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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The Rehabilitation of African Industry - a Summary of British and Washington-based Activity

Washington-based material not included in this paper.

This report was prepared by Jon Walters, U.N.I.D.O. consultant, in cooperation with the Regional and Country Studies Branch of U.N.I.D.O.

List of Abbreviations

A.D.B.	African Development Bank
A.E.D.	Africa Economic Digest
C.D.C.	Commonwealth Development Corporation
C.F.T.C.	Commonwealth Fund for Technical Cooperation
D.E.G.	Deutsche Entwicklung Gesellschaft
D.F.C.	Development Finance Consultants
D.F.C.K.	Development Finance Corporation of Kenya
D.H.S.	Deloitte, Haskins and Sells
D.T.I.	Department of Trade and Industry
E.C.G.D.	Export Credit Guarantee Department
E.D.F.	European Development Fund
E.E.C.	European Economic Community
E.I.B.	European Investment Bank
E.I.U.	Economist Intelligence Unit
F.E.	foreign exchange
F.M.O.	Financieringsmaatschappij voor Ontwikkelingslanden
I.D.A.	International Development Association
I.D.S.	Institute of Development Studies
I.F.C.	International Finance Corporation
I.M.F.	International Monetary Fund
Indeco	Industrial Development Corporation
O.D.A.	Overseas Development Administration
O.D.G.	Overseas Development Group
P.T.A.	Preferential Trade Area of Eastern and Southern Africa
S.A.D.C.C.	Southern African Development Coordination Conference
S.O.A.S.	School of Oriental and African Studies
T.A.	technical assistance
U.D.B.	Uganda Development Bank
U.N.D.P.	United Nations Development Programme
U.N.I.D.O.	United Nations Industrial Development Organisation
U.S.A.I.D.	United States Agency for International Development

Contents

1. Terms of Reference

The terms of reference of this assignment were to identify and visit government agencies, universities, research bodies, relevant institutes and private individuals in the U.K. concerned with rehabilitation. Thereafter to visit the World Bank, the International Monetary Fund and other multilateral agencies in Washington, U.S.A. and prepare a synthesis of the work on the rehabilitation of African manufacturing industry. The assignment was carried out between 15 March and 15 April, 1988 in Britain and will be followed up in Washington between 10 May and 24 May 1988.

2. Overview of the Main Issues

Since the late 1970s development strategies have given high priority to the rehabilitation of existing investments in the belief that such priority is justified by the returns relative to those expected from investment in new capacities.

Rehabilitation is not yet a precise term with a universally agreed usage but in general it refers to investment designed to improve the productivity of existing assets without major additions to plant or major changes in technology. There is, however, some disagreement over which variable is not being maximised when debilitation is present. For some analysts (particularly management consultants) profits are the maximand and debilitation is identified whenever profits are well below the maximum attainable. For others output is the maximand and debilitation is synonymous with low capacity utilisation. How important this semantic controversy is in practice is unclear - one observer argued that "rehabilitation" is much more important as a slogan for mobilising resources than as a technical term.

There is a widespread view that rehabilitation investments are often incorrectly appraised. This occurs either because rehabilitation is fashionable and returns are overestimated as a result or because low capacity utilisation is perceived as necessarily suboptimal or because of a general lack of appraisal capabilities in the organisations concerned. An associated phenomenon is an unwillingness or inability to evaluate the wisdom of the original investment or of its continued operation under unexpected circumstances. Several respondents to the survey expressed the view that low capacity utilisation should not be taken alone as an indicator of the extent of rehabilitation needs: low capacity utilisation might be optimal where demand and supply conditions are not as originally anticipated; high capacity utilisation might only be achieved with subsidies and protection thereby disguising the need for rehabilitation; plants of recent vintage may achieve high capacity utilisation even though production is relatively poorly-organised.

The importance of the operating environment as a cause of debilitation was often emphasised in the survey. Such factors as exchange rates, producer prices, foreign exchange (FE) availability and investment codes were mentioned. In many countries it was felt that restructuring policies (measures taken at the macro, sectoral or subsectoral levels) were essential to rehabilitation (measures at the plant level).

Rehabilitation in periods of structural adjustment was the subject of some discussion with two main issues being identified. First, individual plants may be "rehabilitated" as a by-product of structural adjustment policies (for example, increased FE earnings following devaluation). Second, the problem of distinguishing relative from absolute changes in key variables during such periods seriously hampers investment appraisal and prioritisation. These factors led some observers to suggest that rehabilitation should be restricted (or even entirely suspended) until a very advanced phase of structural adjustment. However, it could be countered that debilitated plants may be capable of little response to changing conditions and (if there is extensive debilitation) the positive impact of structural adjustment policies could thereby be significantly reduced.

On the other hand, management deficiencies were also often cited as causes of debilitation. Indeed, many observers included in the present survey expressed the view that the issue of FE shortages has often detracted attention from accompanying management deficiencies. It was pointed out that capable management can often reduce the impact of FE shortages considerably by appropriate marketing, pricing and stock control strategies though the potential extent of such reductions obviously varies between subsectors and between countries. A broad range of other management deficiencies were identified as sufficient to debilitate an enterprise even if the operating environment were ideal. (Particular emphasis was placed in the survey on the need to improve engineering creativity and management awareness of preventive maintenance requirements.)

For the success of rehabilitation it is obviously important to identify the causes of debilitation. It was noted that certain studies tend to concentrate on engineering solutions to the physical symptoms of debilitation without paying due attention to ultimate causes particularly managerial ones. It was also noted that rehabilitation releases the currently binding constraint only to reveal further causes of debilitation. Thus, rehabilitation is often a continuous activity.

A number of typologies were suggested in the course of the survey to group countries with similar debilitation problems and rehabilitation solutions:

1) a) those disrupted by war;
   b) those with serious FE constraints;
   c) those with need for consolidation of technological capabilities in order to become internationally competitive.

2) a) those with serious FE constraints but under an I.M.F. programme;
   b) those with serious FE constraints but no I.M.F. programme;
   c) those without serious FE constraints.

3) a) those exporting mainly agricultural products;
   b) those exporting mainly mineral oil products.

These typologies are clearly not mutually exclusive.

Interviewees were presented with the list of seven focal countries for U.N.I.D.O.'s rehabilitation efforts. Several considered Cote d'Ivoire, Kenya and Morocco to have relatively low levels of debilitation and therefore to be low priorities. The feasibility of effective rehabilitation in Sudan and Zambia was questioned on grounds of insufficient government commitment to appropriate restructuring and in Angola on security grounds (although this may be offset by greater government commitment). The importance of government commitment to appropriate policies was also cited as justification for giving high priority to Ghana, Mozambique and Tanzania. Uganda was often cited as being particularly needy but the feasibility of effective rehabilitation was questioned. Nigeria and Algeria were cited as countries with both considerable needs and government commitment.

Many criteria for subsectoral investment choice were suggested but none of them were specific to rehabilitation. There was a consensus, given data limitations, that case-by-case appraisal within some general industrial development strategy (e.g. import substitution, export promotion) is the most practicable approach. However, the survey did not find any evidence of thorough investigation of the issue of subsectoral choice.

Those studies which reviewed only part of a given subsector rarely gave much direct indication of the rehabilitation potential of the rest of the subsector. However, it was argued that where part of a subsector has been identified as needing rehabilitation there is, ceteris paribus, a case for analysis of some of the rest of this subsector in preference to other subsectors. This is because there may be economies of scale in analysis and implementation and because appropriate supportive policies can only be formulated once a representative sample of plants in a given subsector has been investigated.

Plants in need of rehabilitation usually require external finance to achieve it particularly when FE availability is a constraint. A number of financial institutions were mentioned in this context including A.D.B., C.D.C., D.E.G., F.C.G.D., E.O.F., E.I.B., F.M.O., I.F.C. and the World Bank.

3. Activity in Britain

A number of rehabilitation studies were identified but most of them had been carried out for overseas clients on a confidential basis and time did not allow for obtaining the clients' permission for release of the studies. (However, much of the material was discussed in detail during the interviews.) Section 3.1 is a summary of the studies which could be obtained (copies of which have been forwarded to U.N.I.D.O.).

