered ¹⁷				
Judgement criteria (JC) ¹⁸	Indicators (Ind) ¹⁹	Information sources		Methods / tools
		Primary	Secondary	
JC 1.1 -	I 1.1.1 -			
	I 1.1.2 -			
	I 1.1.3 -			
JC 1.2 -	I 1.2.1 -			
	I 1.2.2 -			
	I 1.2.3 -			
JC 1.3 -	I 1.3.1 -			
	I 1.3.2 -			
	I 1.3.3 -			

PART B – Evidence log

¹⁷ What evaluation criterion/criteria is/are addressed by this EQ?

¹⁸ Describe each selected JC and number them as illustrated in the template; the first numeric value represents the EQ the JC refers to.

¹⁹ As above. The two first numeric values represent the JC the indicators refer to. The number of JC and indicators per JC as reported in the table is purely illustrative. The table is to be adapted to your specific evaluation and reflect the appropriate JCs and indicators.

Ind ²⁰	Baseline data ²¹	Evidence gathered/analysed	Quality of evidence ²²
I 1.1.1			
I 1.1.2			
I 1.1.3			
I 1.2.1			
I 1.2.2			
I 1.3.1			

²⁰ Use the same numbering as in Part A; no need to describe the indicators.

²¹ In case they are available. This column can also be used to record mid-term data (if available).

²² Score as follows: 0 (no evidence), 1 (some evidence), 2 (sufficient evidence), 3 (conclusive evidence)

ANNEX V: STRUCTURE OF THE REPORTS

The evaluation contractor and evaluation team should expect that any key evaluation deliverables might be made accessible to the public by the EC service in charge of the evaluation contract or by any other services of the European Commission, including via affiliated transparency organisations, on selected publication platforms. Therefore, contractors must ensure that all final reports are edited to rigorous quality standards to comply with GDPR principles, notably, but not limited to, confidentiality, security, and rights to protection of personal data of the participants to the evaluation.

DG NEAR: please refer to the templates published [here](#).

1. INCEPTION REPORT (to be delivered at the end of the Inception phase)

The format of the Inception Report is free and must have a maximum length of 20 pages excluding annexes; it must contain at least the following:

Introduction	Short description of the context of the evaluation, its objectives and focus
(Re)constructed Intervention Logic	This will be based on initial analysis of secondary sources and consultation with key stakeholders
Stakeholder map	Free format: this will represent the key stakeholders of the intervention(s) under evaluation and their relations with the intervention(s)
Finalised Evaluation Questions with Judgement criteria and indicators (Evaluation Matrix, part A)	See the template
Methodology of the evaluation	This will include: ○ Overview of entire evaluation process and tools ○ Methodology for each evaluation question ○ Consultation strategy [as needed] ○ Case studies [as needed] ○ Approach to the following phase of the evaluation, including planning of field missions
Analysis of risks related to the evaluation methodology and mitigation measures	In tabular form (free style)
Ethics rules	Including, but not limited to, avoiding harm and conflict of interest, informed consent, confidentiality and awareness of local governance and regulations
Work plan	This will include a free text description of the plans and their representation in Gantt format

2. INTERMEDIARY DESK AND FIELD NOTE (to be delivered at the end of the Desk and Field phase)

The format of the Intermediary Desk and Field Note is free and should have a maximum length of 15 pages excluding annexes; it must contain at least the following:

List of activities conducted, including list of stakeholders consulted and documents reviewed
Difficulties encountered and mitigation measures adopted
Intermediate/preliminary consolidated Desk and Field findings, by evaluation question
Preliminary overall conclusions (to be tested with the Reference Group)

3. DRAFT FINAL REPORT AND FINAL REPORT (to be delivered at the end of the Synthesis phase)

The Draft Final and the Final Report have the same structure, format, and content. They should be consistent, concise, and clear, and free of linguistic errors both in the original version and in their translation, if foreseen. The Final Report should not be longer than 40 pages excluding annexes. The presentation must be properly spaced, and the use of clear graphs, tables and short paragraphs is strongly recommended.

The cover page of the Final Report should carry the following text:

“This evaluation is supported and guided by FAO Office of Evaluation and the European Commission and presented by [name of consulting firm]. The report does not necessarily reflect the views and opinions of FAO nor the European Commission”.

