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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

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POLICIES AND MEASURES TO PROMOTE INDUSTRIAL CO-OPERATIVES IN AFRICA*

Prepared by the

Regional and Country Studies Branch

Division for Industrial Studies

for the Regional Expert Consultation on the

Role of Rural Co-operatives in the Productive Sectors in Africa

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PREFACE

The Regional and Country Studies Branch is carrying out a series of analyses of the industrialization process in the developing countries in order to identify prospects and constraints and to outline the key issues for policymaking. In a period when past strategies and approaches for industrial development are being re-assessed, it seems essential to examine, inter alia, the options in terms of the resource base, structural policies, market orientation and support to the development of various forms of production. It is in this context that this paper was prepared. It attempts, against the current crisis of African industrialization, to highlight one of the issues of growing interest to policymakers, i.e. the possible role of co-operative schemes in small-scale industries in the continued process of industrial development in the region. It is hoped that the paper can contribute to the on-going debate on Africa's strategies and policies for industry.

I. Introduction

1. The stagnation of industrial development is part of the present economic crisis in Africa. The purpose of this paper is to explore ways in which governments may support co-operative forms of industrial organization in order to alleviate some of the problems in the industrial sector. After briefly recapitulating the major causes and cures proposed for the present African malaise, the merits of co-operative approaches particularly in the small-scale industrial (SSI) sector are considered. Given the great difference in economic conditions between African countries in economic terms, the discussion of promotional policies and measures is conducted in general terms.

2. The paper draws on information from country case studies prepared for this conference and work done in the area by UNIDO. The lack of detailed studies and information on the status and development of industrial co-operatives in Africa stresses the need for research to highlight the potential role of co-operatives and differences between co-operative and private approaches to industrial development.

II. African industrialization

3. Most African countries have since their independence strongly emphasized industrialization as a pivotal part of their development strategies. In the sixties and part of the seventies, the endeavours towards increasing industrial production were quite successful and significant changes in economic structures occurred. In the mid to late seventies and the eighties the situation became completely different; in the period 1973-81, 22 of 49 African countries experienced negative rates of growth in manufacturing value added (MVA) per capita, and 18 countries experienced a fall in the share of MVA in GDP over the same period. 1/

4. Major reasons for the present crisis in many countries may be summarized under the following headings

Import dependence

5. The import substitution strategies followed in the early stages of African industrial development substantially brought down the relative dependence on imported consumer goods (see Table 1). The concommittant increase in the proportion of intermediates and capital goods in total imports was accompanied (over the period 1965-1980) by a doubling of the real value of imports growing slightly faster than GDP, hence increasing import dependence.[2/]

6. The structure and extent of import dependence in the seventies are illustrated in Table 2 which groups a number of manufactured products (excluding metal products, machinery and equipment) according to the fraction of apparent consumption being imported. The first two columns in the table shows that virtually the whole range of industrial inputs is imported. This is in spite of the fact that Africa has the raw materials necessary for producing such goods. These gaps in the African industrial structure are in large part due to the way in which import substitution policies were implemented.

7. It is evident that much of the industrial investment undertaken during the 1970s was insufficiently integrated with the national economies and the national resource bases. Development was often conceived on a project by project basis. Linkages between industrial projects - and indeed between industrial expansion and the economy as a whole - remained weak. This has led to the growth of the so called "white elephant" projects which constitute a net drain on foreign exchange. These projects absorb a sizeable proportion of ODA flows, necessitate substantial commercial borrowings and use large volumes of imported inputs. Yet they make little significant contribution to generating foreign exchange within the economy, either directly or indirectly. A reorganization of Africas major industrial programmes and approaches and of the processes for rehabilitating existing plants is thus an essential prerequisite for reducing the import dependence of the continent and for achieving a reduction in the debt service payments which are a growing burden on the foreign exchange resources of most African countries.

Table 1: Distribution of imports by end use in selected countries, 1960s to present

(percentage of total imports)

Country (Years in parentheses)	Consumer goods			Intermediate goods			Capital goods			
	1960s	1972	1978–82	1960s	1972	1978–82	1960s	1972	1974–75	1978–82
Ghana (1962, 1972, 1979)	48	25	18	34	51	53	18	25	20	29
Zambia (1968, 1972, 1981)	26	31	20	48	40	57	26	29	22	23
Tanzania (1963, 1972, 1978)	49	29	20	n.a.	40[a/]	35[a/]				
(1966, 1970, 1974, 1979)[b/]							25	35	24	47
Nigeria (1960, 1972, 1978)	61	36	28	17	26	24	22	37	42	49
Ivory Coast (1960, 1972, 1979)	56	49	26	22	26	53	22	25	28	21
Kenya (1964, 1972, 1982)	27	20	6	55	56	68	15	20	30	26
Ethiopia (1967, 1971, 1981/82)	29	33	24[c/]	30	33	40[c/]	40	34	16[c/]	35[c/]

Source: World Bank: "Industrialization in Sub-Saharan Africa", 1984

a/ Different source from consumer goods data.

b/ Machinery and transport equipment only.

c/ Drought relief imports have been excluded.