More than 80 individuals were interviewed including government officials, journalists, academic economists, business executives, officials of aid agencies, management consultants, economic consultants, business association executives, economic researchers, geographers and engineering consultants. These contacts were derived from three sources:

1) A list of 15 potential contacts formulated by U.N.I.D.O.
2) Further contacts suggested by those on the first list.
3) Contacts suggested by a review of recent back-issues of African Business and Africa Economic Digest.

The questionnaire below was formulated (in consultation with U.N.I.D.O.) to guide the interviews. Section 3.2 summarises those interviews which yielded substantive information.

Rehabilitation of African Industry - Questionnaire

1) What are the essential features of an industry or plant in need of rehabilitation?

2) What are the main causes of the problems such industries or plants face?

3) What indicators have been or could be used to show need for rehabilitation? How far is low capacity utilisation a sufficient condition?

4) What rehabilitation studies or other activities (public or private) are you aware of?

5) Which countries have been identified as having priority? Which industrial sub-sectors in particular?

6) Are these existing rehabilitation portfolios indicative of further potential?

7) Are there particular countries in which you think it might be opportune for U.N.I.D.O. to mount prediagnostic sub-sector surveys?

8) What do you think of U.N.I.D.O.'s choice of the following countries as worthy of particular attention: Cameroon, Angola, Kenya, Cote d'Ivoire, Sudan, Zambia and Morocco?

9) How do the corrective prescriptions of outside agencies relate to national industrial strategies?

10) What studies exist of the impact of structural adjustment policies on any sub-sector?

11) To what extent are issues of rehabilitation related to policy choices between domestic and export market orientation?

3.1 Studies

S.A.D.C.C. Studies

1) S.A.D.C.C.: Industrial Rehabilitation Workshop - Arusha, August, 1985, S.A.D.C.C./I.D.U.

2) S.A.D.C.C. Indicative Industrial Development Plan, S.A.D.C.C./I.D.U., September, 1987.

3) S.A.D.C.C. Industry and Trade Activities (Addendum to S.A.D.C.C. Industry and Trade Annual Conference Report (1988); Arusha, January, 1988.

4) S.A.D.C.C.: Industrial Projects (Salt), S.A.D.C.C./I.D.U., January, 1984.

5) S.A.D.C.C.: Industrial Projects (Pulp and Paper) S.A.D.C.C./I.D.U., June, 1984.

6) S.A.D.C.C.: Development of Insecticides and Pesticides Manufacturing Activity, S.A.D.C.C./I.D.U., March, 1985.

P.T.A. Studies

7) P.T.A.: Study of Fertilisers and Chemical Intermediates in 12 countries of the subregion, I.D.U., May, 1985.

8) P.T.A.: Productivity Improvement of Steel Rolling Mills in Kenya, I.D.U., October, 1985.

9) P.T.A.: Productivity Improvement of Steel Rolling Mills in Mauritius and Tanzania, I.D.U., August, 1986.

Angola Studies

10) Reconstruction Programme for the Provinces of Huila, Namibe, Cunene. Angola. Interim Report, Vol. 2c, Industrial Sector, Annexe: Field Survey, Draft, Dar al Handasah, December, 1985.

11) Reconstruction etc., Vol. 2, Sectoral Studies, 2d: Industry, Angolan Ministry of Planning/U.N.D.P./Dar al Handasah, March, 1986.

12) Reconstruction etc., Angolan Ministry of Planning/U.N.D.P./Dar al Handasah, November, 1987.

Kenya Studies

13) Kenya: Kyu Garments Project, I.D.U., December, 1985.

14) A Plan for the Reactivation of Furs and Wools Ltd (Thika, Kenya, I.D.U., August, 1987.

Zambia Studies

15) Zambia: Productivity Improvement of Crushed Stones Sales Ltd, I.D.U., November, 1985.

16) Zambia: Modernisation of the Mwinilunga Pineapple Cannery, I.D.U., September, 1986.

17) Zambia: Indeco, Productivity Assistance to R.O.P. (1975) Ltd, Ndola, I.D.U., November, 1985.

Consultancy Study Summaries

18) P-E Inbucon Ltd: Summary of Industrial Rehabilitation Consultancy in Africa, March, 1988.

19) Deloitte, Haskins and Sells: Statement of Experience for the Rehabilitation of African Industry, D.H.S., April, 1988.

1) <u>S.A.D.C.C. Industrial Rehabilitation Workshop - Arusha, August, 1985 (S.A.D.C.C./I.D.U.)</u>

The S.A.D.C.C. Industrial Coordination Division of the Ministry of Industries and Trade, Tanzania assisted by I.D.U. held an Industrial Rehabilitation Workshop in Arusha, Tanzania on 27 and 28 August, 1985. Three volumes of papers were produced.

1. Background.
2. Objectives, Rationale and Approach and Initial Set of Project Profiles.
3. Country Profiles.

The first volume summarised the discussion by delegates from the S.A.D.C.C. countries, aid agencies, consultancy firms and potential investors of general issues relating to rehabilitation. Most S.A.D.C.C. delegates stressed the need for greater resource transfers to fund rehabilitation and to sustain high capacity utilisation although the Zimbabwean delegation also emphasised the need for reduced intra-S.A.D.C.C. trade barriers. Notable criticisms of the non-S.A.D.C.C. delegates of the Workshop's approach were those of the World Bank (too much stress on FE constraints at the expense of the other constraints external to the plant level and of plant-specific constraints, too optimistic about solutions) and of U.N.I.D.O. (insufficient attention to management deficiencies).

The second volume described the rationale for rehabilitation as being the belief that in current circumstances of prolonged FE shortages (which have debilitated a considerable number of plants) the returns to rehabilitation are in general high compared to the returns to investment in new capacities.

The report argues that an industrial recovery programme is required involving action at three levels:

1. economy-wide/region-wide (especially in terms of FE provision)
2. industry-wide (in terms of rationalisation)
3. plant level (increasing production efficiency)

No detail on precise recovery actions at the first level is provided other than to state the primary objective of "establishing competitive industry using local resources which can generate net savings or earnings of foreign exchange."

At the second level production is to be rationalised "in terms of plant location, material source and market location" and incentive schemes and measures to permit increased FE allocation are to be introduced.

At the third level actions are to include reorganisation of production, rebalancing and reequipment, quality upgrading, product rationalisation or diversification, materials control and diversification, improved systems of accounting and control, repair and maintenance, training and capital restructuring.

In accordance with the Lagos Plan of Action of 1980 and the "objectives of S.A.D.C.C. governments" priority is to be given to investment in the basic needs and core industries (defined as industry "using domestic resources to produce essential goods" and industry "producing materials, components and equipment for further processing" respectively).

The paper argues that industrial development in S.A.D.C.C. has followed the traditional import-substitution model with a high degree of import dependence for inputs. Declining FE earnings from agriculture combined with high FE costs of oil imports have constrained the availability of FE for the purchase of inputs for the manufacturing sector which earns little FE for itself. The subsectors chosen for priority in rehabilitation do not depart from the import substitution strategy but may reduce the import dependence of that strategy to some extent. The paper does not attempt to examine the extent of this reduction. Indeed, the criteria for subsectoral selection do not derive from a specific rehabilitation perspective; the subsectors are merely those agreed from the outset of S.A.D.C.C. industrial coordination to be priority subsectors for industrial development in general.

The paper then provides brief profiles of 66* projects (submitted by the S.A.D.C.C. member states) which were prepared by I.D.U. to attract technical and financial assistance for rehabilitation. The paper does not make clear whether any projects were proposed but rejected as being unworthy of rehabilitation.

The third volume profiles each S.A.D.C.C. country giving background information and an overview of rehabilitation needs and the main factors which have given rise to those needs.

* Five additional projects were tabled at Arusha.

2) S.A.D.C.C. Indicative Industrial Development Plan - S.A.D.C.C./I.D.U., September, 1987

This Indicative Plan reviews S.A.D.C.C.'s industrial coordination efforts and proposes further actions. In accordance with the priority given to rehabilitation by S.A.D.C.C. in 1985 it devotes considerable attention to rehabilitation efforts.

The Plan discusses rehabilitation in a manner which assumes the underutilisation of capacity as a necessary precondition. The S.A.D.C.C. member states are classified into:

1) Those in which military destabilisation has given rise to the need for rehabilitation (Angola, Mozambique).