The main sections of the evaluation report should be as follows:

Executive Summary	The Executive Summary is expected to highlight the evaluation purpose, the methods used, the main evaluation findings and the conclusions and recommendations. It is to be considered a “stand alone” document.
1. Introduction	A description of the intervention, of the relevant country/region/sector background and of the evaluation,
2. Methodology	Provide the reader with sufficient methodological explanations to gauge the credibility of the conclusions and to acknowledge limitations or weaknesses, where relevant
3. Findings	A chapter presenting the answers to the Evaluation Question headings, supported by evidence and reasoning. Findings per judgement criteria and detailed evidence per indicator are included in an annex to the Report.
4. Conclusions and Recommendations	
4.1 Conclusions	This chapter contains the conclusions of the evaluation, organised per evaluation criterion. In order to allow better communication of the evaluation messages that are addressed to the various stakeholders, a table organising the conclusions by order of importance can be presented, or a paragraph or sub-chapter emphasising the three or four major conclusions organised by order of importance, while avoiding being repetitive.

4.2 Recommendations	They are intended to improve or reform the intervention in the framework of the cycle underway, or to prepare the design of a new intervention for the next cycle. Recommendations must be clustered and prioritised, and carefully targeted to the appropriate audiences at all levels, especially within the Commission structure.
4.3 Lessons learnt	Lessons learnt generalise findings and translate past experience into relevant knowledge that should support decision making, improve performance and promote the achievement of better results. Ideally, they should support the work of both the relevant European and partner institutions.
5. Annexes to the report	The report should include the following annexes: • Terms of Reference of the evaluation • detailed evaluation methodology including: the evaluation matrix; options taken; difficulties encountered and limitations; detail of tools and analyses • detailed answer by judgement criteria • evaluation matrix with data gathered and analysed by (EQ/JC) indicator • Intervention Logic/Logical Framework matrices (planned/real and improved/updated) • relevant geographic map(s) where the intervention took place • list of organisations consulted (In line with EU Data Protection rules, in particular the GDPR, it should be impossible from the report to identify the persons who were consulted. A separate list of the persons consulted (and contact details when known) should be shared with evaluation manager upon request with the understanding that this would not be published). • literature and documentation consulted • other technical annexes (e.g., statistical analyses, tables of contents and figures, matrix of evidence, databases) as relevant.

4. Draft conclusion, lessons learned and recommendations (online version)

The contractor will also need to draft conclusion, lessons learned and recommendations in the online form accessible in the Funding and Tender Opportunities Portal inside the Monitoring & Evaluation component, which consists notably of conclusions, lessons learned and of recommendations that can be later clustered and prioritized.

ANNEX VI: QUALITY ASSESSMENT GRIDS FOR THE REPORTS

Annex VI-A: INCEPTION REPORT – Quality Assessment Grid

Legend: scores and their meaning	Scale		Explanation
	Fully compliant		The criterion was fully met (or exceeded)
	Minor shortcomings		The criterion was met with only minor shortcomings (i.e., minor areas for improvement and/or few inaccuracies are noted but do not substantially affect the quality of the section).
	Some shortcomings		The criterion was partially met with some shortcomings (i.e., areas for improvement and/or errors are noted, suggesting the need for adjustments).
	Major shortcomings		The criterion was not met (i.e., significant weaknesses or errors are noted and must be addressed).
	Non-relevant		Criteria is ignored in scoring grid and related averages
1. CLARITY OF THE REPORT			SCORE
1.1	Is easily readable, and understandable (it is free of jargon, written in plain English or French, has logical use of chapters, appropriate use of tables, graphs, and diagrams).		
1.2	Appropriate length of the document overall in number of pages (20 pages excluding annexes)		
1.3	The length of the various chapters and annexes of the Report is well balanced		
1.4	The annexes contain – at the least – the original TORs, the evaluation matrix, a bibliography, and a list of consultees. The annexes are in compliant with what was required and specified in the ToR.		
Section score			
2. INTRODUCTION, INTERVENTION LOGIC AND KEY STAKEHOLDERS			SCORE
2.1	The report provides appropriate description to the context of the evaluation, its objectives and focus		
2.2	It explains the timing of the evaluation and its expected outputs and use.		
2.3	Any departures from the original TOR are adequately explained and justified.		
2.4	The (re)constructed intervention logic is presented in both diagram and narrative form		
2.5	The (re)constructed intervention logic describes how the intervention is expected to contribute to the intended change by outlining the causal links between the inputs, outputs, outcomes, and impact as well as the key assumptions underpinning the change process.		
2.6	The report provides an appropriate description and understanding of the various stakeholders of the intervention(s) and how they would affect or be affected by the evaluation		
Section score			
3. FINALISED EVALUATION QUESTIONS WITH JUDGEMENT CRITERIA AND INDICATORS			SCORE
3.1	The total number of Evaluation Questions is equal to or lower than 10		
3.2	Evaluation Questions are specific (grounded in the intervention logic), open-ended and focused on 'why' and 'how'		
3.3	Evaluation Questions, judgement criteria and indicators are sensitive to the context, including gender, age, and disabilities issues (as relevant)		