Low efficiency, poor competitiveness

8. **UNIDO has estimated that Africas share in world manufacturing exports declined from 0.48 per cent in 1970 to 0.36 per cent in 1980. Even though the share in world output increased from 0.73 per cent to 0.97 per cent[3/] indicating that African countries did somewhat better in their own home markets, the overall picture is one of decline in competitiveness.**

9. **Capacity underutilization combined with pressures on industry to keep employment higher than warranted by the production technologies used has frequently led to a decline in value added per worker. In Tanzania real value added per worker reached its highest at the beginning of the seventies but then declined so that it was lower in 1977 than in 1964. Zambia has experienced a decline in real manufacturing value added per worker since the early seventies.[4/]**

Table 2. Summary of data on import content of apparent consumption in selected commodities in 40 African countries

(Ratio = import to aparaent consumption ratio)

Commodities in which ratio approaches 100% in all or almost all countries	Commodities in which ratio approaches 100% in most countries	Commodities in which ratio is not below 75% in most countries	Commodities in which ratio is not below 50% in most countries	Commodities in which ratio is not below 25% in most countries	Commodities in which ratio is below 25% in most countries
Wood pulp (72-76)(79-81) Pulp of other fibres (72-76) (79-81) Wood pulp sulphate (72-76) Newsprint (72-76) (79-81) Methanol (72-76) (79-81) Glycerine (79-81) Chlorine (72-76) (79-81) Zinc oxide (72-76) (79-81) Titanium oxides (72-76) (79-81) Lead oxides (72-76) (79-81) Ammonia (72-76) (79-81) Caustic soda (72-76) (79-81) Soda ash (72-76, (79-81) Hydrogen peroxide (72-76) (79-81) Calcium carbide (72-76) (79-81) Dyestuffs (72-76)(79-80) Vegetable tanning extracts (79-81) (72-76) Activated carbon (72-74, (79-81) Potassic fertilizers (72-76) (79-81) Synthetic rubber (72-76) (79-81) Non-cellulosic staple (72-76) Regenerated cellulose (72-76) (79-81) Lubricating oil (72-76) Angles, shapes, etc. (72-76) (79-81) Iron plates, heavy (72-76) (79-81) Plates, medium (72-76) (79-81) Plates + sheets (72-76) (79-81) Tin plate (72-76) (79-81) Railway track material (72-76) (79-81) Wire, plain (72-76) (79-81) Tubes (71-76 (79-81) Tubes, welded (72-76 (79-81) Copper bars, etc. (72-76) (79-81) Copper tubes (72-76) (79-81) Aluminium unwrought (72-76) (79-81) Aluminium rods (72-76)(79-81) Aluminium plates (72-76) (79-81) Aluminium tubes (72-76) (79-81) Lead unwrought (79-81) Zinc unwrought (72-76)(79-81) Zinc plates (72-76) (79-81) Tin unwrought (72-76) (79-81) Tin plates (72-76) (79-81) (Total 81 entries) a/	Fish tinned (72-76) (79-81) Malt (72-76) Wood pulp sulphate (79-81) Other printing paper (72-76) (79-81) Kraft paper (72-76) (79-81) Machine-made paper (72-76) (79-81) Glycerine (72-76) Sulphuric acid (72-76) (79-81) Nitrogeneous fertilizers (72-76) (79-81) Phosphate fertilizers (72-76) (79-81) Insecticides, etc- (72-76) (79-81) Non-cellulosic staple (79-81) Motor gasoline (72-76) Kerosene (72-76) (79-81 Distillate fuel (72-76) Lubricating Oil (79-81) Pig iron (72-76) Wire rods (79-81) Lead unwrought (72-76) (Total - 30 entries) a	Raw sugar (72-76) Malt (79-81) Cotton yarn (79-81) Motor gasoline (79-81) (Total 4 entries) a	Butter (72-76) (79-81) Distillate fuel (79-81) Liquefied petroleum gas (72-76) Cement (72-76 (79-81) (Total 6 entries) a	Cheese (72-76) Vegetable oil (79-81) Flour (72-76)(79-81) Refined sugar (72-76) Footwear (79-81) Particle board (72-76) (79-81) Liquefied petroleum gas (79-81) Cement (72-76) (79-81) (Total 11 entries) a	Cheese (79-81) Margarine (72-76)(79-81) Vegetable oil (72-76) Raw sugar (79-81) Refined sugar (79-81) Animal feeds (72-76) (79-81) Beer (72-76) (79-81) Soft drinks (72-76) (79-81) Cigarettes (72-76) (79-81) Cotton yarn (72-76) Cotton fabric (72-76) (79-81) Footwear (72-76) Soap (72-76) (79-81) (Total 13 entries) a

Note a/: Each commodity is counted once for each time period.

