Employment and Unemployment: Government Policies since 1950: II[1]

THE first part of this article dealt with the obligations accepted by governments to achieve and maintain a high level of employment, and with the action taken by governments against unemployment due to lack of demand, unemployment in depressed areas and frictional unemployment. This second part will briefly survey plans for economic development in a number of countries, with special reference to their expected effect on employment.[2]

Employment Policy and Development Planning

Underemployment and structural unemployment in underdeveloped countries arise to a great extent from lack of capital or other resources necessary to increase employment. A great deal has, of course, been written about underemployment and disguised unemployment.[3] There is underemployment or disguised unemployment in agriculture, for example, when a decline in the labour force in agriculture would not result in a decline in output.[4] Less has been written, however, to clarify the concept of structural unemployment in underdeveloped countries. It is frequently observed in some countries, of which Italy, Mexico and India are examples, that at the same time that there is underemployment in agriculture industrial capacity is not fully utilised.[5] It might appear

[1] The first part appeared in Vol. LXXIV, No. 1, July 1956.

[2] Articles on recent development plans have appeared in the *International Labour Review*, Vol. LXVIII, No. 2, Aug. 1953 and Vol. LXIX, No. 5, May 1954 (India); Vol. LXIX, No. 3, Mar. 1954 (Pakistan); Vol. LXXI, No. 2, Feb. 1955 (Philippines); and Vol. LXXIII, No. 2, Feb. 1956 (Ceylon).

[3] See Chiang Hsieh: "Underemployment in Asia", in *International Labour Review*, Vol. LXV, No. 6, and Vol. LXVI, No. 1, June and July 1952; also I.L.O.: *Action against Unemployment*, Studies and Reports, New Series, No. 20 (Geneva, 1950), Ch. VII.

[4] United Nations: *Measures for the Economic Development of Underdeveloped Countries* (New York, 1951), p. 7.

[5] Commissione Indagini e Studi sull'Industria Meccanica (C.I.S.I.M.): *Economic and Industrial Problems of the Italian Mechanical Industries* (Rome, 1952), pp. 66-67; also Adolf Sturmthal: "Economic Development, Income Distribution and Capital Formation in Mexico", in *Journal of Political Economy* (Chicago, University Press), Vol. LXIII, No. 3, June 1955, pp. 190-194.

that, if there is unemployment in industry with excess industrial capacity, this unemployment might be easily overcome by some of the methods to increase total demand that were discussed in the first part of this article.[1] Such may, in fact, be the case up to a certain point, since unemployment from lack of demand may be superimposed upon structural unemployment and underemployment. But there remains the possibility in certain cases that if excess capacity is used to increase employment in industry, wages and other incomes earned from increased employment will tend to be spent to a very large extent on agricultural products, the price of agricultural products will rise and inflation will result without there being much increase in demand for industrial products.[2] Thus it may be difficult to make sufficient use of excess capacity in industry unless increased output in industry is accompanied by increased output in agriculture.

Underemployment in agriculture also tends to " spill over " into other sectors of the economy. In most urban centres in underdeveloped regions there are large numbers of persons who have come from the countryside and are either unemployed and hoping for some kind of job or are engaged in peddling or small business ventures that do not contribute very much to improving the overall efficiency of distribution in the community. Or they may be employed as domestic servants, some of whom may be kept occupied for only a few hours per day.[3] Even in industry there are generally more workers employed than is actually necessary. Redundant staff in industry results partly from legal and practical difficulties in dismissing workers and partly from a feeling by employers that they would be responsible for the social consequences of dismissing workers who could not possibly find other jobs.

Against this background of the types of structural unemployment and underemployment in underdeveloped countries we can now consider some of the measures in development plans that are

[1] Assuming that there are no bottlenecks in supplies of key raw materials or in certain key occupations.

[2] Cf. P. R. BRAHMANANDA : " A Theory of Industrial Unemployment in an Underdeveloped Economy ", in *Indian Economic Journal* (Bombay), Apr. 1954, especially pp. 386-388. An explanation is required of how such unbalanced excess capacity could have arisen in the first place. It may have been due to errors in judgment by entrepreneurs or central planning authorities or to special wartime situations. Sometimes an increase in agricultural population may, in effect, create excess capacity in industry because, with greater agricultural population and lower output per worker in agriculture, less food may be available for the non-agricultural population. With higher prices of agricultural produce the population will have less available to spend for non-agricultural products and the non-agricultural sector may produce at considerably less than capacity.

[3] Some employers, for reasons of prestige or tradition, may employ more domestic servants than can be kept fully occupied.

closely connected with the problems of unemployment and underemployment. It should be stressed that some very important aspects of development plans—including the extent of government control, financing arrangements and balance-of-payments problems —are not considered here because they are less closely related to employment problems.

We shall first of all consider the employment goals of development plans, and then methods for relieving unemployment implied in them. These include land settlement, industrialisation, village improvements, the development of cottage industries and measures to integrate indigenous peoples into the culture of more industrially oriented societies.

Employment Goals

Many development plans do not contain any estimates of the extent to which their implementation would increase employment and overcome unemployment and underemployment. This omission is understandable enough in view of the fact that in some underdeveloped areas—especially certain regions in Latin America and Africa—labour shortages rather than unemployment are a problem ; in other areas there is serious unemployment and underemployment, but it would be difficult to collect exact data on their extent or the probable future increase in the labour force, and on the extent to which increased production would result in increased employment. In spite of these difficulties, however, some countries have made estimates, necessarily highly qualified, of how much unemployment may be overcome as a result of a development plan.