3.4	The judgement criteria and indicators are well defined, relevant to the EQs, the selected OECD/DAC criteria and the indicative Evaluation Questions from the ToR
3.5	The evaluation matrix is clearly articulated indicating the evaluation criteria, indicators, data sources and methods for gathering and analysis.
Section score	
4. METHODOLOGY OF THE EVALUATION	
SCORE	
4.1	The IR provides a detailed overview of the evaluation process and its design (incl. sample and sampling methodology when relevant)
4.2	The proposed design, tools and methods are appropriate for addressing the evaluation mandate and their relative strengths are explained
4.3	The consultation strategy is clear and appropriate
4.4	The structuring and organisation of the different phases of the evaluation, including planning of the missions is clear
4.5	Methodological limitations are acknowledged, their impact on evaluation design is discussed and appropriate mitigation measures envisaged
Section score	
5. RISKS AND ETHICS	
SCORE	
5.1	The IR explains how the evaluation avoids harm; attains informed consent; ensures confidentiality and demonstrates contextual sensitivity
5.2	The IR contains a section describing actual or potential conflict of interest affecting the evaluation team and an appropriate mitigation strategy is explained.
Section score	
6. WORKPLAN	
SCORE	
6.1	A sufficiently detailed free text description of the work plan is provided in the IR
6.2	The workplan is provided in Gantt format
Section score	
OVERALL SCORE	
Category	Score
1	Clarity of the report
2	Introduction, intervention logic and key stakeholders
3	Finalised Evaluation Questions with judgement criteria and indicators
4	Methodology of the evaluation
5	Risk and Ethics
6	Workplan
Overall assessment: it is recommended that for a report to be approved, the average of the section scores should be either 'Fully compliant' or only 'Minor shortcomings' AND no section score should be scored 'Major shortcomings'.	

Annex VI-B: FINAL REPORT– Quality Assessment Grid

Legend: scores and their meaning	Scale	Explanation
	Very Satisfactory	The criterion was fully met (or exceeded)
	Satisfactory	The criterion was met with only minor shortcomings (i.e., minor areas for improvement and/or few inaccuracies are noted but do not substantially affect the quality of the section).
	Unsatisfactory	The criterion was partially met with some shortcomings (i.e., areas for improvement and/or errors are noted, suggesting the need for adjustments).
	Very Unsatisfactory	The criterion was not met (i.e., significant weaknesses or errors are noted and must be addressed).
	<i>Non-relevant</i>	<i>Criteria is ignored in scoring grid and related averages</i>
1. CLARITY OF THE REPORT		SCORE
1.1	Is easily readable, understandable and accessible to the relevant target readers (it is free of jargon, written in plain English or French, has logical use of chapters, appropriate use of tables, graphs and diagrams).	
1.2	Highlights the key messages	
1.3	The length of the various chapters and annexes of the Report is well balanced	
1.4	Contains relevant graphs, tables and charts facilitating understanding	
1.5	Contains a list of acronyms	
1.6	Avoid unnecessary duplications	
1.7	Language has been checked for unclear formulations, misspelling and grammar errors	
1.8	The Executive Summary is an appropriate summary of the full report and is a free-standing document	
1.9	Respects the compulsory format of the Report given in the ToR (including final Evaluation matrix and evidence log in annex)	
		Section score
2. RELIABILITY OF DATA AND ROBUSTNESS OF EVIDENCE		SCORE
2.1	Data/evidence was collected according to the defined methodology (presented in the appendix of the final report and endorsed in the inception report - if not, justifications are provided).	
2.2	The report considers, when relevant, evidence from EU and/or other partners' relevant studies, monitoring reports and/or evaluations	
2.3	The report contains a clear description of the limitations of the evidence, the risks of bias and the mitigating measures	
		Section score
3. VALIDITY OF FINDINGS		SCORE
3.1	Findings (intended and unintended) derive from the evidence gathered	
3.2	Findings address all the validated evaluation questions as per the validated evaluation matrix	
3.3	Findings result from an appropriate triangulation of different, clearly identified sources	
3.4	When assessing the effect of the EU intervention, the findings describe and explain the most relevant cause/effect links between outputs, outcomes and impacts	
3.5	The analysis of evidence is comprehensive and takes into consideration contextual and external factors	

