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THE UNIDO INTEGRATED APPROACH TO REHABILITATION IN AFRICA

<u>Studies on the rehabilitation of African industry</u>

No. 12

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Preface

As part of the Industrial Development Decade for Africa, UNIDO is paying increasing attention to the problem of industrial rehabilitation. Through its integrated, multidisciplinary rehabilitation programme, UNIDO offers support: (i) at the macro-industrial policy level in order to remove obstacles to industrial development; (ii) at the subsectoral level that encompasses similar and interrelated enterprises; and (iii) at the level of a specific enterprise and in productive plants in order to cope with critical bottlenecks.

Under this programme, the Regional and Country Studies Branch (REG) is conducting diagnostic studies to determine the major problems of African manufacturing and the potential for regenerating the sector. The aim is to provide a basis for policies and measures that may lead to overall improvements, and to identify industrial plants for rehabilitation assistance.

The present publication serves a dual pupose:

- it outlines the UNIDO integrated approach to rehabilitation in Africa used by REG in its work on regeneration and rehabilitation issues; and

- the various modalities to implement the approach.

The document is the twelfth in a series of publications on regeneration and rehabilitation.

1. Introduction: Africa's current economic situation

Compared to other developing regions Africa is in dire straits. Of the major developing country subregions, sub-Saharan Africa has the lowest provision of basic needs, the highest population growth, and the lowest efficiency of investment. Per capita GNP growth rates continue to stagnate or to decline in most countries. Most per capita incomes are desperately low - less than $300 in Zaire, Mali, Ethiopia, Mozambique, and Malawi - and in many cases are lower than they were 20 years ago. The per capita income of the region as a whole today is lower than in 1970. Of the 33 countries listed in UNIDO's Industry and Development - Global Report 1988/89 with a per capita income of less than $400, more than two-thirds are African. In addition, as many as twenty one Sub-Saharan countries have had, or continue to have, total external debts at least as large as half the total value of their GDP. What is worse, in about ten African countries external debt may actually be greater than the total value of their GDP.[1/]

Agriculture, the major source of livelihood in the great majority of African countries, has not been able to provide the region's fast-growing populations with essential food supplies.

During the last two decades food production in Africa has declined to catastrophically low levels. Understandably, Africa's ability to feed itself, measured in terms of per capita food production, has also fallen rapidly. Per capita food production has slumped by around 20 per cent.

For most countries, agricultural products are also the principal source of foreign exchange, yet agricultural export earnings have dropped dramatically. Revenue from other raw materials has also dropped appreciably. Prices for ferrous and non-ferrous metals, for example, decreased by 20 per cent during the 1980-1986 period, and the price of crude oil dropped by 50 per cent. African exports to other world regions declined from $60.5 billion in 1985 to $50 billion in 1986, a drop of 14 per cent. The European Community, traditionally the region's main trading partner, reduced its imports from the region by 24 per cent in 1986.

With respect to the manufacturing sector, manufacturing growth rates in African countries generally resembled those of other developing countries until the early 1980s. Africa's share in world manufacturing value added (MVA) rose from 0.7 per cent in 1970 to 1 per cent in 1982. Since then, however, industrial performance in Africa as a whole has deteriorated relative to other developing regions.

Africa also has the lowest average rates of capacity utilization. Utilization rates well below 50 percent are not uncommon. In the mid-1980s, for example, the rate was 33 percent in Sudan (private sector), 36 percent in

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1/ See, The Impact of External Debt on the Regeneration of African Industry; UNIDO, Regional and Country Studies Branch, forthcoming; and World Bank, Report No. 8014, "Sustainable growth with equity - a long-term perspective for Sub-Saharan Africa," 15 August 1989.

Liberia, under 35 percent in Sierra Leone, 25 percent in Tanzania, and between 30 and 50 percent in Zambia (selected major industries). In Mali, a 20 percent utilization rate is common in most factories. Much of the installed industrial capacity is idle or underutilized as a result of poor investment choices, falling incomes, bad management, lack of foreign exchange needed to purchase raw materials and spare parts, lack of an effective supporting institutional infrastructure, inadequate human resource development and an inappropriate policy framework.

In addition, capital flows have also been drying up in recent years. This process may actually accelerate due to the diversion of funds to more attractive opportunities such as in East Europe The diminuation in the flow of external capital flows to Africa has led to a shortage of foreign exchange. This, in turn, has prevented the importation of raw materials and essential equipment and spare parts for industry. The lack of these raw materials, equipment and spare parts has also contributed to widespread breakdown of machinery and low capacity utilization rates.