2) Those in which the purchase of inputs has been constrained by FE shortages (Tanzania, Zambia and Zimbabwe - the first two being more serious cases because of the "single-minded pursuit of import-substituting industrialisation").

3) Those with plant-specific rehabilitation needs (Botswana, Lesotho, Swaziland and Malawi) - the least serious case.

Common constraints (which are classified as long term and structural or short-term factors) and solutions adopted (at country or plant level) are summarised.

The Plan raises the following issues for consideration:

1) Very few rehabilitation projects have been presented by Angola and Mozambique whose needs are greatest which suggests serious weaknesses in project identification and preparation.

2) The plant-level rehabilitation needs estimated in the national recovery plans of Tanzania and Zambia (details given) are considerably less than those presented to S.A.D.C.C. therefore the relationship between national and S.A.D.C.C. initiatives is unclear.

3) There is a need for integration of macroeconomic structural measures and microeconomic rehabilitation.

4) Financial assistance is often overemphasised at the expense of technical assistance needs.

5) Seed capital and revolving fund schemes may pose problems for intra-

S.A.D.C.C. trade in manufactures where transactions are not on the basis of prompt payment in hard currency.

6) Management assistance is more important than technical rehabilitation in Botswana, Lesotho, Malawi, Swaziland and Zimbabwe.

7) There is a need to mobilise more intra-S.A.D.C.C. resource flows for rehabilitation.

8) The S.A.D.C.C. Industry and Trade Coordination Division is experiencing serious implementation problems with the rehabilitation programme and member states have become disillusioned.

9) The criteria for rehabilitation project selection are unclear.

10) There is a danger that rehabilitation will be overemphasised at the expense of new projects.

As a response to the above issues the following recommendations are made:

1) The criteria for rehabilitation project selection should be the same as for new projects (but the list of 35 priority subsectors should be extended by the addition of 10 subsectors which have been identified in national recovery plans as being in need of rehabilitation). This will promote consistency in investment decisions.

2) Those of the 45 subsectors which utilise domestic inputs or produce exports should be given priority since the resultant saving or generation of FE will assist rehabilitation.

3) Specific proposals for intra-S.A.D.C.C. resource flows for rehabilitation should be formulated (subsectors in which such work is in progress are mentioned).

4) The rehabilitation programme should be updated annually because needs can arise at short notice.

5) The existing programme should be rigorously reviewed and some prioritisation should be made.

6) It should be clearly stated that the project cycle for rehabilitation projects should be the same as that specified for new projects.

7) Intra-regional trade should be promoted to raise capacity utilisation.

8) Funds should be mobilised for seed capital schemes.

9) Entrepreneurs should be more closely involved in S.A.D.C.C. activities.

10) An action plan for implementation should be drawn up annually (a format is suggested).

The Plan identifies the following areas as requiring FE funding:

1. consultants fees for studies;
2. investor/donor agency meetings;
3. consultative group meetings;
4. field visits for consultations;
5. project negotiations with donors and investors.

3) S.A.D.C.C. Industry and Trade Activities (Addendum to S.A.D.C.C. Industry and Trade Annual Conference (1988) Report), Arusha, January, 1988

This paper summarises progress to date on rehabilitation following the 1985 Arusha Workshop, the 1986 U.N.I.D.O.-sponsored Harare investment conference and various other initiatives.

4) S.A.D.C.C. Industrial Projects (Salt), S.A.D.C.C./I.D.U., January, 1984

The study surveyed two saltworks in **Mozambique** and one in **Tanzania**. Its main rehabilitation recommendation was the complete replacement of the severely debilitated South Maputo refinery.

5) S.A.D.C.C. Industrial Projects (Pulp and Paper), S.A.D.C.C./I.D.U., June, 1984

Although this study by I.D.U. commissioned by S.A.D.C.C. was primarily of demand for pulp and paper in S.A.D.C.C. countries it did address the issue of increasing S.A.D.C.C. supply by rehabilitation. Specific plants which were identified as being in need of rehabilitation were:

1. Kibo Paper Mill, **Tanzania**: FE constraints were identified as being responsible for shortages of raw materials, spare parts and essential consumables leading to 60-70% capacity utilisation even though current levels of demand would sustain higher output.

2. CCPA Pulp and Paper Mill, **Angola**: the report stated that production had ceased in 1983 (reasons not stated) and that rehabilitation plans had been rejected on cost grounds given that the sub-sector was a relatively low priority of the Angolan Government.

3. Fapel Paper Mill, **Mozambique**: capital improvements to increase capacity utilisation were mentioned (but not detailed) and it was stated that foreign funding was required (no amounts given).

4. Zambesi Paper Mill, **Zambia**: this mill suffered the same problems as the Kibo Paper Mill but capacity utilisation was much lower (30% in some areas, 50-60% in others).

The report covered the entire sub-sector in S.A.D.C.C.

6) S.A.D.C.C. - Development of Pesticides and Insecticides Manufacturing Activity, S.A.D.C.C./I.D.U, March, 1985

Part of this study by I.D.U. commissioned by S.A.D.C.C. was of the rehabilitation needs of insecticides and pesticides formulation plants in **Angola, Mozambique. Tanzania, Zimbabwe and Zambia.**

The study made detailed recommendations on quality control, modernisation and replacement of equipment and FE allocations for the plants in Mozambique, Tanzania and Zambia. In Zimbabwe no rehabilitation needs were identified and in Angola it was not possible to collect relevant information.

The study reviewed entire subsectors in each country.

7) P.T.A. - Study of Fertilisers and Chemical Intermediates in 12 countries of the sub-region, I.D.U., May, 1985

Part of this study on the supply and demand situation in the fertilisers and chemical intermediates subsectors focussed on rehabilitation needs of specific plants:

1. Tanzania Fertiliser Company, **Tanzania**: foreign exchange shortages for the purchase of feedstock, spare parts and other maintenance materials had caused plant deterioration to the extent that maximum attainable capacity utilisation was only 60%. Recommendations were made on equipment overhaul and replacement, supplementary equipment purchase and the provision of spare parts.

2. Lake Katwe Salt Co., **Uganda**: a specific corrosion problem was restricting output and investigations were underway to identify solutions.

3. Nitrogen Chemicals of Zambia Ltd, **Zambia**: the study reported equipment deterioration, operational difficulties and insufficient/irregular supplies of locally mined coal as restricting output but made no recommendations.

8) P.T.A. - Productivity Improvement of Steel Rolling Mills in Kenya, October, 1985

This study by I.D.U. commissioned by P.T.A. sought to identify productivity improvements in steel rolling mills (and to assist in implementation) primarily in order to stimulate demand for Zimbabwean iron and steel intermediate products. Seven mills were studied and recommendations made for each in the areas of production flow, manning, training, quality control and new equipment. The study covered the entire subsector.

9) P.T.A. - Productivity Improvement of Steel Rolling Mills in Mauritius and Tanzania, I.D.U., August, 1986.

This study by I.D.U. commissioned by P.T.A. sought to identify productivity improvements in steel rolling mills (and to assist in implementation) primarily in order to stimulate demand for Zimbabwean iron and steel intermediate products. The study investigated all 4 steel rolling mills in Mauritius. Productivity improvement recommendations were made with regard to machinery overhaul, production flow modifications, equipment purchase, quality control, maintenance, management recruitment and the need for further technical studies.

The study also investigated the only steel rolling mill in **Tanzania** and made recommendations relating to machinery overhaul, production flow modifications, equipment purchase, quality control, maintenance, record-keeping, training and product modification.

Overall productivity appeared to be higher in Mauritius than in Tanzania (although there was considerable variation between mills in the former).

10) Reconstruction Programme for the Provinces of Huila, Namibe, Cunene Angola, Interim Report, Volume 2c, Annexe, Industrial Sector, Annexe: Field Survey, Draft, Dar al Handasah, December, 1985

This study consists of a brief review based on field visits of the history, current operating conditions and rehabilitation needs and prospects of every significant industrial enterprise in the Huila, Namibe and Cunene provinces of Southern Angola. It provides the basic data for the later industrial sections of the Reconstruction Programme which would otherwise have been largely unavailable.