In Italy the so-called Vanoni Plan envisages that, under certain assumptions, most unemployment may be overcome by 1964.[1] The Plan assumes that by 1964 jobs will have to be found for 4 million workers. This total includes 1,050,000 from agriculture, 1,750,000 from outside agriculture and 2 million accounted for by the natural increase in the labour force ; on the other hand a net loss of 800,000 is expected to result from emigration during the period.[2]

The Vanoni Plan envisages that this additional supply of labour (allowance having been made for frictional unemployment in estimating its magnitude) will be taken up in about equal parts by an expansion of industry on the one hand and tertiary activities (services, transportation, etc.) on the other.

In the People's Republic of China under the current Five-Year Plan it is provided that employment will be increased by 4.2 mil-

[1] See " The Vanoni Plan for the Economic Development of Italy ", in *International Labour Review*, Vol. LXXI, No. 6, June 1955, pp. 616-634.

[2] Ibid., p. 619.

lion, to be distributed as follows : 54 per cent. in industry, 9 per cent. in state-owned agricultural enterprises and forestry, 18 per cent. in construction and 19 per cent. in commerce and services.[1]

In the Philippines the Five-Year Employment Programme of the Department of Labor plans an increase in employment by 1959 of about 1,369,000, to be distributed as follows (in thousands)[2] :

Agriculture	600
Mining and manufacturing	335
Tertiary activities	434

In India, during the period covered by the Second Five-Year Plan, the additional employment that would need to be created in order to achieve full employment is estimated to be as shown in table II.

TABLE II. ADDITIONAL EMPLOYMENT REQUIRED DURING THE PERIOD OF THE INDIAN SECOND FIVE-YEAR PLAN

(In millions)

	Urban areas	Rural areas	Total
Unemployment already existing	3.8	6.2	10.0
New entrants into the labour force	2.5	2.8	5.3
Total	6.3	9.0	15.3

The additional employment that is, in fact, expected to result from the Plan is as follows (in millions) :

Construction	2.10
Irrigation and power	0.05
Railways	0.25
Other transport and communications	0.18
Industries and minerals	0.80
Cottage and small-scale industries	0.45
Forestry, fisheries, and allied schemes	0.41
Education	0.26
Health	0.12
Other social services	0.14
Government services	0.43
" Others " including trade and commerce	2.71
Total	7.90

[1] United Nations, Department of Economic Affairs : *Economic Survey of Asia and the Far East, 1955* (New York, 1956), p. 47.

[2] *Industry and Labour* (Geneva, I.L.O.), Vol. XV, No. 5, 1 Mar. 1956, p. 202.

Thus under the Second Five-Year Plan the expected increase in employment would be sufficient to relieve unemployment in urban areas substantially but not to absorb all unemployment or underemployment in agriculture.

One difference should be pointed out between the employment goals of the Italian and Indian plans. The employment goals in the Italian Plan do not include the employment that would be provided in the construction of buildings or other non-recurring investments. The employment goals in the Indian Plan, on the other hand, do include employment in construction to the extent of 2.1 million or about 27 per cent. of the expected increase in employment. Thus the Indian estimate of sustained employment from the Plan would be somewhat high if the volume of construction were not maintained after the completion of the Plan, while the Italian estimate would be low if, as a result of the Vanoni Plan, the volume of new construction were permanently raised to a higher level.

In the Six-Year Programme for Economic Development in Ceylon [1] a distinction is made between " revolving " employment and permanent employment. Revolving employment is created as a direct result of the construction of buildings, equipment and other investments for the Programme, but it cannot be expected to continue after the Programme is completed. Permanent employment, on the other hand, is expected to continue after the completion of the Programme. Table III shows estimates of the extent to which employment is expected to increase during the construction of projects and in the operation of projects after the end of the planning period :

TABLE III. ESTIMATED INCREASE OF EMPLOYMENT UNDER THE SIX-YEAR PROGRAMME IN CEYLON

	Numbers employed in the construction of projects			Increase in permanent employment at end of six-year period
	1954-55	1955-56 to 1959-60 (annual average)	Increase in employment	
Administrative and clerical	2,095	2,538	443	4,854
Technical	3,470	4,360	890	4,988
Skilled workers	22,562	39,526	16,964	38,081
Unskilled workers . . .	71,366	94,970	23,604	46,972
Total . . .	99,493	141,394	41,901	94,895

[1] Government of Ceylon, Planning Secretariat: *Six-Year Programme of Investment, 1954/55 to 1959/60* (Colombo, Government Press, 1955), pp. 36-39.

These estimates do not include any allowance for the extent to which underemployment in Ceylon is expected to be overcome by land settlement schemes to be carried out under the Programme. These will be discussed below.

In the Caribbean, in a development plan for Jamaica proposed by the International Bank for Reconstruction and Development, it was roughly estimated that net output could be increased by 5 per cent. a year, with the result that by 1962 employment could be increased as follows [1] :

Agriculture	35,000
Tourist trade	8,000
Factory employment	15,000
Light manufacturing	10,000
Tertiary activities	75,000
Total	143,000

This figure would not be sufficient to absorb all the unemployment in Jamaica ; unemployment is now about 100,000 and the labour force may increase by another 100,000 by 1962. It was concluded in the Bank report that, at the completion of the Plan, 8 to 10 per cent. of the labour force would remain unemployed.

