

Resilience amidst crisis: The informal sector of Dakar

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The economic crisis of the 1980s has increased awareness of the informal sector's potential for offsetting some of the negative effects on output and employment of declining activity in the formal sector. Self-employment and micro-enterprise activity have absorbed some of the formal sector workers who lost their jobs but even more new entrants to the urban labour force. With the further squeeze on government payrolls and on formal sector businesses resulting from structural adjustment measures taken in the 1980s, a number of African governments, including the Government of Senegal, and the international aid agencies have been looking to projects involving the informal sector to take some of the edge off the crisis. For that purpose, up-to-date information on the size of the informal sector in major cities and the behaviour of informal sector participants is obviously useful.

In Senegal a mini-census followed by a survey of the informal sector micro-enterprises of Dakar and its environs (as far as Pikine and Thiaroye on the Cap Vert) were carried out from September 1988 to January 1989 by USAID/Senegal for the Government of Senegal.¹ The information provided by the census and survey was intended to help the Government of Senegal, USAID, the World Bank, the ILO, the UNDP and other aid donors to

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¹ The survey was conducted at the suggestion of Jacques Delons, who was in Dakar as a member of an ILO High-Level Employment Mission to Senegal in May 1988. The survey instrument used was a modified version of the last questionnaire designed (for Yaoundé) by the late Georges Nihan for the ILO's World Employment Programme as part of the Research Programme on Skill Acquisition and Self-Employment in the Urban Informal Sector of Francophone Africa. See the following papers and articles: Erik Demol and Georges Nihan: "The modern informal sector in Yaoundé", in *International Labour Review*, 1982/1, pp. 77-88; Carlos Maldonado, with the collaboration of Josiane Capt and Erik Demol: *Petits producteurs urbains d'Afrique francophone* (Geneva, ILO, 1987); Georges Nihan: *Le secteur non structuré: signification, aire d'extension du concept et application expérimentale*, WEP research working paper (Geneva, ILO, 1979), also published in *Revue Tiers-Monde* (Paris), Vol. XXI, No. 81, Jan.-Mar. 1980, pp. 261-284; and S. V. Sethuraman (ed.): *The urban informal sector in developing countries: Employment, poverty and environment* (Geneva, ILO, 1981).

design programmes to encourage productive activities in the informal sector in Senegal. This article summarises those results and gives an up-to-date picture of the contribution made by Dakar's informal sector to employment, income and the transmission of skills.

Since the late 1960s Senegal's economy has been shaken by a series of crises: fluctuating world prices for its main exports – groundnuts and phosphates; the oil shocks of the mid and late 1970s; drought in the 1970s and early 1980s; the aftermath of the overbuilding of parastatal organisations and public sector enterprises in the 1960s and 1970s; and a population growth rate of close to 3 per cent per year exacerbated by continued rural migration into the Dakar-Cap Vert urban area. Since the early 1980s structural adjustment measures have been taken to stabilise the economy but at the cost of holding back the growth of the modern industrial and business sector. Nevertheless, the producers of goods and services in the modern urban informal sector have demonstrated remarkable resilience and dynamism while the traditional urban informal sector has proved an important employer of last resort.

1. Employment and value added

Census of micro-enterprises

The census identified almost 30,000 units employing some 57,000 persons including the entrepreneurs themselves. Almost three-quarters (72 per cent) of the units were in commerce: vendors in the markets, in small shops and kiosks, and on the streets; the other 28 per cent were in production: the building trades, services and transport. Table 1 shows the breakdown of these activities by branch and major sub-branches. The average size of enterprise as measured by employment per unit ranged from 1.1 in commerce to 8.1 in vehicle repairs; employment per micro-enterprise was found to be considerably higher in Dakar in 1988 than it had been in Yaoundé in 1978. The number of micro-enterprises in building and construction is underestimated since the enumerators did not go out to the building sites where presumably most of the active self-employed masons and others in the building trades were working during the daytime hours when the census was carried out, but only identified those found in their place of business. The census findings probably suffered another downward bias since September and October, the months of the census, are in the rainy season when many urban dwellers return to their villages of origin (or family origin) to help with the farm work.