11) Reconstruction Programme for the Provinces of Hila, Namibe, Cunene, Volume 2: Sectoral Studies, 2d: Industry, Angolan Ministry of Planning/U.N.D.P./Dar al Handasah, March, 1986

This study argues that extensive rehabilitation of existing industries should precede any new industrial investment. It reviews the current operating conditions of 33 industrial enterprises and classifies these enterprises by rehabilitation potential and priorities. For those 22 enterprises for which rehabilitation is considered justified financial and technical assistance requirements are identified in detail.

12) Reconstruction Programme for the Provinces of Huila, Namibe, Cunene, Angolan Ministry of Planning/U.N.D.P./Dar al Handasah, November, 1987

Phase II, Volume 6: Project Profiles

This final phase of the study includes industrial project profiles with an emphasis on intermediate technology and small to medium scale enterprise. The rehabilitation projects include:

1. tool production
2. plough and cart parts, pumps, castings
3. plastic products
4. 3 brick factories
5. 2 lime works
6. sawmill subsector
7. tannery
8. tyre vulcanisation workshops

In each case the financial and technical assi-tance needs are either identified and costed or the terms of referer · for further study are proposed.

This study was submitted to the Angolan Government in December, 1987 but at the time of writing (late April, 1988) had elicited no response.

13) Kenya: Kyu Garments Project, I.D.U., December, 1985

This study was undertaken by I.D.U. for the Government of Kenya and concerned a garment manufacturer operating well below capacity and threatened by insolvency. The study made recommendations concerning balancing equipment, production flow, working capital, new equipment, training, new technology and product diversification. The study also lists all other units in the textile subsector but gives no information on rehabilitation needs. Indeed, since the rehabilitation need arose for highly plant-specific reasons the study gives no indication of the rehabilitation potential of the rest of the subsector.

14) A Plan for the reactivation of Furs and Wools Ltd (Thika, Kenya), I.D.U., August, 1987

This study by I.D.U. of a dormant tannery and leather products workshop in

Kenya was undertaken as part of a programme of technical assistance to Kenya Industrial Estates Ltd.

The report recommended reactivation on the basis of specific proposals concerning organisational structure, manning levels, balancing machinery and equipment, layout and production, stock and cost control systems. This derived from the main finding of the study that although machinery was inadequate and poorly maintained and production had been badly organised the project was essentially viable.

15) Zambia: Productivity Improvement of Crushed Stones Sales Ltd - I.D.U., November, 35

This study of a company specialising in production and processing of limestone products and talc (to be used as aggregates, agricultural/industrial lime and related products) was conducted by the Industrial Development Unit (I.D.U.) of the Commonwealth Secretariat (with the assistance of consultants) at the initiation of Indeco of which the company is a subsidiary. The study should be seen in the context of a Government economic restructuring programme which placed emphasis on the rehabilitation of existing industries (instead of embarking on new programmes) as a response to a severe foreign exchange shortage.

The study made a series of recommendations for rehabilitation actions to be implemented immediately, short term (within 6 months to 1 year) and long term (over the next 5 to 10 years). These recommendations covered the following areas: output composition, export promotion, management recruitment, equipment purchasing, spare part stocking, maintenance, management training, capital restructuring and injections, pricing, production flow and phasing out of unprofitable operations.

The study briefly surveyed other production units in the sub-sector and identified two of them as being in need of rehabilitation.

16) Zambia: Modernisation of the Mwinilunga Pineapple Cannery - I.D.U., September, 1986

This study of a company processing and canning pineapple was conducted by I.D.U. at the initiation of Indeco of which the company is a subsidiary. The study proposed an action plan for rehabilitation and expansion. Rehabilitation recommendations covered the following areas: quality control, maintenance, staff training, equipment purchase, upgrading of plant, diversification of product and production control. The study proposed that technical assistance be procured for implementation.

The study surveyed other production units in the sub-sector very briefly and identified two of them as being in need of rehabilitation.

Volume 2 of the study detailed plant and machinery quotations.

17) Zambia: Indeco Ltd - Productivity Assistance to R.O.P. (1975) Ltd, Ndola, I.D.U., November, 1985

Part of this study by I.D.U. commissioned by Indeco was of the rehabilitation of the soap-making plant operated by Indeco subsidiary R.O.P. (1975) Ltd. The study consisted of a technical audit to identify production bottlenecks and an investigation of the possibility of substituting domestic tallow or domestic vegetable oils for imported tallow inputs (in response to the scarcity of foreign exchange). The technical audit gave rise to recommendations concerning replacement of equipment and upgrading. It pointed out however that the most serious constraint were the frequent shortages of foreign exchange to purchase raw materials although it did not examine the extent to which this could be overcome by stocking. The investigation of alternatives to imported tallow revealed technical problems in the case of vegetable oils and the possibility that supplies would not be diverted to soap-making in the case of domestic tallow.

The study was extremely brief due to severe time constraints and did not investigate other production units in this sub-sector.

18) P-E Inbucon Ltd - Summary of Industrial Rehabilitation Consultancy in Africa, March, 1988

The Corporate Consulting Division of P-E Inbucon Ltd prepared a summary statement of its recent industrial rehabilitation consultancy work in Africa. This has included:

1. A study of the rehabilitation needs in all areas of operation of the blanket manufacturing subsector in Ethiopia. (1984/85)

2. A 30-month project financed by the World Bank to assist the Uganda Development Bank (U.D.B.) in rehabilitation and development of industry. The firm were engaged to conduct market, financial, economic and engineering appraisals and to prepare bankable rehabilitation plans to be financed by a $100 million I.D.A. credit (plus other donor funds) through U.D.B. This it did in the following subsectors for 35 projects: textiles, soap, brewing, sugar, metal furniture, light engineering, hides and skins, footwear, batteries, vegetable oils and beverages. (1984/85)

3. A World Bank industrial mission to review the textile, agro-industrial, wood processing, aluminium, metal and chemical sub-sectors in Ghana. The most efficient industries were identified and rehabilitation priorities established consistent with this identification. Foreign exchange requirements were estimated. (1984/85)

4. A two-and-a-half-year technical assistance programme to Ghana Industrial Holding Corporation sponsored by U.N.I.D.O. A 6 month preliminary appraisal of the rehabilitation of the Corporation's 16 industrial divisions was followed by a 2 year management development programme. The subsectors covered were: glass, vegetable oils, steel rods, pharmaceuticals, paints, paper, construction materials, meat products, metal products, domestic appliances, footwear, hessian products, beverages, fruit canning and boat building.

5. A World Bank Industrial Mission to report on the state of and development priorities in the engineering subsector in Tanzania.

19) Deloitte, Haskins and Sells - Statement of Experience for the Rehabilitation of African Industry, D.H.S., April, 1988

The Management Consultancy Division of D.H.S. prepared a summary statement of its recent industrial rehabilitation consultancy work in Africa. This has included:

1. World Bank sponsored Kenya Sugar Authority Sugar Rehabilitation Project engineering consultancy assistance to sugar factories. (1980-81)

2. Preview of motor vehicle subsector in Kenya for Industrial Development Bank. (1980)

3.2 Interviews

Academics

1)	Chris Edwards	economist	Overseas Development Group
2)	Reg Green	"	Institute of Development Studies
3)	Charles Harvey	"	"
4)	Michael Hodd	"	School of Oriental and African Studies
5)	Rhys Jenkins	"	Overseas Development Group
6)	Raphael Kaplinsky	"	Institute of Development Studies
7)	Sanjaya Lall	"	Institute of Economics and Statistics
8)	Richard Lawless	"	University of Durham
9)	Keith McLachlan	geographer	School of Oriental and African Studies
10)	Paul Moseley	economist	Institute of Development Policy and Management
11)	Chris Stevens	"	Overseas Development Institute
12)	Michael Tribe	"	Project Planning Centre

Journalists

13)	Teresa English	journalist	Africa Economic Digest
14)	Alec Gordon	"	Economist Inteliigence Unit
15)	Michael Hollman	"	Financial Times
16)	Diana Hubbard	"	Africa Economic Digest
17)	George Joffe	"	freelance
18)	Gill Lusk	"	Africa Confidential
19)	John Marx	"	Middle East Economic Digest
20)	Richard Synge/ Sue Turner	journalists	Africa Economic Digest
21)	Nick van Hear	journalist	freelance