These goals for different countries demonstrate that the problem of unemployment and underemployment in many underdeveloped countries is by no means easy to overcome even when ambitious development plans are undertaken. To a large extent the problem is complicated at least until industrialisation and urbanisation have reached a certain stage—by the dynamic tendency of the natural growth in the labour force to offset much of the decrease in unemployment that would otherwise arise as new jobs were created by development programmes. The recognition of this fact has led to the adoption in some countries of measures designed to encourage deliberate limitation of the size of families with a view to checking rapid increases in population and in the labour force.

Increasing the Supply of Arable Land

Perhaps the most obvious way to overcome underemployment in agriculture is to make more arable land available to underemployed workers. While in some areas it may be practically impossible to increase the amount of arable land available, in many other regions there do exist definite possibilities for expanding the

[1] International Bank for Reconstruction and Development : *The Economic Development of Jamaica* (Baltimore, Johns Hopkins Press, 1952), pp. 5 and 143-144.

supply of arable land by projects for irrigation, reclamation and land clearance.[1]

Central and South-East Asia.

In Afghanistan, under the Helmand-Arghandab Valley Project, it is expected that about 380,000 hectares of land will be irrigated. The project also provides for the construction of roads and villages in the newly irrigated lands.[2] In Thailand it is planned that by 1959, with the help of an 18 million dollar loan from the International Bank for Reconstruction and Development, 940,000 hectares of land in the central plain will be irrigated. Progress is also being made for the irrigation by means of storage tanks of about 36,000 hectares in the north-eastern part of the country.[3]

In the People's Republic of China the Five-Year Plan calls for the expansion of China's cultivated areas by at least 2.5 million hectares by 1957.[4] Measures are also being taken to enable more sustained use of lands that have hitherto suffered from floods. Reservoirs for controlling the flooding of the Yellow River are scheduled to be built. In 1954 a large reservoir for control of the Yungting River was completed.[5]

In North India it is expected that the Bhakra-Nangal Project will irrigate 1.2 million hectares of new land in addition to providing more water for 1.5 million hectares. In August 1955 Indian engineers completed the basic construction work on the Damoder Valley Project, which is intended to irrigate 32,000 hectares of land. The Tangabhadra Project in Andhra is expected to have a capacity for irrigating 800,000 hectares of land. These are only examples of some of the major irrigation projects going on in India. Attention should also be called to the importance of the tube-well drilling project under the Indo-American Technical Assistance Programme which, while perhaps less spectacular than the making of big dams,

[1] In considering schemes for increasing the amount of arable land it is important to avoid any misleading international comparisons that might be suggested by the following discussion. For example, it would, of course, be wrong to compare the relative success of different countries in irrigation schemes solely by reference to the amount of land irrigated. Sometimes, in terms of the actual yield of the land irrigated, a scheme to irrigate a smaller area of land may be more successful than a scheme to irrigate a larger area. Again, in some areas irrigation is very much more difficult and costly than in others.

[2] *Economic Survey of Asia and the Far East, 1955*, op. cit., pp. 52-53.

[3] Ibid., p. 181.

[4] Li Fu-chun: *Report on the First Five-Year Plan for Development of the National Economy*. A statement delivered on 5 and 6 July 1955 at the Second Session of the First National People's Congress. Supplement to *People's China*, Aug. 16, 1955, p. 28.

[5] *Economic Survey of Asia and the Far East, 1955*, op. cit., p. 89.

has enabled the irrigation of a large number of small plots of land. The First Five-Year Plan provided for drilling 4,000 tube wells, but that figure may well be surpassed by 1,600.[1]

In Pakistan about 1,300 tube wells had been installed in a tube-well irrigation project by April 1955. The Government is also carrying out an ambitious series of large-scale irrigation projects. These include the Banbawali-Bedian Link, the Buloko-Sulaimenki Link, the Thal Irrigation Project and the Lower Sind Barrage. It is not improbable that irrigation schemes in Pakistan will benefit about 10 million hectares of land.

In Ceylon the so-called dry zone in the northern and eastern parts of the island is sparsely populated. In the Six-Year Programme the Government plans, however, to expand the productive population of this area substantially by measures for irrigation and malaria control. Colonisation and settlement plans provide for moving about 40,000 families, mainly into this area. In the Gal-Oya area it may be possible to develop about 124,000 acres of land. Other major irrigation schemes are expected to irrigate about 56,000 acres. Minor irrigation schemes, utilising tanks and similar devices, are expected to provide for the irrigation of about 74,000 acres.[2]

In Indonesia, where population is heavily concentrated on the Island of Java, the Government is considering the possibility of a large-scale transfer of workers to Sumatra and Borneo, which are less densely populated. In 1953 about 10,000 families were moved from Java to South Sumatra and South Borneo. Under a 1954 plan for the transfer of population, each family transferred will be provided with two hectares of land, agricultural equipment, seed supplies and a house.[3]

Near and Middle East.[4]

In the Middle East there are especially great possibilities for using irrigation methods to increase arable land. In the Six-Year plan for Iraq a programme has been worked out for the construction of ten dams on the Tigris-Euphrates River system. The scheme is expected to irrigate 1.24 million hectares on the Tigris and 560,000 hectares on the Euphrates. In Iran the Seven-Year Plan Organisation envisages the irrigation of 500,000 hectares from surface

[1] *Economic Survey of Asia and the Far East, 1955*, op. cit., pp. 107-108.

[2] *Six-Year Programme of Investment, 1954/55 to 1959/60*, op. cit., pp. 39 and 178-179.

[3] *Economic Survey of Asia and the Far East, 1955*, op. cit., p. 128.