Thus, although manufacturing industry in Sub-Saharan Africa could play a leading role for economic growth, in recent years it has failed to do so. Industry, therefore has not generated a dynamic growth process and has not satisfied domestic demand or achieved its significant export potential.

2. The issue: the need for rehabilitation 1/

The underlying causes of the present situation in Africa are both macro- and micro-economic in nature. Being highly dependent on imports - both raw materials, components and equipment - industry in Africa has been seriously affected by the need to reduce imports as a result of balance-of-payments crises in individual countries. Furthermore, during the early stages of industrialization, projects were often based on unrealistic assumptions of domestic market demand growth, availability of local raw material, export prospects and the development of a supportive national infrastructure. Therefore, many infant industries have tended to remain weak and financially vulnerable. Macro-economic policies and specific pricing, trade and industrial policies have in many cases distorted product markets and production conditions. At the micro-economic level, in many instances investments have also been made on the basis of project concepts that were technologically too complex to be sustained over the long-term without significant foreign assistance. In many projects, insufficient support in the form of training, comprehensive human resouce development, and other essential auxilliary inputs tended to drastically affect productivity. In other cases, especially in the food processing industry, expected raw material supplies to manufacturing proved to be insufficient, irregular or even non-existent. The resulting significant under-utilization of industrial production facilities is one of the major factors hindering the renewal of economic growth in Africa. If this trend could be reversed, greater utilization of installed capacity and improved productivity would be the most economical means of restoring dynamism to the industrial sector and overall economic growth in Africa.

1/ For a more detailed description of these issues, see: "Regenerating African manufacturing industry: Country briefs", UNIDO, PPD.97.

3. Proposed approach: the UNIDO integrated 'Top-down/Bottom-up' approach to rehabilitation 1/

Until now, most work in Africa on industrial rehabilitation has not been systematic or comprehensive, and international co-operation has also suffered from these shortcomings. Rehabilitation has been viewed either as the treatment of a plant's technical problems - without analysing the real causes or their ramifications - or as a macro-economic issue. In the first case, technical assistance activities have often been carried out in isolation from the fiscal, monetary and economic policies of African governments, without taking into account financial requirements, market possibilities, the availabilitiy of raw materials, the adequacy of management and other human resources, and intermediate outputs. This approach has frequently resulted in rehabilitation projects that were too narrowly focused. Concentration on solving individual problems runs the risk of other equally important problems being ignored. In the second case, the diversity of economic activities and economic constraints and potential at the micro-level is not always appreciated.

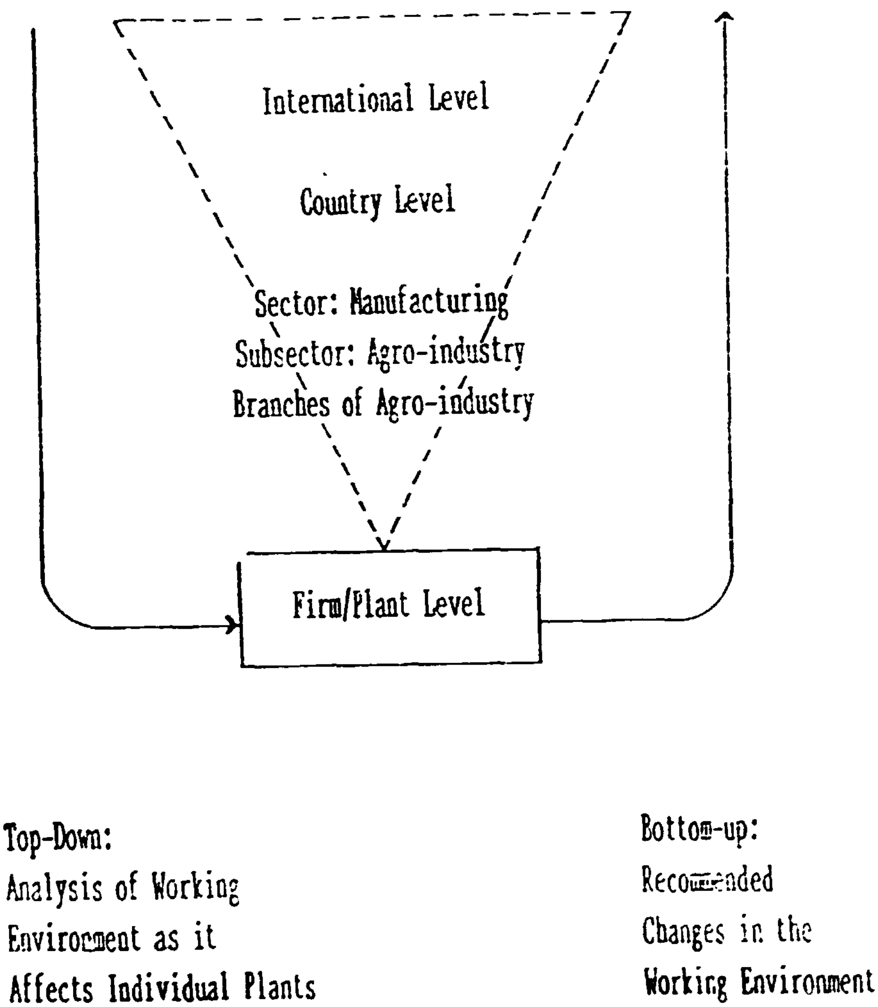
The concept of industrial rehabilitation obviously needs to be broadened and integrated: it should combine an understanding of both macro-economic forces and real problems at the plant level. It should encompass a broader diagnosis and recommend a wider range of action. Manufacturing enterprises are not 'islands unto themselves'. They exist in an economic environment which is ever-changing. Manufacturing enterprises should therefore be studied in relation to their total economic environment. Diagnostic analyses and remedial action programmes should cover the entire range of technical, managerial and technology issues at the plant level as well as the overall financial, commercial and structural issues at the branch, subsector, sector and macro-economic levels. An approach covering all these issues would be a top-down/bottom-up approach. (The figure is illustrated in Figure 1).