Government Officials

22)	Mike Garrod	trade official	Department of Trade and Industry
23)	John Smith	"	"
24)	R.W. Wooton	aid official	Overseas Development Administration

Investors

25)	Andrew Brzozowski	business development adviser	Commonwealth Development Corporation

Consultants

26)	Paul Batchelor	Coopers and Lybrand
27)	D. Compston	Allott and Lomax
28)	Ollie Haggarty	Coopers and Lybrand
29)	Ian Harder	Maxwell Stamp Associates
30)	Cecilia Hope	Development Finance Consultants
31)	Colin Humphreys	W.S. Atkins
32)	Keith Maddison	Commonwealth Secretariat (I.D.U.)
33)	Richard Moorsam	freelance
34)	Chris Rudd	Tate and Lyle Engineering
35)	Carloyne Stanforth	Price Waterhouse

36) Henry Stott	White-Young
37) Robin Theordore	Dar al Handasah
38) Graham Walker	"
39) Leslie Zurick	Peat, Marwick, McLintock

Business Association Executives

40) Avril Harrison	Committee on Middle East Trade
41) Gerry Howe	West Africa Committee
42) Ernest Noble	Middle East Association
43) Sinclair Road	Committee on Middle East Trade
44) Colin Shepherd	East Africa Association
45) Willie Turner	South Africa Association

1) Chris Edwards - Overseas Development Group (O.D.G.), Norwich

Mr Edwards mentioned the case of the Tanzanian fertiliser industry where 40-50% capacity utilisation was only achieved behind very high tariff protection because very high production costs. In other words, high capacity utilisation partly obscures the need for rehabilitation.

2) Reg Green - Institute of Development Studies (I.D.S.), University of Sussex

Rehabilitation need in sub-Saharan Africa usually arises from insufficient machine maintenance due to a lack of FE for the purchase of spares. Low capacity utilisation alone is not sufficient reason for rehabilitation - a case for potentially efficient production must be established. This must be done on a case-by-case basis (sufficient data often exist). In evaluating the future viability of debilitated plant it is important to calculate costs on the basis of rehabilitated plant being in operation - where plant is badly debilitated this may involve considerable engineering analysis. Plants with above average utilisation of capacity now are not necessarily those with greatest long-term viability (it is likely that they are simply of recent vintage) - it may be that returns to rehabilitation would be higher elsewhere. This is a criticism of the World Bank approach of prioritising by capacity utilisation. Green argues for giving priority to projects which will plausibly be efficient, face substantial domestic demand and, to a lesser extent, face substantial domestic availability of material inputs. He argued that no further generalisations could be made on the relationship between export or domestic market orientation and rehabilitation other than that export markets require more efficient production than domestic market.

On a country basis Green gave priority to Ghana, Tanzania, Mozambique, Uganda (if politically stable enough), Togo and Madagascar (except the last two are under structural adjustment programmes calling for no increase in consumption which would restrict potential output increases). Zambia has no programme in which to fit rehabilitation activity and was therefore not worthwhile. Sudan was even worse since it could not really be described as having a government. In Angola rehabilitation would be physically possible since much industry is in safe zones but the war distracts the attention of the government to a considerable extent and the shortage of foreign exchange is critical. Kenya, Cote d'Ivoire and Cameroon did not appear to be in need of industrial rehabilitation. Algeria showed some potential since much of the problem was an insufficient grasp of maintenance concepts at management level and insufficient trained maintenance personnel whilst interest in the problem, training ability and funds were not lacking.

3) Charles Harvey - I.D.S.

Harvey identified **Uganda**, **Zambia**, **Tanzania**, **Ghana** and **Sudan** as being particularly in need (except in Uganda he argued there is a growing realisation that the solution is to start again rather than rehabilitate). He argued that rehabilitation is not worthwhile within a framework of seriously distorted prices and macroeconomic policies not conducive to external balance. Generalisations between "import strangulation" (i.e. those with severe FE constraints) cases and other were not useful. He would subdivide the import-strangulated according to whether they were under an I.M.F. programme or not since such a programme could be expected to reduce the duration of their import strangulation.

4) Michael Hodd - Dept of Economics, School of Oriental and African Studies (S.O.A.S.)

He argued that, in **Tanzania**, all industry is in need of rehabilitation (capacity utilisation is generally 20-30%) due mainly to deficient maintenance arising from FE shortage (caused by pricing policies discriminating against exports). This has been exacerbated by shortages but also local skill deficiencies (where expatriate skills have been unacceptable rather than unavailable due the FE constraints). He argued that machines taken out of production are generally unusable after about a year because they are not maintained and are cannibalised for spare parts. He also expressed the view that the problem of rehabilitation in Tanzania must be seen in the context of general shortages of engineering skills. He also stressed that low capacity utilisation in a particular plant was often the result of production difficulties elsewhere in the economy.

Mr Hodd identified **Ghana**, **Uganda**, **Mozambique** as being particularly worthy of U.N.I.D.O. attention on need grounds. He also argued that it was important to choose both agricultural exporters and mineral/oil exporters because the latter had a pronounced tendency to have established high cost import-substituting industries dependent on imported inputs and would therefore be more vulnerable to a decline in export revenue.

He pointed out that any sub-sectoral analysis of the impact of structural adjustment policies should take account of the opposing effects on imported input prices of exchange rate depreciation and tariff reductions both of which were usually a component of such policies but whose net impact would obviously not be the same over all sub-sectors.

5) Rhys Jenkins - O.D.G.

He expressed the view that "rehabilitation" was primarily of use as a mobilising term to persuade decision-makers to take significant initiatives and was therefore not worth detailed definition. He also argued that internationally comparable data on industrial productivity were so scarce that continentally-applicable criteria for rehabilitation priorities could not be developed in practice. In addition, data on individual countries allowing comparison of the returns to rehabilitation across sub-sectors would, in general, only become available at a very advanced stage of analysis and therefore could not be used to select sub-sectors worthy of further study in the initial stage of analysis. He suggested that more general statements of priority sub-sectors should be used to guide prioritisation in this stage.

6) Raphael Kaplinsky - I.D.S.

Dr Kaplinsky proposed classificatory schemes for countries and subsectors that should allow clusters of countries/subsectors with similar problems and appropriate solutions to be identified.

For countries (in Anglophone and Lusophone Africa) he proposed three categories:

1) Countries disrupted by war (e.g. **Angola, Mozambique, Uganda**)
2) Countries with substantial balance of payments difficulties (e.g. **Ghana, Tanzania, Zambia**)
3) Countries in which the major problem is the consolidation of technological capability in the face of pressures to open their markets to imported goods (**Zimbabwe, Kenya, Botswana** and possibly **Malawi**)

For subsectors a matrix constructed from two dichotomies is proposed:

1) small- or large-batch production
2) discrete or dimensional production (i.e. output measured in individual units or units of volume, weight or area)

Dr Kaplinsky proposes that U.N.I.D.O. Country Missions should consist of at least one microeconomist, one specialised engineer, an engineer or economist with experience of the problems of technology transfer, absorption and development and a macroeconomist (who may not need to travel to the country concerned). The team should be allocated adequate time for preparation given the importance of macroeconomic determinants of capacity utilisation.

7) <u>Sanjaya Lall - Institute of Economics and Statistics, Oxford</u>

He cited the case of Ethiopia as interesting because 70-80% capacity utilisation was maintained despite a desperate and prolonged shortage of FE because trained and experienced manpower was readily available. This meant that the ability to solve engineering problems within FE-imposed constraints was particularly highly developed as was an awareness of the importance of preventive maintenance. He contrasted this with the Tanzanian and Kenyan cases where, in particular, the ability to manufacture in-house substitutes for imported spares was lacking although he believed this could often be overcome by short training courses and placements. He was also of the view that, on a more general level, most FE constraints could be overcome by good management through export development or import conservation.

He contrasted "modernisation" (where new technology is applied) to "rehabilitation" (where essentially the same technology is used as before).

8) <u>Dr R. Lawless - Middle East Centre, University of Durham</u>

Low capacity utilisation in Libya and Algeria is not due to foreign exchange problems but to technology transfer constraints. In particular, the electricity, water and communications infrastructure are often inadequate for advanced technologies and workforce training has often been insufficient. The latter has often been problematic in Algeria where training has been part of the turnkey provision by contractors who have neglected it in order to retain control of key areas of the production process. This has particularly been a problem in Algerian iron and steel and gas liquefication production.