[4] Most of the information in this section is taken from United Nations : *Economic Development in the Middle East, 1945-54* (New York, 1955).

water and 150,000 hectares by drilling deep wells. In Egypt among irrigation projects the greatest interest has been shown in the Aswan Dam Project, which, upon completion, would be the largest in the world and bring 840,000 hectares into cultivation. In Lebanon irrigation projects are expected to bring 34,000 hectares into cultivation. In Syria an important project for expanding land use is the Ghab Project on the Orontes. It involves the draining of 26,000 hectares and the irrigation of 65,000 hectares. In Turkey irrigation is planned for 550,000 hectares of land. The Government also plans to drain 300,000 hectares of marshes. In Israel the irrigated area is expected to rise to about 185,000 hectares by 1960. By comparison, in 1948 there were only about 29,000 hectares of irrigated land in Israel.

The Caribbean Area.

In the Caribbean area efforts to make new arable land available are also important in development programmes. Here reclamation of land by clearing and empoldering (use of dykes) is as important as irrigation. In Jamaica, for example, particularly on the north coast, much good land is not fully used because of lack of water. The Mid-Clarendon scheme on the Milk River provides for the irrigation of 10,000 acres. An International Bank mission suggested that 46,000 additional acres could be irrigated in Jamaica. It also suggested that some reclamation schemes might be successful to the extent of making 20,000 acres available.[1]

For Surinam another mission of the International Bank recommended several projects for irrigation or reclamation designed to make more land available.[2] These would involve reconditioning about 13,000 hectares of old land and opening up more than 19,000 hectares of new land. Other projects to be undertaken will depend on the outcome of several pilot projects. The Bank mission recommended that the Wageningen Project under which 50,000 hectares of land would be reclaimed by empoldering, should be tried out with a 7,000 to 10,000 hectare project. The mission also recommended that 200,000 Surinam florins should be spent on experiments with the Slootwijk Project to reactivate 30,000 hectares of deserted plantation lands. For the Lelydorp Project, under which 2,000 hectares of land will ultimately be cleared and 125 farms established on them, the Bank mission recommended an expenditure of 900,000 Surinam florins in addition to certain unexpended allocations.

[1] *The Economic Development of Jamaica*, op. cit., pp. 37-43 and 177-181.

[2] International Bank for Reconstruction and Development: *Surinam, Recommendations for a Ten-Year Development Programme* (Baltimore, Johns Hopkins Press, 1952), pp. 44-55 and 148-153.

Industrial Development, " Propulsive Investments ", and Tertiary Activities

From the above discussion it is clear that much can be done to overcome unemployment, and especially underemployment in agriculture, by making more land available for cultivation. It is important, however, especially in Southern Europe and South-East Asia, not to exaggerate the extent to which new arable land can be made available. To a large extent it may be possible to overcome unemployment and underemployment in agriculture only by moving more workers into industry. Most underdeveloped countries have, therefore, stressed industrialisation in their development plans.

Italy and Southern Europe.

The Italian Vanoni Plan aims at overcoming unemployment and underemployment in agriculture by a direct shift of workers from agriculture into industry. As was indicated above, employment in industry and services will rise while employment in agriculture will be somewhat reduced. Although employment in agriculture will decline, however, about 3.3 billion lire will nevertheless be allocated to that sector, because an increase in agricultural output will almost certainly be necessary in order to provide a substantial part of the market for increased industrial output.

Investment in agriculture under the Vanoni Plan, as is indicated in table IV, is one of the so-called " propulsive " types of investment. These are investments that do not in any direct way create a large volume of employment but which may nevertheless result in an indirect way in a substantial increase in employment in

TABLE IV. THE ITALIAN TEN-YEAR INVESTMENT PROGRAMME

Sector	Investment in thousand million lire	Percentage of total
Propulsive sectors :		
Agriculture	3,287	14
Public utilities	4,700	19
Public works	2,650	11
Total for propulsive sectors	10,637	44
Housing	5,100	21
Industry	5,400	23
Services	3,200	12
Grand total	24,337	100

industry. There are not, for example, very many jobs provided on public utilities, but the availability of power may make possible an expansion of industry that will greatly increase employment. Public works for road construction are another example: after roads and other transport services are completed they may not directly result in much sustained increase in employment, but to industry better transport means lower costs of supplies and possibilities for increased output and employment.

In Southern Europe the emphasis on propulsive investments has not been confined to Italy. In Greece bids are being accepted for the construction of power plants. Since the war an extensive network of roads has been constructed in Turkey. The Portuguese Development Plan of 1953-58 provides two-thirds of its expenditures for electrification, transport and communications. Difficulties resulting from a lack of propulsive investments appear to be particularly evident in Spain, where some newly established industries have operated at low capacity for lack of power. Between 1954 and 1955, however, production of electricity in Spain is estimated to have increased by about 15 per cent. There is also some evidence in Spain that industrial development is running ahead of its transportation requirements.[1]

Aside from propulsive investments, most of the investments in the Vanoni Plan for Italy will be by private enterprise—though aided in some cases by tax concessions, subsidies, credit facilities and other special advantages. It is envisaged that this reliance on private enterprise can to a large extent be made consistent with a planned pace of economic development by the device of " control sectors ". In this case control sectors are housing and forestry. When there is a lack of private investment to meet the goals of the plan the control sectors will be expanded ; on the other hand, when private investment runs ahead of the plan, with a risk of inflation or balance-of-payments difficulties, the authorities will contract output in the control sectors—in this case, for example, the building of houses. The concept of control sectors may be considered an important technique for development planning. A well-chosen group of control sectors may act as a " safety valve " in a development plan ; by their adjustment it may be possible to avoid remaking a development plan when some of its estimates turn out to be wrong.