Source: UNIDO, IO/WG.439/2, "Industrial Development Trends and Policy Options".

10. Low efficiency stems partly from Africa's inadequately developed infrastructure, physically, administrative and socially. Partly however, the problem is related to a lack of appropriate incentives for management and labour. Two factors have contributed impaired performance at the management level: First, the protected (civil-servant like) status of parastatal managers has disrupted the link between performance and rewards. Also, management maneuvreability has in many countries been narrowly circumscribed by bureaucratic and political controls. Second, the strong involvement of external decision makers (e.g. donor agencies and TNCs) have tended to lessen the responsibility and authority entrusted to local industrial managers. The lack of attention to worker incentives is partly a reflection of deficient management. Also, the combination of large, complicated industrial enterprises and labour without industrial experience has made it difficult for workers to identify themselves with the enterprise and see the link between efficiency and rewards.

Foreign indebtedness

11. The debt service ratio (interest payments and principal repayments as per cent of export earnings) is the most commonly used measure of debt difficulties. The debt service ratio for sub-Saharan Africa rose from 4.6 per cent in 1974 to 20.3 per cent in 1983. Debt service payments on public and publicly guaranteed loans by sub-Saharan Africa are expected to have increased to 25.1 per cent of export earnings by 1985. The debt service ratios of the North African countries are much higher - Algeria (36.3 per cent), Egypt (34 per cent), Morocco (38.2 per cent) and Tunisia (22.3 per cent) in 1983.[3/]

12. Table 3 shows a significant and increasing proportion of total sub-Saharan debt being due to manufacturing sector borrowing. The sectors proportion of total debt and debt servicing has risen from respectively 5.6 per cent and 7.7 per cent in 1970 to 12.2 per cent and 15.7 per cent in 1984, the slightly higher numbers for debt servicing indicate less favourable terms for manufacturing debt than for the total.

Table 3. External debt and debt servicing in sub-Saharan Africa, 1970, 1975,1982,1984

	1978	1975	1982	1984
1. Total debt	4,685,865	11,702,591	45,456,648	56,467,945
2. Total debt service	449,282	1,302,030	4,940,778	9,665,888
3. Manufacturing debt[a/]	262,464	949,972	5,711,524	6,909,087
4. Manufacturing service	34,814	127,797	776,059	1,505,145
5. 3 as per cent of 1	5.6	8.1	12.6	12.2
6. 4 as per cent of 2	7.7	9.8	15.7	15.7

a/ Includes manufacturing, mining, utilities, construction and transport.

Source: Industry and External Debt in Africa: A Preliminary Analysis, UNIDO/IS.536, 20 June 1985. (Table 4, extracted from World Bank data.)

13. Whereas gross capital inflows to Africa have during the past decade generally kept pace with the growing current account deficit, both net borrowing (gross borrowing minus amortization) and net transfer levels have shown a tendency to decline for low income African countries since 1980. It is clear that a continued decline in financial transfers can have serious implications for African current manufacturing and for its development process. In many African countries, major manufacturing establishments are operating at small fractions of their productive capacity, primarily due to the unavailability of essential imported raw material and capital inputs. They are also starved of investment needed for production restructuring and modernization.

14. Continuation of present borrowing patterns, with a relatively high and increasing emphasis on commercial type borowing does not represent a solution to this problem. Growth in concessional finance - ODA - is necessary, but the prospects for this are not bright at the moment. Table 4 shows the total net ODA inflow to sub-Saharan Africa virtually unchanged from 1980 to 1983. Furthermore, the size of ODA relative to export credits and direct investment indicates that only a spectacular increase could offset the decline in other flows. This situation strongly points to the necessity of restructuring manufacturing industry towards a pattern less dependent on foreign finance flows.

Table 4. Estimated net flow of foreign finance to the manufacturing sector in sub-Saharan Africa, 1980, 1981, 1982 and 1983

Source	1980	1981	1982	1983
I. Total ODA	627	628	624	612
of which				
DAC countries	401	408	408	397
II. Total non ODA	1,254	1,362	1,576	795
of which:				
Export credits	664	514	560	474
Direct investments	287	521	642	118
Total	1,881	1,990	2,200	1,407
Percentage of all financial flows to SSA	14	14	15	12

Source: G. Dancet, "ODA to Manufacturing Industry in Sub-Saharan Africa", UNIDO, Regional and Country Studies Branch, forthcoming.