In Morocco, Tunisia and Egypt the balance of payments may be a constraint on capacity utilisation but mainly in the (predominantly state-owned) heavy industrial sub-sectors where it is manifested in a lack of foreign exchange to purchase new capital equipment. This may reflect government giving priority in expenditures/tax reliefs to supporting foreign-owned labour-intensive production. The textile industry in all 3 countries may be particularly in need of rehabilitation (replacement of antiquated equipment) but in Egypt electricity supply shortages and bureaucratic constraints may be an obstacle.

Over all five countries most cases of low capacity utilisation resulting from low demand have been solved over time with growth in population and economic activity.

In all 5 countries capacity utilisation is often constrained by the availability of electricity, water, communications and housing for workforce.

Ministries of Planning can be very helpful in identifying sub-sectors in need of rehabilitation but are rarely sufficiently in touch with the industrial process to assist at the plant level. In general, interviews at plant level would be useful but in Algeria there are often bureaucratic and security obstacles.

Although assistance to Morocco is relatively easy, Egypt is in considerably greater need.

9) Keith McLachlan - Dept of Geography, (S.O.A.S.)

He identified the building materials and food processing subsectors in Libya as operating at very low capacity. Their rehabilitation has been given high priority by the Libyan Government in line with its emphasis on basic needs and resource-based import substitution (in preference to light consumer goods production). The causes of low capacity utilisation are deficient management and technical skills (particularly maintenance), poor access to R and D and a severe shortage of FE (since 1983 and progressively worsened) leading to shortages of spare parts and machinery not being replaced when optimal.

10) Paul Moseley - Institute for Development Policy and Management, University of Manchester

He identified the Kenyan sugar refining and textiles sub-sectors as operating well below capacity. In the former case there appears to be little coordination between production and importing authorities such that the refineries benefit from little protection . In the latter case incompetent (parastatal) management and an inability to penetrate export markets were responsible.

11) Christopher Stevens - Overseas Development Institute

He described the Nigerian situation of 40-50% capacity utilisation due to depressed demand and the high cost of foreign exchange to purchase materials. Nigerian industry tends to be highly import dependent due to the overvaluation of the naira during the 1970s and the bias of the riff structure. Since 1983 foreign exchange has been very scarce and severe economic disruption has resulted (exacerbated by the slowness of government reaction to the problem).

However, the extent of the disruption has made it impossible to distinguish structural changes from economy-wide changes except in extreme cases. It is therefore generally impossible to prioritise rehabilitation assistance in any rational fashion.

He also noted that the foreign exchange shortage did not yet appear to have lasted long enough to cause physical debilitation (unlike Zambia).

12) Michael Tribe - Project Planning Centre for Developing Countries, University of Bradford

Michael Tribe (in collaboration with Michael Yaffey) has been engaged in preparing training materials for the appraisal, monitoring and evaluation of rehabilitation projects. This has involved adapting conventional techniques to provide guidelines for the analysis of rehabilitation projects and has required extensive fieldwork (in order to utilise the experience of practitioners in L.D.C.'s) because there has been almost no academic treatment of the subject.

The guidelines have concentrated on the planning of projects (formulating a logical framework for the diagnosis of problem areas), calculating opportunity costs (examining the extent to which original project costs are sunk - they have found a tendency to overestimate this extent) and financial restructuring measures. They have not, however, researched appropriate criteria for the pre-selection of rehabilitation projects at the plant, subsector or country level.

13) Teresa English - Africa Economic Digest (A.E.D)

In the Sudan, the World Bank has been involved in rehabilitation of the sugar industry and the Kuwait-based Arab Authority for Agricultural Investment and Development in rehabilitation of oil mills. She also identified the Liberian palm oil sub-sector as having been studied for rehabilitation purposes by the French company, Sinnex International.

14) Alec Gordon - Economist Intelligence Unit (E.I.U.)

He identified coffee grading/sorting machines in Tanzania and Uganda as needing rehabilitation.

15) Michael Holman - Financial Times

He had no specific information on this issue but was very sceptical that the 7 countries on the list had enough in common to support any useful generalisations. He therefore advocated a case-by-case approach.

16) Diana Hubbard - A.E.D./E.I.U.

Her impression is that textiles, rubber and palm industries in Cameroon generally suffer from outmoded equipment constraints caused by market recession making replacement unviable until absolutely necessary. C.D.C. has been very involved in rehabilitation in the rubber industry and the World Bank in both rubber and palm. Most other industrial investment is French. Foreign exchange availability is not generally a constraint in Cameroon due to membership of the C.F.A. franc zone.

17) George Joffe - freelance consultant

He outlined current industrial issues in Morocco where since 1983 there has been a much lower level of state investment than was previously the case (as a result of I.M.F. pressure). Although both foreign and domestic private sector investment have been encouraged this has done little to compensate for the reduction in state investment. In short funds have not been available for many worthwhile projects both rehabilitation and greenfields. However, the extent of this investment gap or its likely duration are impossible to estimate since the Moroccan economy is undergoing profound structural change.

Mr Joffe identified the food processing, automobile assembly, consumer goods and textiles subsectors as being in particular need of rehabilitation in the sense of productivity-raising investment being required. Foreign exchange allocation has now been decontrolled therefore previous spare parts shortages have now been overcome in most subsectors. However, Mr Joffe cited the automobile assembly subsector as being unable to afford sufficient spare parts at recent exchange rates.

18) Gill Lusk - Africa Confidential

Industry in Sudan suffers from a severe foreign exchange shortage constraining spares and fuel purchases in particular but also materials. Manufacturing investment has been extremely low for many years as a result of low profitability thus a high proportion of industry is in need of rehabilitation- such surpluses of foreign exchange as there are in private hands tend to be used for trading or investment abroad. This has been exacerbated by the policy vacuum since the overthrow of Nimeiry in 1985 (an I.M.F. programme is pending) such that technical assistance has almost no impact and new investment has ceased. Capacity utilisation of 30% is considered good in the private sector. Insufficient demand is a major problem given low incomes and high production costs combined with a strong preference for imports both on perceived quality and price grounds (smuggling is pervasive).

Rehabilitation assistance may be most effective if targeted at small-scale production which tends to have very low import content - until the FE situation shows signs of improvement other assistance would be pointless.

19) John Marx - (A.E.D.)

He identified a general need for a new generation of managers in Morocco, more technocratic in outlook, to modernise technology and management methods. In particular need of rehabilitation (due to FE constraints and spare parts and bad maintenance on old machines) are the textiles, cement, car manufacture and domestic steel subsectors.

20) Richard Synge/Sue Turner - A.E.D.

They pointed out the relationship between increased receptiveness to foreign investment and the availability of FE for rehabilitation - Zambia and Mozambique being two examples of the importance of this. They argued that Sudanese rehabilitation would be severely handicapped by the extreme shortage of management personnel (much of which has migrated to the Gulf). They stressed the importance of rehabilitation as part of a restructuring package rather than being an isolated activity. They also stated that the £200m Export Credit Guarantee Department line of credit for Nigerian rehabilitation through import financing has run into controversy over project selection criteria (E.C.G.D. don't care how the money's spent as long as it's on imports from Britain). They gave priority to Nigeria because it has so much industry (although it also has considerable rehabilitation capabilities of its own) and Ghana and Mozambique because the need is great and the momentum has already been created.

21) Nick van Hear - freelance economic consultant

Mr van Hear identified the Nigerian textiles, brewing and tyre-manufacturing subsectors as being in need of rehabilitation - capacity-utilisation being 20-30%. He argued that the problem had arisen in the textiles and tyre cases because the four-fold depreciation of the naira since September 1986 and the abolition of the commodity marketing boards had led to an export boom in the raw materials of those subsectors, leading to higher input costs or, more often, shortages of inputs whilst the depreciation raised the cost of the alternative of importing inputs. In the brewing case the Nigerian Government banned the importation of grain inputs and adaptation to local grains has experienced technical problems. Mr van Hear argued that rehabilitation in these industries would probably yield high returns based on their previous successful track records and the likely receptiveness of the relevant decision-makers.

22) Mike Garrod - Department of Trade and Industry (D.T.I.) (Sub-Saharan Section)

He stated that comprehensive summaries of British investment exist but are confidential.