There is no basis for measuring changes in numbers of micro-enterprises over time. A 1973-75 census of artisans carried out by the Statistics Department of Senegal's Ministry of Economy and Finance referred, in the case of the Dakar-Cap Vert region, to a larger geographical area than that covered in the 1988 USAID census and is therefore not comparable.

Table 1. Census of micro-enterprises in Dakar and its environs,¹ September-October 1988: Number of micro-enterprises and persons employed

Branch and sub-branch of activity	Micro-enterprises		Persons employed ²		Employment per enterprise
	No. (1)	% (2)	No. (3)	% (4)	
Production	4 548	15.3	20 518	35.7	4.5
Clothing and leather	2 748	9.3	10 670	18.6	3.9
Woodworking	685	2.3	4 739	8.2	6.9
Metalworking	961	3.2	4 845	8.4	5.0
Construction materials	58	0.2	110	0.2	1.9
Grain processing	94	0.3	152	0.3	1.6
Food processing	2	—	2	—	1.0
Building and construction	128	0.4	387	0.7	3.0
Services	2 240	7.6	9 981	17.4	4.4
Vehicle repairs	709	2.4	5 752	10.0	8.1
Electrical repairs	265	0.9	1 073	1.9	4.0
Prepared foods	820	2.8	2 086	3.6	2.5
Hairdressing and other services	446	1.5	1 070	1.9	2.4
Commerce	21 341	72.0	23 998	41.8	1.1
Transport	1 382	4.7	2 529	4.4	1.8
Total	29 639	100.0	57 413	100.0	1.9

¹ Includes Pikine and Thiaroye but not Rufisque and more distant parts of the Cap Vert. ² Including head of enterprise.

Source: USAID census of micro-enterprises in Dakar and its environs. See Charbel Zarour: *Etude du secteur informel de Dakar et de ses environs, Phase III, rapport final*, Dakar, August 1989, table 17, p. 88.

However, an increase in the number of production and service micro-enterprises presumably accompanied the general population increase, the settlement of new sections of greater Dakar such as the Parcelles Assainies (the World Bank's sites and services project area of the 1970s, now a thriving peripheral town), and the more intensive settlement of some of the established sections such as Pikine-Thiaroye. The number of micro-enterprises in the older and densely populated Rebeusse-Medina section closer to central Dakar has probably not increased. The activities where numbers have most likely grown are vehicle and electrical repairs. Unfortunately, the census enumerators were not instructed to distinguish between male and female entrepreneurs since the census was intended simply to establish the sample frame for the more intensive survey of micro-enterprises producing goods and services. Production and service activities are dominated by men, except for hairdressing, some dressmaking and food

Table 2. Sample survey of micro-enterprises in Dakar and its environs, November 1988-January 1989: Number of micro-enterprises and persons employed

Branch and sub-branch of activity	Micro-enterprises		Persons employed ¹		Employment per enterprise (5)
	No. (1)	% (2)	No. (3)	% (4)	
Production	347	62.2	1 771	56.1	5.1
Clothing and leather	104	18.6	363	11.5	3.5
Woodworking	118	21.1	748	23.7	6.3
Metalworking	125	22.4	660	20.9	5.3
Building and construction	25	4.5	109	3.5	4.4
Services	186	33.3	1 276	40.4	6.9
Vehicle repairs	96	17.2	872	27.6	9.1
Electrical repairs	67	12.0	269	8.5	4.0
Hairdressing and other services	23	4.1	135	4.3	5.9
Total	558	100.0	3 156	100.0	5.6

¹ Including head of enterprise.

Source: Charbel Zarour: *Etude du secteur informel de Dakar et de ses environs, Phase II, enquête exhaustive du secteur, Annexe: Les résultats chiffrés de l'enquête*, Dakar, May 1989, table 1, p. 1.

preparation, where more women participate. On the other hand, women predominate in commercial activities, especially the markets.

There is some ambiguity in the distinction implicitly made between self-employed skilled craftsmen and casual workers in the building trades, as pointed out by Chris Gerry in an earlier study on Dakar.² A mason repairing a wall for a neighbour is a micro-enterprise; if he is part of a construction crew working for the building contractor of a four-storeyed apartment building in Dakar, he is more likely to be a casual labourer. Since the masons in the census were all identified at their place of business, they were considered self-employed heads of micro-enterprises. The status of drivers of bush taxis and unlicensed inter-urban "clando" (clandestine) taxis is similarly ambiguous. Is the owner-driver really a micro-enterprise or is he an employee of the individual who helped to buy the taxi? The census chose the micro-enterprise option.