Bias towards large-scale investment and inappropriate technologies

15. Table 5 illustrates the predominance of small manufacturing enterprises in Africa. Overall,(With the exeption of Egypt) it appears that more than half of manufacturing employment could take place in enterprises with less than 10 employees. As indicated by the data for Tanzania and Ghana, the bulk of these firms would be unregistered "informal sector" firms.

16. Although the emphasis on the promotion of small scale industries has increased since the sixties, the bulk of manufacturing investment is still in the form of large scale projects. Aggregate data for the African region does not exist but the overall predominance of the public sector in manufacturing investment revealed in Table 6 and the clear tendency for such investment to concentrate on relatively large scale enterprises 5) strongly supports this impression.

Table 5. Large- and small-scale shares of manufacturing employment in selected African countries

(percentage)

Size (number of workers)	Tanzania 1967	Ghana 1970	Egypt 1966/67	Kenya 1969	Nigeria 1972	Ethiopia 1971	Sierra Leone 1974
Large-scale (50 or more)	37.4	15.0	64.0	41.0	14.5	17.3	4.4
Intermediate (under 50 of which:)	62.6	85.0	36.0	58.9	85.5	82.7	95.6
(10-49)	(6.7)	(0.3)	(10.0)	(9.9)	(26.4)	..	..
(1-9)	(1.4)	(6.6)	(26.1)	..	..	..	..
(Unregistered)	(56.6)	(78.1)	..	..	..	..	..

Source: Small Enterprise Development. Economic Issues from African Experican Experience. J.M. Page, W.F. Steel, World Bank Technical Paper No.26.

Table 6. Share of public sector in manufacturing investment, value added, output and employment (latest available year)

Percentage share	Investment		Value added		Output		Employment	
80-89	Egypt	(81.4)	Algeria	(84.9)	Somalia	(85.1)	Algeria	(81.0)
70-79	Somalia	(79.9)			Algeria	(79.1)	Egypt	(70.0)
60-69	Zambia	(64.0)	Egypt	(66.7)			Somalia	(65.3)
50-59	Tunisia	(53.7)	Zambia	(51.0)				
							Tanzania	(47.3)
							Zambia	(42.5)
	Tanzania	(39.0)	Tanzania	(33.6)	Ghana	(32.9)		
	Morocco	(34.8)						
20-29			Senegal	(21.1)				
10-19	Ivory Coast	(19.3)						
	Nigeria	(17.7)						

Source: UNIDO/IS.386

17. The tendency for manufacturing machinery and equipment to reflect the level of technological development of industrialized countries rather than the needs of African countries is well known. A main factor causing this problem is the relative ease with which finance for plant importation can be obtained from aid donors who are biassed towards supporting capital goods exporters from their own countries.

Limited impact on rural development

18. In most African countries, 70 - 80 per cent of the population live in the rural areas. Relatively large scale, high technology investment tend to be dependent on an infrastructural base which is not found in these areas. Therefore there is a clear bias for most such investment to take place at the urban centres. For African countries, the fraction of industrial activity (measured by employment) taking place in the national capital only is typically above 50 per cent.

Unfavourable effect on income distribution

19. Whereas the manufacturing sector has contributed to employment creation in Africa, it has been argued that the income distribution effects have been less favourable then they could have been. Firstly, the relative capital intensity of manufacturing investment has led to a distributional shift from wages to gross profits and secondly, the sectors dependence on skilled labour have created labour market conditions whereby certain groups of workers have been able to obtain wage levels out of proportion with their skill levels.

Inappropriate range of products

20. The Lagos plan of Action emphasizes a basic needs approach to industrialization. An increased concentration on production of mass consumption goods in local markets would have the advantage of both satisfying demands for simple products and turning production towards less complex production technologies.

21. Although one would need more detailed information to draw strong conclusions, the last column of Table 2 appears to indicate that basic consumer goods like sugar, soap, cotton materials, margarine and vegetable oil are relatively well catered for in the product range of the manufacturing sector. Still, commodities like raw sugar, cotton yarn and cement have an import content of over 50 per cent indicating scope for furtherconcentration on basic needs goods.

22. The key issues in the formulation of a new industrial policy seem to be:

(a) To improve the inflow of foreign exchange. This would involve debt relief, emphasis on production for export and relying less on imported raw materials and intermediate and capital goods.

(b) To increase efficiency and competitiveness. This would entail revision of protection policies, fighting inefficiency and lack of accountability in parastatals and government run industries, rewiew of organizational matters and worker incentives. A shift to private sector emphasis would be another option.

(c) To influence the selection of production technology and scale of operation. The aim would be not to place unrealistic expectations on the availability of educated marpower and to provide large productive employment. At the same time various forms of industrial and management training would be required to enable industries to handle increasingly sophisticated and highly productive technologies.