23) John Smith - D.T.I. (Middle East Section)

The only useful information he provided was that any lists of British investment in North Africa held by D.T.I. would be confidential.

24) R.W. Wooton - Overseas Development Administration (O.D.A.)

Mr Wooton required that information from O.D.A. be requested in writing which was done in the form of a letter accompanied by the questionnaire. A verbal promise was then given by O.D.A. that any relevant documentation would be sent but none was received by the end of the British phase of the assignment.

25) Andrew Brzozowski - Commonwealth Development Corporation (C.D.C.)

In recent years C.D.C. have increased their industrial investment under Government instruction (to seek out profitable opportunities wherever they might be) and due to increased funding C.D.C. plan to invest £160 million-£180 million during 1988 (cf. £100m in 1986) and in order to spend this on projects with significant developmental impact (i.e. not minimum risk) they must invest in rehabilitation because of the shortage of new viable projects. It should however be noted that C.D.C. are in conflict with O.D.A. and the Treasury over the wording of C.D.C.'s statute which appears to exclude investing in rehabilitation where this investment involves no capacity expansion.

C.D.C. have to date been involved in the following rehabilitations: oil palm and rubber processing in Liberia, D.F.C.K. (indirect), coffee pulping in Kenya, dry-yeast manufacture in Sudan, distillery and tea factory in Uganda. They are also considering the Kenya Meat Commission, palm oil processing in Cote d'Ivoire, the rehabilitation unit in Kenya (see Cecilia Hope - D.F.C.), a joint-venture (with I.F.C., D.E.G. and F.M.O.) to provide restructuring/management services in Africa and textiles, building materials, engineering and food processing in Tanzania, Zambia and Kenya. C.D.C. generally restrict investment to projects which earn or conserve foreign exchange in order to ensure repayment of C.D.C. loans and repatriation of C.D.C. dividends.

26) Paul Batchelor - Coopers and Lybrand

Coopers and Lybrand are currently involved in a 3-year rehabilitation of 12 of Indeco (Zambia's) 36 very diverse manufacturing investments (in all of which Indeco is a majority or sole shareholder). This is at World Bank initiative. The 12 companies were chosen by Indeco and the World Bank with loan repayment performance being the former's main criterion for selection.

The 12 were in the following subsectors: car assembly, sawmilling, bicycle manufacturing, fruit canning, construction stone, glass, fertilisers, brewing, milling, baking, utensil manufacture.

The first stage of Coopers and Lybrand's involvement lasted 2 months and involved teams (consisting of a financial expert, a production engineer and an economist/marketing expert) spending 3 man months on each of 6 companies making an overall diagnosis of its problems followed by 3 man weeks formulating an action plan with each company's management (and some extra Coopers and Lybrand assistance). This action plan allocated implementation responsibility between Coopers and Lybrand and management.

In the second stage a core team of 4 people (consisting of financial, human resource, economic and engineering experts) implemented and monitored the action plans over 4 months.

In the third stage this team spent 6 months monitoring the first 6 companies and diagnosing the problems of the second 6. Implementation and monitoring will be continued until the end of the third year of the project and a few additional ad hoc diagnostic studies and implementations thereof will also be carried out during this time.

Many firms were characterised by a shortage of spare parts and materials (due to FE constraints), poor maintenance (owing to a shortage of maintenance personnel and a lack of awareness of the importance of preventive maintenance), inexperienced management, inadequate understanding of marketing (particularly for export) and low demand. Inadequate management was identified as the major problem with physical rehabilitation needs often being primarily a symptom of management problems.

Coopers and Lybrand developed their rehabilitation diagnostic technique from systems analysis of U.K. companies intending to computerise and therefore requiring optimal production methods beforehand. Various categories of performance criteria are used including financial, raw material usage, cost (particularly with regard to international competitiveness), personnel turnover, market performance and capacity utilisation (which becomes particularly important when a high proportion of costs are fixed).

Coopers and Lybrand have also worked on rehabilitation in Zimbabwe (metal engineering and agro-industrial subsectors) and Malawi (agro-processing subsidiaries of Admarc and Malawi Development Corporation). Mr Batchelor identified the Zambian flour-milling subsector, the Tanzanian textile and leather goods subsectors and Kenya generally as having significant rehabilitation potential. He also identified the textiles, edible oils, sugar refining and milling subsectors as being widely in need of rehabilitation in Africa.

Mr Batchelor expressed the view that rehabilitation efforts would be most cost-effective if targeted on whole subsectors since much of the analytical work would be common to a number of plants and policy instruments could be more efficiently formulated and implemented. In general, then, the existence of a rehabilitation study of part of a subsector made it prima facie particularly worthwhile studying the rest of that subsector even though partial studies would usually only have given a superficial indication of the rehabilitation potential of the rest of the subsector through analysis of competitiveness. In addition, insofar as the causes of an individual plant's rehabilitation needs are external to it they are likely to have affected the rest of the subsector.

Mr Batchelor stressed that the rehabilitation work already done was the "tip of the iceberg". This was true both of its extent across plants, subsectors and countries and also its intensity at plant level. As to the latter rehabilitation analysis generally identified the currently binding constraint only to discover further constraints once the first one was released - rehabilitation must therefore be seen as a continuous activity.

Mr Batchelor suggested that from his experience of African industry the most successful subsectors (and therefore those most worthy of rehabilitation) are those where the resource base or the market are primarily domestic (such as agro-industrial, forestry, mineral or basic consumer goods) and the least successful are capital-intensive intermediate and capital-goods production which were usually uncompetitive due to scale and technological disadvantages. He stressed the need for a high degree of openness of economies and allocation by comparative advantage. Mr Batchelor suggested adding **Tanzania**, **Mozambique** and **Ghana** to the list of priority countries because their governments were already implementing rehabilitation strategies and were therefore creating the operating environment crucial to success. He contrasted this with the **Zambian** case where rehabilitation efforts became much more difficult after the breakdown of relations with the I.M.F. and the World Bank which worsened operating conditions (although the authorities became even keener on rehabilitation).

Mr Batchelor stressed the importance of achieving the correct balance between an independent analysis of rehabilitation needs and obtaining local enthusiasm for a rehabilitation strategy. He argued that the latter was often neglected particularly by the World Bank.

27) D. Compston, Allott and Lomax

His firm specialises in advisory services to the ceramics, industrial minerals and building material industries. They have worked on rehabilitation in **Egypt** (one brickworks), **Libya** (whole tiles subsector), **Senegambia** (one lime-making plant), **Ghana** (one brick and tile plant), **Nigeria** (various projects including two brickworks) and **Zambia** (one ceramics plant). He identified inappropriate raw material choices and generally poor management as common features but not FE shortages. His firm's studies would generally include an overview of other firms in their subsector and he speculated that the Egyptian and Nigerian cases particularly showed further potential in those subsectors.

28) Ollie Haggarty - Coopers and Lybrand (West Africa Section)

Coopers and Lybrand have done considerable management consultancy work in West Africa mostly in the public sector (which includes the majority of large-scale manufacturing). In general they focus on managerial/organisational problems and only include technical constraints and solutions peripherally. Most of their work has been for governments or agencies (such as the World Bank) which almost always imposes a confusion of objectives. It is usually made clear by the client that economic appraisal not merely financial analysis is required but at the same time the need for commercial viability is stressed. A clear definition of objectives and their weights is usually lacking and therefore must be defined by the consultants. However, this means that industries/firms identified as being worthy or unworthy of rehabilitation may not actually be so in terms of the client's own objectives of different agencies. As an example he cited the case of massive funding by the E.E.C. of rehabilitation of the Nigerian palm oil industry for import substitution motives whilst it was clear that such investment could not be justified by current comparative advantage which was contrary to the policy of the I.M.F. and World Bank.

On countries Haggarty argued that most West African industry is in need of rehabilitation but this appeared to mean only that management could be improved. In Cameroon, Coopers and Lybrand had worked on a brewery which Haggarty felt was representative of an almost universal need for industrial rehabilitation in the country. He felt that **Cameroon** exhibited the right political will for rehabilitation to be successful as was also the case in Ghana particularly. In the Cote d'Ivoire he argued that the rapidly worsening foreign exchange problem was an obstacle to rehabilitation efforts but he didn't think there was much need for rehabilitation anyway.