Sample survey of micro-enterprises

The 1988 census of micro-enterprises was followed up by a sample survey of 558 micro-enterprises engaged in production (clothing and leather,

² Chris Gerry: *Petty producers and the urban economy: A case study of Dakar*, WEP research working paper (Geneva, ILO, 1974).

Table 3. Estimated monthly value added per enterprise by branch and sub-branch of activity for micro-enterprises included in Dakar informal sector survey (in francs CFA)

Branch and sub-branch of activity	No. of enterprises	Gross margin ¹	Operating costs ²	Estimated value added ³	Employment per enterprise ⁴	Value added per worker (6)
	(1)	(2)	(3)	(4)	(5)	(6)
Production	140	450 348	79 279	371 069	5.1	72 759
Clothing	46	513 992	51 325	462 667	3.5	132 190
Woodworking	54	482 964	93 065	389 899	6.3	61 889
Metalworking	40	333 128	92 816	240 312	5.3	45 342
Building and construction	8	771 020	101 814	669 206	4.4	152 092
Services	83	318 456	84 009	234 447	6.9	33 978
Vehicle repairs	47	314 668	104 891	209 777	9.1	23 052
Electrical repairs	25	425 216	47 492	377 724	4.0	94 431
Hairdressing and other services	11	92 000	47 779	44 221	5.9	7 495
Sample total	231	414 064	81 759	332 305	5.6	59 340

¹ The gross margin (sales *plus* an adjustment for stocks *less* purchases of material inputs) was calculated only for micro-enterprises reporting both purchases and sales for a "normal" week. ² Operating costs include rental of working premises, electricity, water and other current costs other than wages and salaries. Estimates for sub-branches are recalculated from Zarour's table 58 by reweighting with the numbers of enterprises in column 1 to arrive at estimates for branch sub-totals and the overall total. The operating costs figure for hairdressers has been revised downward to bring it more in line with other activities. ³ Column 2 less column 3. ⁴ From column 5 of table 2 above.

Source: Derived from Charbel Zarour: *Etude du secteur informel de Dakar et de ses environs, Phase III, rapport final*, op. cit., tables 58 and 60, pp. 185 and 187.

woodworking, metalworking), building and construction, and other services (excluding prepared foods). No attempt was made to cover commerce or transport.

Table 2 shows that average employment per enterprise was higher in the survey than in the census for metalworking, building and construction, vehicle repairs and other services; it was lower for clothing and leather production and for woodworking.

The Dakar questionnaire included questions on the value of sales, purchases, and stocks and on other costs (such as electricity and water charges) which, if answered properly (or at all), would yield estimates of value added. In the event, only 231 (41 per cent) of the 558 respondents were able to provide estimates of both receipts and outlays, and many of their responses were unreliable. Nevertheless, estimates of value added per worker by activity can be derived from the responses that did provide numbers for both receipts and outlays, as shown in table 3. The estimates

range from 7,495 francs CFA³ per month per worker in hairdressing and other services (which appears improbably low) to 152,092 francs CFA for the building trades (which is probably too high). No attempt has been made to separate value added into net income of heads of enterprises, and imputed earnings of unpaid family workers and virtually unpaid apprentices. In comparison, the 1989 minimum wage (guaranteed inter-occupational minimum wage (SMIG) plus cost-of-living indemnity) in the informal sector was 34,850 francs CFA per month (201 francs CFA per hour).

2. Apprenticeship as training and apprentices as workforce

The number of individuals receiving the limited technical training available at the secondary level in Senegal's formal educational system is small: in 1986, 4,234 out of a total of 30,342 secondary-level students attended technical courses, 2,988 of them learning secretarial and management skills and 1,246 learning industrial skills. Another 1,602 students were enrolled in 13 vocational training establishments. In contrast, the micro-enterprise census identified 10,317 apprentices in micro-enterprises whose owners were willing to respond. Hence most of the urban skilled labour force is trained in the informal sector.