(d) To improve the distribution of incomes. This would entail both interpersonal and spatial distribution. In particular there should be an emphasis on rural industries.

(e) To change the range of industrial goods produced towards mass consumer articles and towards production of intermediate industrial inputs based on raw materials.

III. The role of industrial co-operatives

23. Industrial co-operatives, defined as manufacturing sector enterprises organized on the basis of co-operative principles[6/] are scarce in Africa and the amount of experience gathered about such productive forms is not extensive.

24. With industrial co-operatives so defined, there is hardly any indication that co-operative production forms per se have advantages in solving the above mentioned problems of foreign exchange, technology, scale and range of goods. It is however likely that co-operatives will have a higher degree of accountability and clearer worker incentives than those usually experienced for instance in large parastatals. Also, application of co-operative principles will give rise to a better personal distribution of incomes than would emerge under "free market" private enterprise.

Small-scale industry promotion

25. Looking at experience and not so much at principles and definitions, the perhaps most prominent fact about co-operatives is that they deal with small scale economic activities. This fact creates an important link between industrial co-operatives and Africas industrialization problems; it is frequently assumed that small scale industries (SSI) in Africa to a greater extent than medium and large scale ones:

- rely on local raw materials,domestic capital and savings
- are run by national entrepreneurs wholly dependent for their livelihood on the success of their enterprise.
- serve as a training ground for entrepreneurs.
- rely on "appropriate technology" embodying greater labour intensity and allowing a lower intensity in managerial and technical skills.
- produce basic mass consumption goods, key inputs and capital to agricultural production
- are situated in rural areas.

It has also been pointed out that SSIs may perform relatively better or even flourish in times of general economic stagnation.[7/]

26. The above list of SSI properties compared with the list of key issues in African industrialization seems to indicate that an emphasis on small scale industry would provide one major part of the solution to Africas industrial development crisis. Jumping to the conclusion that major resources should be redirected from the support of large scale industry to the development of SSIs would however be wrong for several reasons.

27. Firstly, looking at the "missing links"in African industrial production (Table 2), it is clear that small firms cannot in themselves create such links. For most of the heavily demanded chemicals, base metals, fuels, pulp and paper, small scale production is simply not an economic or technical option. Secondly, experience from more industrially developed parts of the world illustrates the importance of links between small and large firms rather than concentration around either the small scale sector or large "modern" enterprises.

28. Thirdly, not all the assumed advantages of SSI are always borne out in practice:

- although SSIs greater reliance on local raw materials, for instance in agro processing is clear, it is doubtful whether small firms have an efficiency advantage.
- There is not much hard evidence on which to confirm or deny that SSIs use more appropriate technologies. Although SSI consistently seem to employ more workers per unit of capital, if this reflects low utilization of economies of scale, a higher concentration on small firms would mean higher unit costs.
- Within the SSI only the very smallest of artisan type enterprises seem to work well where there are infrastructural deficiencies. SSIs tendency for urban locations seem to increase rapidly with increasing firm size.

29. Fourthly, The decision to use more resources in support of SSI would have to depend on the expected benefits from so doing and not on present SSI characteristics. For example, Page and Steel (1984)[7/] point to the possibility of small informal enterprises being labour intensive because they lack access to institutional credit and incentive schemes. This would calls for some caution in supporting SSI by way of favourable credit schemes.

30. Given careful consideration of the extent and methods of SSI promotion it appears however quite clear that in most African countries there is considerable scope for gainfully channeling more resources towards small firms. In most countries, public policies overall amount to a bias for large scale industries. An emphasis on co-operative methods with its self-reliance objectives would seem to imply a cost effective channel for greater SSI support.

Co-operatives contribution

31. The history of industrial co-operatives points to the main reasons why usually small firms are involved in co-operatives; many of the inherent disadvantages of being small can be ameliorated by co-operative methods. The early industrial co-operatives emerged from existing enterprises coming together, mostly to seek mutual protection and to mobilize countervailing power against large scale competitors and trade monopolies or to enhance their negotiating hand vis a vis Governments. Relatively fewer came together in the absence of external threats just to exploit scale advantages or advantages in the purchase of intermediate inputs or product marketing.

32. The circumstances which led to the formation of the early industrial co-operatives mostly in developed countries, are usually quite different from those of to-days developing world. In most African countries, the problem is not so much that individuals or individual firms are without support or are being threatened by larger competitors, but rather that there is a scarcity of small industrial producers. Government, as the "prime mover" in African industrialization has in most countries taken the leading role in creating industrial activity. One major approach is the promotion of the small scale sector. However, most small scale industry in Africa is not organized in co-operative forms.