1/ This approach has been developed over a number of years. The basis of the approach can be found in "UNIDO policy on industrial rehablitation", Report of the Working Group on Industrial Rehabilitation, 25 February 1988. The approach has been applied in a number of African countries, see UNIDO's special reports on industrial rehabilitation - The regeneration of Zambia, Angolan, Liberian, Tanzanian, Moroccan, Kenyan manufacturing industry with emphasis on agro-based industries (forthcoming) - (PPD/R.19, PPD/R.21, PPD/R.23, PPD/R.26 and PPD/R.27) respectively; among others, US/TUN/88/224, US/SEN/88/269 and in particular, US/ZAM/89/128: Restructuring the maize and stockfeed subsector in Zambia with particular reference to finance, economic and technical assistance to E.C. Milling. See also the report of the Expert Group Meeting on Industrial Rehabilitation and Restructuring with Special Focus on the Food-processing Subsector in Africa, IPCT.87(SPEC). UNIDO's rehabilitation approach is also in line with UNIDO's increasing emphasis on the integrated programme approach to technical assistance development and delivery. More specifically, the approach is particularly harmonious with UNIDO's work on Strategic Managment of the Adjustment Process in the Industrial Sector in Africa, see, IO.40 (SPEC).

From a top-down perspective, each country is first viewed in its international context. This involves macro-economic or country level analyses which examine the key characteristics of a country's economic policy and institutional framework. At the sectoral level, manufacturing industry is assessed in terms of overall characteristics, potential and major problems and constraints.

Figure 1: The plant in its working environment:

Top-down/Bottom-up approach



Special attention is paid to policies and institutions relating to the sector. The relationship of manufacturing to agriculture is also given special consideration, since for most countries agro-based industries are the most important. This is for a number of reasons. Most African Governments have the goals of self-sufficiency in food production and food security. There is also the important fact that the development of agro-based industries is the means for an industrial tradition based on locally available raw materials. Thus, at the subsector level special emphasis in terms of agro-based industries is given to those related to the food processing subsector. Again, at the subsector level there is an analysis of the characteristics, potential, major problems and constraints, linkages, and policies that related to the key subsector being analysed. The subsector is also examined at the branch level.

Finally, at the plant level, a detailed analysis is made of the rehabilitation needs of a few selected key firms with specific recommendations for rehabilitation efforts. The firms selected for detailed analysis are important firms in key subsectors with good backwards and forwards linkages to other firms, industries and sectors, especially primary sectors such as agriculture and other natural resource sectors.