Of the micro-enterprises in the sample survey, 80 per cent had apprentices; that proportion reached 97 per cent for vehicle repairs, 96 per cent for hairdressing and other services, and 87 per cent for woodworking. For the enterprises with apprentices, the average number per enterprise was 4.7, ranging from 2.8 in the clothing sub-branch to 7.2 in vehicle repairs. For those same enterprises, the apprentices made up 81 per cent of the workforce other than the entrepreneur; in the case of vehicle repairs, the proportion reached 87 per cent. The attraction of vehicle repairs for apprentices reflects the fact that the activity is considered to be profitable and continually expanding.

The level of the apprentices' formal education was, as might be expected, quite low. Only 21 per cent had been to primary school (25 per cent for apprentices in production activities) and 3 per cent to middle school (5 per cent in production activities). None of the apprentices had attended a formal technical training institution.

The age distribution of the apprentices was as follows: 7 to 14 years, 11.2 per cent; 15 to 18, 28.7 per cent; 19 to 21, 25.5 per cent; over 21, 34.6 per cent.

Just over half (50.4 per cent) of the apprentices had been with their enterprise for three years or less: in vehicle repairs 62 per cent had stayed with the enterprise over three years (32 per cent over five years); in the building trades the proportion over three years was 60 per cent (39 per cent over five years).

³ 1,000 francs CFA = US\$3.

For the sample as a whole, 30 per cent of the apprentices were relatives of the entrepreneur. Almost 90 per cent of the entrepreneurs included in the survey indicated that they received frequent requests to take on apprentices. The activities most in demand were woodworking, metalworking, vehicle repairs, electrical repairs and hairdressing. Clothing attracted fewer applicants than in the past.

The survey also generated some information on the subsequent job histories of former apprentices who had qualified as skilled workers: 32 per cent remained in the same enterprise, 25 per cent moved to another, 15 per cent entered the formal sector and 28 per cent started up their own informal sector activities.

3. Market relationships

The survey questionnaire did not ask for any information concerning the sources of the micro-enterprises' inputs. However, it was evident from casual observation that the sources of supply are varied. For many informal sector producers in Dakar, the source of inputs is the formal sector retail shop across the street, since most of their enterprises are too small to purchase at wholesale volumes. Often the source of supply is another informal sector producer working nearby; indeed, in an older neighbourhood of intense micro-enterprise activity such as the Rebeusse-Medina section of Dakar, some of the input-output relations between enterprises may be described as an informal assembly line that extends down the street. Another major source of inputs is recovered waste products, most evident in the enterprises close to Dakar's formal sector industrial area which salvage and re-work discarded remnants from the factories. Metalworkers obtain much of their raw material from the scrap metal merchants in Rebeusse. Car mechanics cannibalise spare parts from automobiles brought in for repair or abandoned as scrap.

The survey questionnaire did ask for information about the customers of the micro-enterprises. Of the micro-entrepreneurs who were able to answer, almost half (47 per cent) reported that private individuals were their main customers, followed by small merchants, 20 per cent; government officials, 18 per cent; small artisans, 9 per cent; department stores and other large enterprises, 3 per cent; and intermediaries, 3 per cent.

Although households were the main customers of the majority of enterprises, the variety of other customers is important since it indicates that there are significant forward linkages to the formal sector as well as to other informal sector enterprises. Most (84 per cent) of the micro-enterprises work to specific orders; the other 16 per cent produce for inventory in the expectation of future sales. Only in metalworking and the building trades (in particular brick making) does production for inventory reach as high as 33 per cent. Nevertheless, the market relationships indicated in the 1988 survey are less restrictive than Chris Gerry's interpretation of them in his 1974 study,

in which he found that the majority of "petty producers" were not integrated into wholesale and retail commercial networks but generated most of their income through personal artisan-client relationships with no commercial mediation.⁴

4. Accounting, bank credit and taxes

Only 27 per cent of the entrepreneurs who replied to the question concerning enterprise management procedures indicated that they kept an order book although 41 per cent claimed to keep a receipts book. Nineteen per cent kept an account of receipts and expenditures, 29 per cent had a bank or savings account, and while only 2.5 per cent kept a proper set of accounts, 4 per cent used or hired the services of someone to deal with management problems.