Housing in Italy does have the advantage as a control sector that there is a great housing shortage and that in the foreseeable future there is not likely to be any lack of need for increased output in this sector. On the other hand it might be supposed that, for

[1] Most of this information is based on United Nations, Economic Commission for Europe: *Economic Survey of Europe in 1953* (Geneva, 1954).

an industry or group of industries to function successfully as a control sector, it should use a wider range of material and human resources than is found in housing construction. While house building might offset unforeseen changes in total demand it might not, for example, serve in any adequate way to offset the effects of fluctuations in steel production. In the official and unofficial studies that preceded the making of the Plan, however, special efforts were made to analyse the structure of the Italian economy to determine what particular resources would be required to implement the Plan.[1]

Latin America.

In the Latin American countries in recent years, as may be seen from table V, there has been a shift in population away from agriculture into industry on somewhat the same pattern as is envisaged in the Vanoni Plan. Table VI shows, however, that proportionally less investment is estimated to have been devoted to agriculture (about 8 per cent. of total investment) for the period 1950-54 than is expected to be made in Italy (about 14 per cent.), even though possibilities for expanding agricultural output are probably greater in Latin America than in Italy. This low level of propulsive investment in agriculture in Latin America may to some extent account for inflationary pressures that in some of these countries appear to have been directed towards a limited agri-

TABLE V. ACTIVE POPULATION BY SECTORS IN LATIN AMERICA, 1940-54

Sector	Absolute figures (millions of persons)		Percentage distribution	
	1940	1954	1940	1954
Agriculture	27.5	30.0	62.1	51.6
Industry, building and mining	6.4	11.2	14.5	19.3
Services	10.3	16.9	23.4	29.1
Total . . .	44.3	58.1	100.0	100.0

Source : United Nations, Economic and Social Council : *The Selective Expansion of Agricultural Production in Latin America and Its Relationship to Economic Development.* A joint document of the Economic Commission for Latin America and the Food and Agriculture Organisation. Document E/CN.12/378, 31 July 1955, p. 30.

[1] See United States Mutual Security Agency, Special Mission to Italy : *The Structure and Growth of the Italian Economy* (Rome, 1953). This study makes extensive use of the so-called input-output analysis technique. See also John FEI and Veniero DEL PUNTA : " L'uso della ' programmazione lineare ' per lo studio della planificazione dello sviluppo industriale con riferimento al problema del Mezzogiorno italiano ", in *Revista di Politica Economica* (Rome), Nov. 1955.

TABLE VI. COMPOSITION OF CAPITAL STOCK BY ACTIVITIES IN LATIN AMERICA, 1950-54

Sector	Capital stock				Net investment 1950-54 [1]	
	Absolute values (millions of dollars [2])		Percentage distribution		Absolute values (millions of dollars [2])	Percentage of capital stock in 1950
	1950	1954	1950	1954		
Agriculture . . .	21,551	22,952	25.7	22.9	1,401	6.5
Industry, building and mining . .	12,803	17,924	15.3	17.8	5,121	40.0
Services	49,516	59,631	59.0	59.3	10,115	20.4
Total . . .	83,870	100,507	100.0	100.0	16,637	19.9

Source: *The Selective Expansion of Agricultural Production in Latin America* . . ., op. cit., p. 24.
[1] Calculated as the difference between the capital stock in 1950 and 1954.
[2] Converted at 1950 purchasing power of the dollar.

cultural output in a way similar to that described in general terms on page 125 above. In the case of Argentina this point was put as follows in a recent report submitted by Dr. Raúl Prebisch to the President of Argentina [1]:

It is a well-established principle of economic development that technical progress in agriculture is the essential basis for industrialisation in the Latin American countries, for two compelling reasons. In the first place technical progress, by increasing productivity, renders possible a better employment of labour and thus enables an increasing proportion of the annual increment of the labour force to be absorbed into industry and other activities. In the second place, the higher level of farm incomes results in an expansion of the internal market for the products of industry. One of the most serious errors in Argentina's economic policy has consisted in ignoring this close bond between industrial growth—which is an indispensable requisite for economic development—and the technical progress of agriculture. Argentine farming enterprise has been provided neither with the necessary incentives nor with the resources required for its technical development, and it has also been deprived of the labour which could only have been released through an enhanced productivity. In this way an attempt has been made to intensify the vigorous rate of growth already attained by the industrialisation process since the Second World War, without broadening its basis or adjusting its structure to the demands of development, and, at the same time, entirely neglecting the support of the rural production sector, which, however, was indispensable for the industrialisation programme.

It must be admitted, in all fairness, that steps were later taken to rectify the error, although not to the extent, nor with the resolution required for effectively repairing the damage done to the production sector. It is thus necessary to restore the balance between agriculture and industry, and the

[1] *The Review of the River Plate* (Buenos Aires), Vol. CXVIII, No. 3235, 31 Oct. 1955, p. 29. Dr. Prebisch is Executive Secretary of the Economic Commission for Latin America (E.C.L.A.) but this statement represents his personal view and not necessarily that of E.C.L.A. It was made while he was on leave from E.C.L.A. as a consultant of the Government of Argentina.

complementary nature of their respective functions, so that both may contribute with maximum efficiency to the rehabilitation of Argentina's economy and the speeding up of its rate of development.