3.6	Where appropriate the analysis and findings address the cross-cutting issues of gender, climate change, SDGs etc.	
		Section score
4. VALIDITY OF CONCLUSIONS		SCORE
4.1	Conclusions are logically linked to the findings, and go beyond them to provide a comprehensive analysis	
4.2	Conclusions appropriately address the selected evaluation criteria including the relevant cross-cutting dimensions	
4.3	Conclusions take into consideration the various stakeholder groups of the evaluation (including gender, age, disabilities sensitivity if relevant)	
4.4	Conclusions are coherent and balanced (i.e. they present a credible picture of both strengths and weaknesses), and are free of personal or partisan considerations	
4.5	(If relevant) whether the report indicates when there are not sufficient findings to conclude on specific issues	
		Section score
5. USEFULNESS OF RECOMMENDATIONS		SCORE
5.1	Are clearly linked to and derive from the conclusions	
5.2	Are concrete, achievable and realistic	
5.3	Are targeted to specific addressees	
5.4	(if relevant) are clustered, prioritised, and possibly time-bound	
5.5	(If relevant) provide advice for the Intervention's exit strategy, post-Intervention sustainability or for adjusting Intervention's design or plans	
		Section score
6. APPROPRIATENESS OF LESSONS LEARNT ANALYSIS (IF REQUESTED BY THE TOR OR INCLUDED BY THE EVALUATORS)		SCORE
6.1	Lessons are identified	
6.2	When relevant, they are generalised in terms of wider relevance for the institution(s)	
6.3	Lessons are well connected to the discussions in the body of the report and previous categories given in this QA checklist	
		Section score
OVERALL ASSESSMENT		
	Category	Score
1	Clarity of the report	
2	Reliability of data and robustness of evidence	
3	Validity of Findings	
4	Validity of conclusions	
5	Usefulness of recommendations	
6	Appropriateness of lessons learnt analysis (if requested)	
Overall assessment: it is recommended that for a report to be approved, the average of the section scores should be either 'Fully compliant' or only 'Minor shortcomings' AND no section score should be scored 'Major shortcomings'.		

ANNEX VII: PLANNING SCHEDULE

This table must be included by framework contractors in their specific contract Organisation and Methodology and forms an integral part of it. It will be assessed under the criteria ‘Strategy and organisation of the work’.

Framework contractors can add as many rows and columns as needed.

The outputs/phases of the evaluation should reflect those indicated in the present Terms of Reference.

		Proposed number of working days ²³		
Activity/Milestone	Location	Team Leader	Evaluator	Indicative Dates
Output 1 - Inception phase: total days				
•				
•				
Output 2 - Interim phase: total days				
Desk activities: total days				
•				
•				
Field activities: total days				
•				
•				
Output 3: Synthesis & dissemination phase: total days				
Synthesis phase: total days				
•				
•				
Dissemination phase: total days				
•				
•				
TOTAL working days (maximum)				

²³ Add one column per each team member.

PART B

1. Benefitting Zone

Papua New Guinea

2. Specific Contracting authority

Contracting authority – The European Union Delegation to Papua New Guinea

3. Specific Contract language

English

LOCATION AND DURATION

4. Location

Tentative: home-based plus at least 30 days for data collection and field visits in Port Moresby, East and West Sepik provinces, and 2 travels to Port Moresby for presentations and meetings.