Emphasis on a few strategic firms with good linkages in key subsectors concentrates resources where they can have most impact. It also maximizes the multiplier effects of any given investment - in that, should these firms be successfully rehabilitated they will exert a significant "pull-effect" on other similarly placed firms. They thus become the motors to start the regeneration process going and provide the dynamism for more widespread economic growth.

In order to examine a plant in its total work environment a multidisciplinary approach is required which includes an analysis of the firm in terms of the macro and industrial economic, financial, management and organization, human resource development, marketing, design and engineering, and technological dimensions. This multidisciplinary approach is absolutely essential in order to avoid the piece-meal approach and 'situate' the firm in its total working environment. This approach ensures that the real reasons why plants do not work to their optimum potential - which may not be just at the plant level - are identified. The approach also allows the elaboration of a more appropriate and broader set of actions to rehablitate the firm so that it is able to be profitable and compete successfully in an ever-changing environment.

The integrated, multidisciplinary approach is summarized in Figure 1. In order to assure that rehabilitation is not impeded by environmental factors, the "top-down" analysis is followed by an assessment of each firm in terms of its rehabilitation climate, from the "bottom-up". In other words, a major effort is made to assess what changes in the economic and institutional environment (e.g. government tariff policies, regulations concerning allocation of foreign exchange, etc.) constitute preconditions to successful plant level rehabilitation. By examining the plant in its total working environment from top-down to bottom-up, UNIDO believes it can identify the means for firms to achieve long-term viability.

On the basis of this approach, industrial rehabilitation becomes a comprehensive integrated programme of activities to secure the optimal use of existing capacities and resources for future, general industrial growth: it becomes an essential practical tool in the attempt to regenerate the African industrial development process.

4. Requirements of the approach

The UNIDO approach leads to four main tasks. The first is to identify suitable enterprises where scarce foreign exchange and other investible resources will be most efficiently used to upgrade production and company peformance, thus ensuring the greatest impact on overall growth. In particular cases, industrial rehabilitation may actually lead to plants being recommended for closure. In such cases, even though important social and political implications have to be considered, shut-downs cannot be excluded.

The established concept of rehabilitation often restricts the view of decision-makers to existing industrial structure, whereas a wider and more forward-looking regeneration concept might help all parties concerned to see closure as a necessary part of an attempt to establish an industrial structure with better prospects for sustained growth.

The second task is to combine the plant rehabilitation process with a restructuring programme of the industrial sector as a whole so as to ensure growth, domestic economic integration, and/or the provision of support industries and serivces. Such a programme will entail investment in new capacities in industry, infrastructure, services and primary commodity production. The third task is to adjust the policy and administrative framework to support industries and services. Such a progamme will entail investment in new capacities in industry, infrastructure, services and primary commodity production. The fourth task is to adjust the policy and administrative framework to support better the domestic and international efforts towards industrial regeneration.

Rehabilitation can thus be seen to be a process that has technical, technological, organizational and managerial implications. It also has economic, financial, marketing, design and engineering aspects. Similarly, restructuring at the subsectoral level should take into account economic and financial aspects, as well as the general and technical management structure, product technology and range, and domestic and foreign markets. The wide range of issues involved implies that human, physical and financial resources should be concentrated on a few manageable projects or markets, and attention should be focused on technological developments and market trends.

As the approach covers a wide range of issues, successful implementation requires the moblization of resources from domestic entities, both public and private, and from foreign multilateral, bilateral, commercial and financial bodies. The activities of these entities should be co-ordinated to provide the appropriate assistance to plants, subsectors and overall industrial regeneration.

For the approach to have any chance of success it is essential that African decision-makers - Governments, private sector bodies, development banks, individual plant managers and owners - understand the approach and fully accept the need to be comprehensive in their diagnosis of rehablitation needs and requirements. Rehabilitation must not be seen simply as a technological/engineering plant level problem, but rather as a multi-dimensional problem calling for a multi-dimensional solution. It is imperative therefore that the relevant African decision-makers are, from the beginning, involved in a full dialogue that will lead to concerted and consistent action. It is also important for Governments to develop the capability - with the assistance of bilateral organizations, commerical banks, international bodies such as EEC, IFC, World Bank and especially, UNIDO - to diagnose rehabilitation needs, develop practical, timely rehabilitation programmes, and financial and technical support to actually implement these rehabilitation programmes.