In recent years, however, a number of Latin American countries have taken measures to increase productivity in agriculture. In Mexico, for example, a campaign to raise wheat production may achieve self-sufficiency. In Brazil in 1954-55 the area of wheat cultivation was six times greater than before the war. Argentina, Venezuela, Ecuador and Colombia are expected to become self-sufficient in sugar in the near future. Cotton production in Colombia is six times greater than before the war.[1] In Bolivia, the production of maize in 1953-54 was more than doubled, mainly as a result of the introduction of a new type of maize.[2]

Attention may also be called to government policies to encourage agricultural expansion in Latin America. In Brazil, with the help of a loan from the Export-Import Bank in Washington, the Ministry of Agriculture in 1954 financed the importation of a considerable volume of machinery which was sold to farmers at cost and on three years' credit. In Colombia the Credit Bank makes loans available for village improvements and imports of agricultural machinery. In Cuba the Agricultural and Industrial Development Bank has been particularly active in advancing an expansion of rice production. In Mexico state-controlled banks have extended credit for purchases of fertilisers. In Chile a reform of agricultural taxation will begin to apply in 1957 : it provides for tax exemptions under certain rather broad conditions for all improvements to agricultural land and for a new system of appraising land for taxation. The State Bank and the Development Corporation have financed the purchase of fertilisers, breeding stock, machinery and other improvements. In 1954 the Government, in collaboration with the International Bank for Reconstruction and Development and the Food and Agriculture Organisation, set up an eight-year programme which envisages a 40 per cent. increase in agricultural output through a more intensive application of technical skills in agriculture.

India.

In India the expenditures of the central Government and of state governments under the Second Five-Year Plan have been set out as shown in table VII.

[1] *The Selective Expansion of Agricultural Production in Latin America . . .*, op. cit., pp. 84 ff and 112.

[2] See United Nations, Department of Economic and Social Affairs : *Economic Survey of Latin America, 1954* (New York, 1955), p. 127. The data in the following paragraph are drawn from the same source, pp. 134-180.

TABLE VII. GOVERNMENT OUTLAY [1] IN VARIOUS SECTORS UNDER THE INDIAN SECOND FIVE-YEAR PLAN

Sector	Outlay (in million rupees)	Per cent.
Agriculture and community development	5,600	12
Irrigation and power	8,980	18
Industries and minerals	8,910	19
Transport and communications	13,840	29
Social services, housing and rehabilitation	9,460	20
Miscellaneous	1,160	2
Total	47,950	100

Source: *Second Five-Year Plan—A Draft Outline*, op. cit.

[1] It is important that these outlays should not be directly compared with the Italian Investment Plan in Table IV because the outlays for India appear to include some current expenses as well as public investment and do not include private investment. Public investment under the plan is set at 38,000 million rupees and private investment at 23,000 million rupees.

From the figures on p. 127 it may be seen that the extent of increased employment in industry in the Second Five-Year Plan will probably be proportionally less important than in the Italian Plan where industry is intended to account for about half of the increased employment. The Indian Plan aims to develop heavy industry to provide a sound base for the building up in a later period of an industrial sector that will substantially increase employment in the production of consumer goods. As is indicated below, for the more immediate future great stress is put on the role of handicraft industries in increasing employment.

To a greater extent than in Italy it is planned to increase employment in services and tertiary industries. The planned increase in employment in education, health and social services is substantial, amounting to about half a million. In some cases employment in these fields can be increased by some redefinition of professional functions. As Professor P. C. Mahalanobis, one of the architects of the Indian plan, stated in a broadcast address:

I may consider health services. It is believed that out of 65,000 fully qualified physicians (basically with six-year training), only about one-fourth, that is, fifteen or sixteen thousand, live in rural areas which have a population of over 300 million. That is, in rural areas, there is probably one fully qualified physician for 20,000 persons on an average. Our medical colleges are turning out only about 2,000 physicians per year; even if all of them go to rural areas (which is not possible), allowing for casualties it will take two centuries before there is one six-year trained physician for 1,000 persons—the proportion already reached in some of the advanced countries of the world. It would be possible, however, to turn out every year ten or twelve or fifteen thousand health assistants who would be given training to provide elementary medical aid and to send them to the villages,

which would enable every village to have the services of such health assistants within 20 or 25 years. I have suggested that such cadres should be established without delay.

Eastern Europe and the U.S.S.R.

Development planning in the U.S.S.R. and the countries of Eastern Europe has also stressed industrialisation, particularly in producer goods industries. In recent years, however, as is indicated in a general way in table VIII, the rate of increase in industrial employment has tended to fall. This decline does not, however, necessarily indicate a decline in the rate of growth of industrial production. It is rather the consequence of the high priority given in development plans to maintaining an adequate labour force in agriculture. When programmes for economic development in these countries were first undertaken, there appeared to be a considerable number of underemployed workers in rural areas (except in Bohemia). At the present time, however, the availabilities of rural labour at current levels of technique and mechanisation are much more limited, while at the same time demands for food in urban areas have increased.

Planning authorities are therefore unwilling in most cases to continue to shift workers in large numbers from agriculture to industry and thereby risk a decline in agricultural production. In some cases, in fact, shortages of agricultural labour have developed and recruitment programmes have been organised with varying degrees of success. In Czechoslovakia the target established for 1954 provided for the recruitment of about 105,000 workers for agriculture, but only 17,000 were actually recruited ; in 1955 about 10,000 young workers were recruited to go to the frontier regions to help cultivate unused land. According to the Agricultural Plan for the 1954-57 period, the Czechoslovak authorities envisage an increase in agricultural labour of 320,000 workers.