Of the entrepreneurs questioned, 86 per cent said that they would like a bank loan. Of that group, only 7 per cent had ever tried to obtain a loan and fewer than 2 per cent had succeeded. Of those who had not tried to obtain a loan, 21 per cent cited difficult procedures as the reason, 62 per cent said that they lacked sufficient bankable guarantees, 4 per cent said that other conditions imposed by the banks were too hard to satisfy, and the others that they had lost interest in getting a loan or no longer needed one.

The main tax to which the micro-enterprises are subject is the business licence (*patente*), which is levied on individuals carrying out a commercial, industrial or professional activity. The *patente* has two parts: a flat rate which varies up to 650,000 francs CFA according to turnover, workforce and material inputs used; and a proportional tax of between 0 and 15 per cent on the rental value of the business premises. For micro-retail vendors in urban markets, the *patente* amounts to about 6,300 francs CFA per year depending on the size of the shop and the stock of merchandise; the micro-retail vendors also pay a daily market tax of 75 francs CFA per square metre of space occupied in the market.

In fact, only 24 per cent of the entrepreneurs in the sample said that they paid the *patente*. There would appear to be three reasons for this low rate: some micro-enterprises do not earn enough to be able to pay it; some work in the open with no fixed premises; most simply do not know enough about the tax regulations to comply.

Enterprises are also subject to a tax on business profits, a general income tax, a tax on services levied only on enterprises that have access to government contracts, and a stamp tax. Of the micro-enterprise sample, only 1 per cent paid anything towards the business profits tax or the general income tax, 3 per cent paid the service tax, and 12 per cent paid the stamp tax.

⁴ Gerry, op. cit., p. 60.

Table 4. Breakdown of entrepreneurs seeking government assistance or bank credit, by purpose (%)

Purpose	Government assistance	Bank credit
Purchase of raw materials	22	16
Purchase of equipment	39	38
Purchase of a business site	20	16
Construction	16	28
Other	3	2
Total	100	100

5. Assistance desired

The survey questionnaire contained an open question concerning the difficulties faced by the informal sector enterprise. Invariably lack of funds appeared at the top of the list of problems, followed far behind by lack of customers and orders, and by the difficulty of finding a business site. While one-quarter of the entrepreneurs wanted above all to avoid government interference, the other three-quarters claimed they would like financial assistance from the Government. Also, as noted earlier, 86 per cent of the heads of enterprises questioned wanted access to bank credit, particularly long-term credit. The breakdown of those seeking government assistance or bank credit and for what purpose is shown in table 4.

6. Some policy conclusions and recommendations

The informal sector's apprenticeship system provides two important services for Senegal: vocational training for a predominant proportion of urban youths; and a temporary but flexible cushion against open unemployment. Appropriate external assistance could raise the technical level of the vocational training now provided for apprentices by their employers.

Informal sector entrepreneurs would like support from the Government (or from aid donors) in the form of credit and technical assistance, but they are anxious lest such support bring them into too close contact with the tax authorities, who are known to want to expand the tax base to include more micro-enterprises. One obvious recommendation is for the tax authorities to postpone such action until the micro-enterprises grow enough to justify their keeping formal business accounts.

Lack of access to credit is the major felt need of heads of enterprises in the modern informal sector. It is evident, however, that most of the micro-enterprises cannot provide the formal guarantees required by the formal

banking system. At the same time, there is a considerable volume of financial saving among the micro-enterprises themselves. One partial solution would be to develop a system of mutual saving and loan associations, which could develop simplified loan procedures and within which peer pressure and close follow-up of transactions, rather than tangible guarantees, would ensure repayment of loans.⁵

In conclusion it should be mentioned that the results of the Dakar informal sector census and survey are being used by USAID/Senegal as inputs for the preparation of a credit programme for micro- and small-scale enterprises in the greater Dakar area, probably Pikine. The Dakar project is being designed, along the lines of the ongoing USAID community and enterprise development project in Kaolack, one of Senegal's major provincial cities, as a "minimalist" credit project with little or no technical assistance other than close follow-up by the project loan officers. As in Kaolack, the project will be administered through store front offices in busy market areas to permit close contact between project clients and project loan officers.

⁵ See Bernd Balkenhol: "Guaranteeing bank loans to smaller entrepreneurs in West Africa", in *International Labour Review*, 1990/2.