33. The most important contribution of co-operatives in the present stage of African industrialization would seem to lie in their potential for building a basis for a striving small scale sector. Through alleviating inherent problems in small scale industry development without detracting

from the advantages of small scale production, co-operatives could provide an important stimulus to growth. There are several directions by which co-operatives may enhance small scale production efficiency and profitability:

- the greater incentives following from the fact that each worker is also an owner;
- attainment of scale advantages through joint purchase, production and marketing;
- strength to withstand negative influence from competitors, trade monopolies and governments through co-ordinated policies;
- pooling of financial resources;
- joint purchases of essential services such as marketing, financial management, accounting, insurance etc.

34. With all these advantages of co-operatives for small scale industries, why is there not an abundance of success stories? The reasons are several: Firstly, there is a tendency to define both "co-operative" and "industrial" narrowly. In particular, there may be a serious underreporting of various forms of pooling of interests (like partnerships etc.) among very small scale and informal producers based on either tradition or circumstance. This is not merely a statistical comment; to bring out the success or failures of "not strictly industry" and "not strictly co-operative" cases may help broaden the base of experience and provide fertile ground for innovations.

35. Secondly, success is a relative concept, measured usually against expectations. There is a tendency to have very high expectations for co-operatives to achieve a multitude of often conflicting objectives; economic, social, political and administrative. An example of the latter would be the use of co-operatives as a basic administrative unit in socio economic planning processes. The multiple objectives endanger success in two ways: a) The probablity of not meeting one of the objectives increases and the failure to serve one purpose is often seen as overall failure; b) The "bunching" of objectives severely complicates management and decision-making.

36. Thirdly, and most importantly, if judged against the economic performance of private enterprises, co-operative forms of organization are likely to have inherent managerial weaknesses. This point is cogently argued out in Abell and Mahoney 1981 (admittedly based on limited empirical evidence): "why given the supposed comparative advantages of IPCs (Industrial Producer Co-opratives) in terms of motivation etc. do they not have in the aggregate, a better performance record than capitalist enterprises? (Alchian and Demsetz, 1972). The answer is (if our theory is correct) because the enthusiasm and motivation is more than offset by lack of managerial skills - partially in the stewardship of capital". [8/]

37. Abell and Mahoney go on to argue that in order for co-operatives to compete with the private sector they either have to rely on "abnormal" levels of solidarity or "attract or train good management". There are however, several other conceivable ways of developing a successful industrial co-oprative sector in Africa, including through government policies and support. It should be noted in the following that whereas Abell and Mahoney are concerned basically with industrial producer co-operatives proper [9/], measures proposed in this paper comprise also support for other forms of co-operation.

38. In line with the above emphasis on small scale industry it is here argued that in the context of African industrialization one should ask the question: How can co-operative approaches be used to appropriately support SSI? It is of some importance to state the question in this form because it amounts to considering co-operative development as a means to reach an objective rather than being an objective in itself.

39. SSI struggle with a wide range of problems. For each of them, whether they be inadequacy of credit and capital, lack of technical and managerial skills, lack of infrastructure, raw materials, spares or marketing problems, there would be ways of alleviating them by co-operative approaches. Main roles for governments would be to encourage small firms to form co-operation and respond with advice and resources to the various problem solutions which these co-operative organizations may come up with. The concrete focus and the extent to which co-operative approaches are used will vary from country to country, depending on

political factors, what is considered the major problem and what resources are available to solve the problem. When one problem is solved, a new one will certainly come to the fore. For example, Botswanas Financial Assistance Policy substantially relieved small scale business for the financial constraint which seemed to be the main problem. Not long after the policy took effect, the perceptions of obstacles swung markedly from the former emphasis on finance to concentrate on human resource factors like managerial and technical skills.

IV. Support and policy measures

40. The possible areas where government support and policy measures could promote industrial co-operatives are several. This paper highlights eleven issues of major importance for such support. The co-operative concept used by government, the legal environment, the economic environment, industrial/ agricultural linkages, the urban sector, training, credit, marketing, pre-investment studies, public purchasing and policy implementation.

The co-operative concept and the industrial sector

41. Above, concepts like "co-operatives", "co-operative methods" etc. has been used loosely, comprising various forms of joint economic activity between firms or persons. Whether one uses this or a stricter definition entailing the adherance to the full set of co-operative principles is not an entirely academic question. If the concept used in policy making and legal frameworks is a restrictive one, special policies and measures for co-operatives may not benefit otherwise support worthy SSI.