A special campaign has been organised in Poland to attract young workers into state farms where manpower is needed. In the

TABLE VIII. ESTIMATED INCREASES IN INDUSTRIAL EMPLOYMENT IN THE U.S.S.R. AND FOUR COUNTRIES IN EASTERN EUROPE

Country	Percentage increase over previous year			
	1952	1953	1954	1955 Plan
Bulgaria	6	5	4	4
Czechoslovakia	2	3	2	1
Hungary	10	5	1	—
Poland	6	6	4	3
U.S.S.R.	—	5	6	2

U.S.S.R. a campaign, initiated during 1953-54, to recruit workers for cultivation of the virgin land in Siberia, Kazakhstan and Northern Caucasus continued throughout 1955, and it is reported that efforts were made to attract demobilised soldiers to settle in the newly cultivated areas of the eastern regions of the country.

The present inadequate development of housing construction has also been a factor in decisions of the planning authorities to limit rural-urban migration. Urban centres were evacuated in several of these countries and damage due to the war was of course enormous. In spite of the rate of increase in housing construction it is not sufficient to accommodate the rapidly rising urban population.

Although less labour has been transferred from agriculture to industry in recent years, new investment in industrial equipment, improved technology and vocational training programmes have resulted in increased output per worker in industry. There has also been greater emphasis on the employment of women [1] and of persons formerly in services or handicrafts.[2]

In the emphasis which they place upon withdrawing labour from services and handicrafts, it may be noticed that development plans in Eastern Europe and the U.S.S.R. differ from those of Italy and India, which provide for increases in employment in the services and handicrafts. The transfer of workers from less essential services to industry has the great advantage over the use of workers from agriculture that it does not put additional pressure on housing, local transportation and other community facilities. Measures have also been undertaken to reduce labour requirements in industry by reducing clerical and administrative personnel, and in some cases by transfers of manpower from industries with lower productivity to industries with higher productivity. In Hungary the planning authorities were authorised in 1955 to assign young people leaving secondary school to directly productive occupations in industry. And in the German Democratic Republic the employment targets fixed for 1955 called for a rise in the ratio of productive workers to other employees.

Village Improvements and Handicrafts

Another line of action against unemployment and underemployment in agriculture is to find new productive activities

[1] For example in Czechoslovakia the proportion of women employed in industry and services in 1954 reached 36 per cent. of the total labour force employed in these branches of economic activity.

[2] For example in Hungary, while the number of industrial workers increased in the 1949-54 period by 326,000, the number of handicraft workers decreased by 428,000.

in rural areas for unemployed and underemployed workers. There is a growing body of evidence that even if there is disguised unemployment and underemployment in agricultural work *per se*, with improved community organisation a great many reasonably productive activities may be set up to keep otherwise underemployed workers occupied throughout the year. In some underdeveloped countries underemployment and disguised unemployment are mainly associated with certain seasons.[1] It is during these periods that measures for community organisation can be especially important for enabling full use to be made of manpower.

The activities of community organisations, in so far as they affect employment, can be considered under the two broad headings of *(a)* measures to improve the long-run efficiency and productivity of agriculture in rural areas and *(b)* measures to increase the output of non-agricultural products, mainly in handicrafts, in rural areas.

Examples of the first kind of rural community organisation are the projects of the local development committees in the Gold Coast to build roads and dig wells. Similar activities have been carried out by the Welfare Committees in Burma and South Korea. Under the community development programme in Greece approximately 5,000 kilometres of roads have been constructed and 3,000 kilometres repaired, 3,000 trees planted and 110 reservoirs constructed.[2] In the People's Republic of China, under the guidance of agricultural producers' co-operatives, a considerable amount of surplus labour in rural areas appears to have been utilised in such activities as soil conservation, disease and pest control, reafforestation, improving housing conditions and part-time schools. In India it is planned to construct 600,000 houses per year in rural areas.

Programmes of the kind discussed in the above paragraph, since they are really capital formation activities, may not provide a permanent increase in employment. A more sustained increase in employment may, however, be provided by the expansion of non-agricultural production, especially in handicraft industries. In Asian countries a number of projects have been undertaken by governments with the aim of improving the techniques, financing and marketing of handicraft products ; a few of these projects are mentioned below.

In Thailand the Department of Experiment and Research in the Ministry of Industry is carrying on research into methods of improving handicrafts, especially lacquerware and rope products. An effort is being made to find local substitutes for raw materials.

[1] See *Action against Unemployment*, op. cit., pp. 129-130.

[2] See United Nations, Bureau of Social Affairs : *Social Progress through Community Development* (New York, 1955), pp. 46-49.

In Afghanistan the Technological Institute in the Ministry of Education has given assistance to the textile, carpet and pottery handicraft industries; a loom has been developed that is small enough to be kept indoors to protect it from the weather; improvements have also been made in textile and carpet dyes, wool washing, clays for pottery and the type of forge used for handicraft work. In Burma the Ministry of Co-operation and Commodity Distribution has been working to improve techniques in cottage industries for textiles, silk reeling, pottery, sugar refining, condensed milk production and hand-made paper.