Co-operation and assistance on the part of the international community is essential if African Governments are to have a real chance of successfully implementing the UNIDO approach to rehabilitation. Most industrial rehabilitation projects require foreign technical and financial support, particularly in the acquisition of equipment and spare parts. Besides international financial assistance, African countries will require technical and managerial expertise to assist in selecting and procuring equipment and monitoring the plant rehabilitation. An important element of UNIDO's programme approach to rehabilitation, therefore, is to mobilize and concentrate national and international resources and efforts to rehabilitate the plants. Intensified and focused international co-operation could generate a multiplier effect in industry and agriculture, thereby endorsing efforts to be undertaken by national entities.

Regional co-operation will also have an important role to play in regenerating African manufacturing. Given the small domestic markets and the difficulties in penetrating overseas markets, regional markets will be needed for growing industries. This implies measures such as harmonization of trade regulations, co-operation in improving the transport and telecommunications infrastructure, and organization of regional trade fairs. Regional co-ordination of rehabilitation and investment would also save resources in scarce supply. The shortage of qualified manpower, both at the enterprise level and in industrial development organizations, could in part be solved by pooling available planning resources and creating regional training institutes for higher-level manpower. Co-operation among African countries would also strengthen their position vis-a-vis overseas suppliers and in overseas markets.

Finally, it is important to stress that whatever the action taken at the national, regional or international levels, it must be taken swiftly. Many African industries are haemorrhaging badly each month. If remedial action - from the diagnosis stage all the way to actual implementation of a rehabilitation programme - is too slow, no matter how well formulated, rehabilitation programmes will fail. In the design stage, therefore, all the actors in the rehabilitation process must ensure the speedy delivery of their inputs and smooth uninterrupted action towards ultimate rehabilitation.

The biggest stumbling block to rehabilitation in Africa has been the often fatal interruption in the rehabilitation process caused by the need to hunt for funds to implement the diagnosed rehabilitation requirements. If rehabilitation programmes are to be successful, individual African Governments should, at the outset, in conjunction with the international community - especially the donor community - design mechanisms to guarantee funds for the comprehensive rehabilitation needs identified. African governments and the Donor Community appear to be slowly recognizing this essential point. The World Bank/IFC's African Project Development Facility (APDF) and the EEC and DEG's Rehabiltitation Advisory Services (RAS) in particular, are good examples what can be done in a positive way to ensure the rehabilitation process is not stopped at the diagnostic level and that funds are available for actual rehabilitation.

The Rehabilitation Advisory Servies, Ltd. (RAS) is a new company based in Nairobi which started operations on 1 May 1989. It is an EEC-financed pilot project with the German development bank, DEG (Deutsche Finanzierungs-gesellschaft für Beteiligung in Entwicklungs Ländern GmbH) owning 51 per cent of total shares and the remainder owned by 3 Kenyan development banks. It is also associated with PREFUND, which is a financial company, wholly owned by DEG, that provides risk capital.

RAS provides consultancy services mainly to medium-scale enterprises which must be at least 51 per cent owned by Kenyans. It concentrates its assistance on enterprises engaged in agro-processing and manufacturing of consumer goods. The company offers a global and co-ordinated approach to rehabilitation taking into account all aspects of rehabilitation - management, marketing, production, sources of inputs, financing and administration.

The African Project Development Facilities (APDF) was established in Nairobi in a joint effort by the African Development Bank, the United Nations Development Programme, the International Finance Corporation and several donor countries to assist African entrepreneurs in promoting viable medium sized businesses. It provides advisory services in the preparation of viable projects. While APDF does not provide project financing, it works with entrepreneurs in securing financing from banks and appropriate sources of capital. It also helps them in obtaining technical and managerial assistance needed to start up projects.

5. Conclusion

In sum, the application of UNIDO's integrated programme approach will assist African Governments to link the macro and industrial economic, branch level, and project issues to decisions taken on rehabilitation and upgrading of production. In addition, the UNIDO apporach is a solid basis for concerted and consistent international co-operation. The approach is also expected to increase the rate of survival of particular plants or subsectors being rehabilitated, if due consideration is given to the context in which the selected plants or subsectors operate. Industrial rehabilitation must be a dynamic, forward-looking concept. Restoring industry is not sufficient, for both the world and economic conditions change rapidly. Ignoring these changes might lead industry back to its prior unacceptable state.

Finally, rehabilitation of industry in Africa's current economic situation is essential if African Governments are to successfully complete the long process of regeneration of their economies. UNIDO's integrated approach to rehabilitation offers the ultimate means for African Governments to provide for themselves the capacity to achieve their goals for industrial regeneration and economic recovery.