42. Particular problems in industrial workers co-operatives have indicated conflicts between the need for economic efficiency and the adherance to co-operative principles; if a main problem for industrial production co-operatives is to mobilize finance for capital equipment, would a less strict adherance to the principle of limited returns to share capital not be one way of overcoming the problem? Would it be advantageous to open for contributions from members which would not be required to work in the co-operative but would receive a certain return on their capital contribution? It has also been pointed out that a conflict may arise

between efficient management and democratic ideals in co-operatives. Would a less strict adherance to the democratic principle, like employment of a professional manager with wide ranging powers for a longer period of time be a proper solution? If one regards the use of co-operative methods as one of the solutions to Africas present industrial development problems and not as an aim in itself, there is a case for broadening the co-operative concept.

Legal environment

43. A co-operative concept suitable for dealing with the special problems of SSI should be reflected in the legal framework; at this rather early stage of industrial co-operative development in Africa, there is a general need for experimentation by small scale industrialists and governments alike for finding the most suitable co-operative forms. This requires the legal framework to be open and flexible and to cater for variation. This may be effected either by establishing up general co-operative laws which may accomodate many different forms in all sectors, or by creating especially flexible rules and regulations for industrial co-operatives.

44. There seem to be a concensus that industrial co-operatives will benefit from being able to use model by laws designed especially for them. Experience have, however, shown the need for modification in the general co-operative law. In Tanzania for instance, problems with regard to the size of membership have also been experienced; laws created primarily to regulate a unified village co-operative structure in support of Ujamaa policies had regulations as to the minimum number of members which did not make sense for most industrial co-operatives.

45. It should also be pointed out that frequent changes in laws and government attitudes tend to pose obstacles for co-operative growth. This comes clearly through in the country paper on Sudan[10/] pointing out that "What seems to have affected co-operative activity adversely most is the vascillation in State support for it rather than the paucity of this support". This point and the need to make special accomodation for industrial co-operatives, indicate the importance of establishing law and policy frameworks which are not frequently changed, but may accomodate a variety of co-operative forms.

Economic environment

46. Although SSI are said to do relatively well in times of general economic decline they too are obviously negatively affected by deterioration and frequent changes in their business environment. A favourable business environment is largely a matter of macro-economic policies which may seem to be rather unconnected to the daily problems of small scale industrial co-operatives. It is quite clear however, that macro policies through, for instance, effects on income distribution, consumer prices and prices on imported mass consumption goods will have a profound effect on the demand for the kinds of goods that SSI typically produce. It is important that correct macro economic policies are regarded as part of any programme for the support of SSI.

Promotion of industrial/agricultural linkages

47. A main strategy approach in the present industrial crisis in Africa is to strengthen the economic links between industry and agriculture. This would mean, in more practical terms, to emphasize the promotion of manufacturing activities supplying inputs to agriculture, producing and repairing capital equipment and agricultural tools or processing output. It would follow that increasing attention would be paid to rural location of industries. As most co-operatives in Africa are both rural and agriculturally based, they would seem to be a valuable point of departure for the implementation of such a strategy. Promotion of manufacturing activities within already existing agricultural co-operatives could substantially strengthen industrial/agricultural linkages.

The urban sector

48. In Africa's bigger cities, large population groups live under desperate poverty conditions. These cities at the same time represent major markets for a wide variety of goods. Some of these goods are imported and at present difficult to produce locally, but a fair amount of simple goods could be made in small-scale enterprises. Promotion of urban manufacturing co-operatives could help release the potential of urban markets for small-scale producers. There is not necessarily any contradiction between urban located and agriculturally based production.

Training

49. Given the scarcity of training resources, not only finance but in particular human resources in most African countries, very careful allocation is called for. It would seem that the co-operative training formula with its emphasis of on-the-job training forms a basis for a training approach with an emphasis on knowledge which is directly applicable and necessary for production activities and avoids an overload of general knowledge. For instance, several observers of the Oodi co-operative in Botswana hold that its sucess to a great extent is due to the training concept applied; instead of relying on co-operators who were generally well trained individually, the co-operative was trained collectively in its specific task, the making of tapestries and bedspreads. The advantage with this was one of training economy; no effort was wasted on general knowledge which was not necessary for production. Thereby, the enterprise quickly came in a position where it could make a profit and costly working capital outlays were saved.

Credit

50. Credit schemes are among the most commonly used methods for supporting SSI. The case for such schemes are built both on the credit needs constantly voiced by SSI, and on the relative administrative ease with which governments and international financial institutions are able to give such assistance. In the present African industrial development context it is, as pointed out above, the SSIs relatively efficient use of capital which seems to be one of their major advantages. Co-operative credit schemes, relying not on outside capital injections but on the members deposits appear to be a suitable way to an efficient utilization of locally generated funds not necessarily implying an infusion of capital from other sectors of the economy or from abroad. This does not mean to exclude the possibility of such capital transfers. On the contrary, a well extended co-operative banking system will usually be an excellent conduit for carefully designed credit schemes, based on government sources or external sources.