Governments have also given assistance in the marketing and financing of handicraft products. India and Pakistan have opened display centres abroad. In India an effort is being made to attract government orders to handicrafts industries. In the People's Republic of China the total value of handicraft production over the five-year period 1952-57 is expected to increase by about 61 per cent. In Ceylon credit at low interest rates for handicrafts is provided by the Ministry of Co-operatives and Industries. In Indonesia loans have been extended for the mechanisation of rural industries. In India the Second Five-Year Plan envisages an expenditure of 2,000 million rupees for the promotion of village and small-scale industries. In Afghanistan an Agricultural and Rural Industries Bank has been established for the purpose, among other things, of promoting small industries. Arrangements have also been made for financing imports of Japanese machinery into Afghanistan.

In India special tax advantages have been extended to handicrafts. Under the Second Five-Year Plan it is envisaged that a tax on large-scale industry will result in some limitation of its output and therefore a greater part of the market will be reserved for handicraft production. It may, of course, be argued that if productivity is higher in large-scale industries such a tax policy may result in lower total national income. On the other hand the argument may be advanced that even if national income is lowered somewhat by a tax policy to encourage small scale industries and handicrafts, the sacrifice in national income will be justified by the increase in employment. As was suggested above, there are also a great many social costs of employing workers in industry that are not usually borne directly by employers. These include costs of housing, transport facilities, urban land development, and other services that are not required, or are not required to the same extent, in rural communities. If these costs are taken into account, there may not be a very great difference between costs of production in handicrafts and costs of production in large-scale industry.

In Latin American countries measures to promote handicrafts are closely connected with other measures for improving living conditions among indigenous peoples. In a number of these countries there may be labour shortages and, at the same time, underemployment among indigenous peoples who cannot be rapidly integrated into a more industrialised and market-conscious society. " The development of existing handicrafts and the introduction of new ones ... are of special value in helping indigenous people to adjust themselves economically to the highly organised methods of production and marketing prevailing elsewhere, without being constrained to abandon their villages for wage employment in towns or on estates or plantations." [1]

Governments have undertaken a number of different lines of action to promote handicrafts among indigenous peoples. In Peru the Industrial Bank supplies silver to craftsmen at special low prices. In Argentina the Domestic Weaving Corporation makes wool and cotton yarn available to handicraft workers without the intervention of middlemen. Training and light equipment have been made available to handicraft workers in Peru, Mexico, Guatemala, Argentina and other Latin American countries.[2]

In Peru attempts are being made to revive nearly extinct techniques for straw and textile weaving. In Guatemala it has been decided to use special labels on indigenous handicraft goods in order to protect the market from cheap factory-made imitations.[3] In Ecuador, where sales of straw hats have suffered a severe decline, the Government in 1952 set up an Institute for the Economic Recovery of the Azuay-Cañar Provinces, which depend for much of their income on the straw hat trade.[4]

Summary

Some of the principal lines along which governments are seeking to overcome underemployment and structural unemployment have been described above. These policies can be grouped in a broad general way under the headings of (1) measures to make more arable land available, (2) industrialisation and related policies and (3) measures to promote village improvements and handicrafts production.

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[1] See I.L.O. : *Indigenous Peoples. Living and Working Conditions of Aboriginal Populations in Independent Countries*, Studies and Reports, New Series, No. 35 (Geneva, 1953), p. 432.

[2] Ibid., p. 448.

[3] *Indigenous Peoples* ..., op. cit., pp. 451-452.

[4] *Lilo Linke, Ecuador* (London, Royal Institute of International Affairs, 1954), p. 137.

All three of these lines of action are being followed in most underdeveloped regions, but their relative importance varies in different countries as do the patterns of movement in manpower that tend to emerge as economic development proceeds.

In the Near and Middle East development programmes appear to envisage overcoming underemployment mainly by irrigation and other measures to increase the supply of arable land. In Latin America and Italy the pattern of economic development involves industrialisation and the drawing of labour away from agriculture into industry and services. Such a policy also requires, however, measures to increase productivity in agriculture; otherwise it is doubtful if there will be sufficient demand from the agricultural sector for the increased output of industry.

The pattern of change in manpower distribution in Eastern Europe and the U.S.S.R. differs from that in Italy and Latin America in that manpower at the present time tends to be shifted into industry mainly from services. In India the Second Five-Year Plan provides for further industrialisation and especially for rapid expansion of the producer goods sector, but this is expected to go only part of the way towards providing the additional employment required. At a later period it is envisaged that, as a result of the progress achieved in basic industries, it will be possible to equip and supply industries manufacturing consumers' goods to enable them substantially to increase output and employment. For the period of the Second Five-Year Plan, however, special stress is placed on the contribution of handicrafts to employment and for this reason they are subsidised, given special tax advantages and fostered as an integral part of the community development programme.

It may be of interest finally to compare the policies surveyed in the present article with those that were analysed in the I.L.O. study *Action against Unemployment* published six years ago. Many of the policies to which attention was called in that study are now taken for granted as part of development planning. These include land settlement, industrialisation, and the promotion of handicrafts. Development plans and experience since 1950, on the other hand, tend to focus attention on some points that were not stressed at that time. Much greater emphasis is now put on the importance of increasing output in agriculture simultaneously with industry in order to provide a market for increased industrial output. Some plans also call attention to possibilities—that were seldom considered in earlier years—of expanding industry by transferring workers into it from services and tertiary activities rather than from agriculture. Greater stress is also given in a number of current development plans to improving conditions for

workers who remain in the villages without moving into industry or land settlement schemes. Measures of this kind include village improvement programmes and a closer link between co-operatives, handicrafts and community development projects. The increased emphasis on community development is in accord with the now widely held view that economic development is as much a social as an economic and engineering process.