5. Start date and period of implementation

The indicative start date is September 2025 (with field visits in October/November 2025). Indicative end date: May 2026.

REQUIREMENTS

6. Expertise

Minimum requirements for the team

The minimum requirements covered by the team of experts as a whole are detailed below. The team must be composed by at least 6 evaluation experts, including the assigned Team Leader (i.e., a professional evaluator).

Qualifications and skills required for the team:

- Excellent analytical and reporting skills
- Excellent communication skills, in particular, liaising with different stakeholders
- Knowledge and extensive experience of complex, multi-sector development programmes
- Knowledge of FAO and EU mandates on gender equality, women's empowerment, and familiarity with sustainable development principles and climate change adaptation strategies

Professional experience of the team:

- The evaluation team must have a cumulative experience of at least 15 years in the field of evaluation, mostly in, but not limited to, development cooperation, with solid experience in rigorous evaluation methods and techniques.
- The evaluation team must have a cumulative working experience of at least 6 years in the following areas: value chain development and/or agricultural entrepreneurship, trade, and investment.

- The team leader must have a minimum of three successfully completed intervention-level or strategic evaluations, of which at least two as team leader.
- At least one of the team members must have previous working experience in Papua New Guinea or the Asia-Pacific region
- At least one of the experts must have 10 years of experience in gender mainstreaming and women's empowerment in development projects, preferably in similar country context
- At least one of the experts must have expertise in environmental sustainability and climate change adaptation in the context of rural development
- At least one of the experts must have expertise in financial analysis in the context of smallholders and small and medium type agribusinesses
- At least one of the experts must have expertise in rural road infrastructure
- At least one of the experts must have expertise in access to financial services in rural areas

Language skills of the team:

- The evaluation team will have command of English at level C1 of the Common European Framework of Reference for Languages (CEFR) – both spoken and written.
- Some stakeholders may not be proficient in English language. Therefore, if the evaluation team lacks a local expert fluent in the local language, it should consider employing interpreters.

The European Union pursues an equal opportunities policy. Gender balance in the proposed team, at all levels, is highly recommended.

Requested minimum number of working days per category of the Lot:

Expert category	Description of the function and its specific requirements	Minimum number of working days overall	Of which, minimum number of working days for missions/field visits
Category I	Experience in leading evaluations of large Agriculture/rural development programmes. Seasoned evaluation specialist, also recruited for his/her supervisory skills. Will be responsible for steering the evaluation and its deliverables. Expected to be the “public face” of the evaluation involving interactions with potentially high-level stakeholders.	Minimum 150 working days, of which minimum 150 days performed by the team leader	Minimum 30 days in the field, of which minimum 30 days performed by the team leader
Category II	Expert(s) in the field of Cocoa and Vanilla value chain, (if not covered by the evaluation Team Leader above). Experience in the Asia and Pacific region will be preferred.	Minimum 100 working days	Minimum 30 working days
Category II	Expert(s) in the field of Rural roads and infrastructures (if not covered by the evaluation Team Leader above). Experience in the Asia and Pacific region will be preferred.	Minimum 50 working days	Minimum 20 working days

Category II	Expert(s) in the field of financial inclusion (if not covered by the evaluation Team Leader above). Experience in the Asia and Pacific region will be preferred.	Minimum 50 working days	Minimum 20 working days
Category II	Expert(s) in the field of Environment and climate change (if not covered by the evaluation Team Leader above). Experience in the Asia and Pacific region will be preferred.	Minimum 50 working days	Minimum 20 working days
Category II	Expert(s) in the field of Gender empowerment (if not covered by the evaluation Team Leader above). Experience in the Asia and Pacific region will be preferred.	Minimum 50 working days	Minimum 20 working days
Category IV	Up to the contractor to propose	Up to the contractor to propose	Up to the contractor to propose

7. Incidental expenditure

Not applicable. Global price specific contracts do not imply verification of timesheets nor include any incidental expenditure.

8. Lump sums

Not applicable to evaluation contracts, which are global price.

9. Expenditure verification

Not applicable. Global price contracts are not subject to expenditure verification.

10. Other details

Not applicable.