Marketing

51. Several small production units will only be able to adequately supply a national market if there is a minimum of co-ordination with regard to e.g. product standards and supply/demand balance. Storage and marketing functions cannot adequately be undertaken by each of the small production units but may adequately be performed by a secondary society or a co-operative apex organisation. Two particular areas where governments could increase their assistance, working jointly with co-operative umbrella organizations are pointed out below.

Pre-investment studies

52. Many project failures in manufacturing industry may be traced back to inadequately prepared pre investment studies. Although small scale activities tend to be rather uncomplicated industrial undertakings, the experience is that they quite frequently venture into fields and projects which prior analysis would have shown unviable. There are therefore reasons to recommend that support be given to small scale project analysis and possibly also that some mechanism be set up for the regulation of market entry to prevent overproduction in otherwise successful production lines. These are tasks well suited for co-operative secondary and apex organizations, but in most countries they will need initial government support and probably draw on already existing governmental expertise. Such support could also be expanded to one giving advice on new and promising fields for industrial co-operatives.

Public purchasing

53. The public sector is a major purchaser of manufactures in most African countries. Channelling such purchases to SSE through their co-operative organizations could constitute a major incentive to local industrial production. Such schemes must however be designed to avoid the development of totally government dependent SSIs and inefficient production units due to a high amount of protection.

Policy implementation

54. What most African countries seem to be in need of today is not merely a set of national policies but primarily an appropriate and well functioning machinery for the implementation of such policies, above all at a decentralized level. Most of the actual support for small scale industries involves local government rather than central government agencies. The effect of policy changes for small scale industrial activity depend on the effectiveness of the local levels of government. The problem however, is that local governments often are poorly equipped and motivated. As a result, small producers often have difficulties in getting a proper response. In Botswana for instance, the successfull Oodi Weavers co-operative, although from the start clearly supported by Central Government, has experienced several problems with licences, plot allocation etc. from the local tier of government.

V. Concluding summary

56. The present difficulties of industrialization in Africa are far reaching and point to the need for a re-orientation of the pattern of industrial development so as to enable resumption of growth. Co-operative approaches, among industrial enterprises, especially SSI's represent an important alternative route which could alleviate some current problems and constraints.

Building up such co-operative arrangements among small industrial companies could indeed constitute an important supplement to current structures of production and could enable a greater productive utilization of local resources. Governments would thus have reasons to stimulate such developments through policies and various supporting measures.

57. Among measures to support co-operative approaches to industrial development, the legal and economic enviroment as well as the effectiveness of policy implementation at the local level are general fields of policy with a strong potential effect on industrial co-operatives. Specific areas in which governments can support SSI

through co-opeative organizations are training, credit and marketing. These areas are key problems in the present industrial development crisis and at the same time areas where co-operative approaches have had considerable success. With regard to sectoral choice, special emphasis in the promotion of manufacturing co-operatives which strengthen the links to agriculture are recommended.

58. In these endeavours of national governments in Africa an improved exchange of experience by national policy-makers and industrialists may be called for as well as support by UN technical assistance.

FOOTNOTES

1. Source: Summary report on Industry and External Debt in Africa. Prepared by the Regional and Country Studies Branch, Division for Industrial Studies", UNIDO/IS.537, 20 June 1985.

2. From 1965 to 1980 the total real terms GDP of African countries increased by an annual average of 5.2 per cent, whereas imports increased at a rate of 5.5 per cent (calculated on the basis of Table 4 of the UN Statistical Yearbook 1981).

3. Industrial Development Trends and Policy Options. UNIDO ID/WG.439/2, 7 May 1985.

4. Industrialization in sub-Saharan Africa. Strategies and Performance. W.F. Steel and J.W. Evans. World Bank Technical Paper No.25.

5. In Kenya, for instance data compiled by te World Bank for 1982 showed that 80 per cent of the firms with government participation had over 100 employees.

6. The principles adopted by the ICA Congress 1966 contain the following main items:

   - Membership voluntary and with no social political racial or religious discrimination

   - Democractic form of decision-making

   - Only limited if any rate of interest on share capital

   - Results to be distributed so as to avoid one member gaining at the expense of another

   - Provision for education of members, officers and employees

   - Co-operation by all co-operative organizations at the local, national and international level.

7. Small enterprise development. Economic issues from African Experience. J.M. Page, W.F. Steel, World Bank Technical Paper No. 26.

8. "The social and economic potential for small-scale industrial producer co-operatives in developing countries", P. Abell, N. Mahoney, UNIDO/PC.17, 25 September 1981.

9. "Industrial producer co-operative" being defined as a form of production where workers jointly own the capital equipment, take all decisions in the running of their establishment and perform all production processes.

10. Co-operatives as instruments of rural development in the Sudan, M.H. Awad, ECA/SDEHSD/IRD/85/WP4, October 1985.