29) Ian Harder - Maxwell Stamp Associates

His firm has carried out rehabilitation studies of leather tanning in Ethiopia, leather goods in Liberia and textiles in both Zambia and Kenya (in the 1970s). In all cases these studies were of entire subsectors; Mr Harder argued that, in general, economic consultancies such as his firm would conduct studies no lower than the subsector level leaving plant level studies to management consultancies. Mr Harder stressed the need for economic and technical consultants to study rehabilitation needs together since economic and technical issues were usually closely interrelated.

Mr Harder highlighted FE shortages for spare parts as the major reason for debilitation but he pointed out that cheap, outdated machinery was often installed for which it eventually became impossible to obtain spare parts or replacements. He also pointed out that impact of FE constraints could be alleviated considerably by management decisions.

Mr Harder argued that market orientation issues could only be analysed on a case-by-case basis but pointed out that improvements in market balance were often an important component of rehabilitation. He also argued that where structural adjustment policies were being implemented rehabilitation should be postponed since macroeconomic changes may remove some of the apparent debilitation.

Mr Harder outlined the methodology of a typical rehabilitation study of a subsector with 3-6 plants:

In phase one an economist (with strong financial expertise) and a technical expert would each spend one month studying pricing, markets, cash flow requirements, profitability etc. and equipment, skills, operating ratios etc. respectively.

In phase two each of the above experts would spend 2 weeks writing a diagnosis of the subsector's main problems.

In phase three each expert would spend 6-8 weeks formulating recommendations for rehabilitation. Maxwell Stamp Associates would not, however, be involved in implementation.

30) Cecilia Hope - Development Finance Consultants (D.F.C.)

D.F.C. have done industrial rehabilitation work in Cote d'Ivoire, Togo, Tunisia, Mali, Senegal, Sudan (cotton ginning and sugar refining) and Kenya. Ms Hope had detailed knowledge of the Kenyan project.

During 1986 and 1987 D.F.C. conducted a study of the rehabilitation needs of selected Kenyan companies for the Deutsche Entwicklungsgesellschaft (contact: Bernd Heymanns) and the Dutch Government. Three Kenyan development finance institutions were involved: the Development Finance Corporation of Kenya (D.F.C.K.), the Industrial Development Bank and the Industrial and Commercial Development Corporation. The African Development Bank was also involved. These financial institutions selected fifty companies as being worthy of preliminary study. The sole criterion was poor loan repayment performance (actual or expected). Ms Hope expressed the view that poor loan repayment performance was justified as sole selection criterion by the needs of the financial institutions not of the borrowing companies. The 50 were then reduced to approximately 20 by discussion between D.F.C. and the financial institutions weeding out those whose problems were either too severe or could be solved by minor reorganisation with only minimal outside assistance Including this phase in the study was highly cost-effective.

These 20 companies were then subjected to 3-4 man days of analysis per company (including 1½ days at the company) by a financial expert with pragmatic general industrial background (financial expertise being most important at this stage where cost considerations allowed only one analyst). Ms Hope argued that in the cases where costs constrained analysis below 4 days this was sub-optimal.

From these 20, D.F.C. recommended 8 companies for more intensive analysis on the basis of expected return to rehabilitation. However, costs constrained the final selection to 4 companies.

These 4 were studied by a team consisting of one technical and one financial expert supplemented by a marketing specialist where required for 45-50 man days (which Ms Hope believed to be optimal). The studies began with an analysis of the company's history to ascertain the causes of its difficulties which were generally an underestimation of project costs with a poor financial plan characterised by excessive gearing (exacerbated by the effects of devaluation of the shilling on foreign currency denominated loans - long-term local currency loans having been unavailable in Kenya and forward cover being extremely expensive). This would be followed by an analysis of current activities and management structure to identify strengths and weaknesses. Then financial analysis would be carried out based on the accounts taken at face value (due to time constraints). Recently audited accounts were usually available but even those often deficient and confused.

This analysis would clarify the issues and identify causes and effects and suggest possible solutions. (Usually the problems were already known by the management.) In only two cases were the costs of rehabilitation justified by the returns.

The analyses supported few generalisations: most of the problems were company-specific. However, poorly-structured initial capital, poor use of management information and, to a lesser extent, inadequate marketing were identified as a common problem. Foreign exchange shortages only impeded production where management did not take sufficient precautions in terms of stock control and pricing. It should be noted that "rehabilitation" was interpreted in a very wide sense being merited where profits were well below the maximum achievable although low capacity utilisation was often the case.

A major problem identified in this study was the attitude of the Kenyan financial institutions towards their borrowers, namely that all companies should be rehabilitated but there should also be total repayment of loans (with penalty interest). Since this was clearly impossible D.F.C. had to set their own guidelines for trade-offs between objectives although the attitude of the financial institutions had moderated by the end of the study.

One objective of D.F.C.'s exercise was to examine the feasibility of establishing a rehabilitation unit (D.F.C. had assisted in the study and actual implementation of such a unit in Senegal - la Societé de Restructuration d'Entreprises in 1985-86). This unit would provide new equity capital (usually redeemable preference shares) to companies in need of rehabilitation but only if given the right to be involved in day-to-day management. This would be in the form of six months (more or less) full-time expertise followed by periodic reviews. The unit itself would be manned by financial, marketing and management experts providing shorter-term assistance and advice. Companies would pay for this assistance (at market rates in the case of technical expertise but possibly at lower rates in other cases). The unit itself would be capitalised by D.E.G., the Dutch Government and possibly local financial institutions (although some doubts were expressed over the ability of the local institutions to cooperate harmoniously with each other in such a unit). Ms Hope emphasised the need for the unit's management to be autonomous to avoid political pressures.

Ms Hope argued that D.F.C.'s work indicated that there is considerable further potential for industrial rehabilitation assistance but she stressed that in order to implement a comprehensive strategy in a committed manner and to cover the overhead costs of assistance such assistance should be channeled through one rehabilitation unit. There was clearly a case for close cooperation amongst donors.

31) Colin Humphreys - W.S. Atkins

Mr Humphreys identified studies of rehabilitation of the automotive components subsectors in **Tanzania** and **Ethiopia** as having been carried out by his firm but was unable to give details.

32) Keith Maddison - I.D.U., C.F.T.C.

I.D.U. have conducted a number of rehabilitation studies both of individual plants and as part of broader subsectoral studies. The former usually indicate nothing about the rehabilitation potential of the rest of the subsector whilst the latter include all identifiable units in need of rehabilitation in that subsector. In the cases investigated by I.D.U. the rehabilitation need has arisen through obsolete machinery, shortage of FE for spare parts, resultant low capacity utilisation and loss of technical expertise (e.g. brain drain, disinvestment). He emphasised that the existence of an adequate market must be established before rehabilitation is justified and that where the market is lacking diversification is often a solution. He pointed out that plants established in the colonial era are now often locally managed with little attention paid to market factors. He emphasised that poor management was always one of the problems giving rise to the rehabilitation need and that some reorientation of production methods was always part of the solution which could only be achieved with the assistance of resourceful technical experts.

He identified **Uganda** and **Tanzania** as having highest priority. He stressed that market orientation should be judged case by case.

C.F.T.C. have carried out or are carrying out the following studies in this field (most of which have led or will lead to I.D.U. involvement in implementation).

Broad subsectoral surveys

Cement	
Salt	
Agricultural implements	S.A.D.C.C.
Pulp and paper	
Pesticides	
Fertilisers	

Specific studies on rehabilitation

salt fields citrus products beach sand processing	**Gambia**	glass 2 steel mills 2 foundries	**Ghana**
sandstone block cutting -	**Lesotho**	steel mills - **Mauritius**	
garments - **Sierra Leone**		clay bricks - **Nigeria**	
agric. implements canning cement	**Malawi**	steel mills paper mill pencils 2 leather tanneries (whole subsector)	**Tanzania**
cement bricks crushed stone refined veg. oil pineapple cannery	**Zambia**		

garments		
paper mills		
3 tanneries (probably indicative of further potential)		Kenya
8 steel mills (whole subsector)		

ceramic tableware	tea factory	
glass	food processing	Uganda
tanning	coffee factory	
bakery	engineering workshop	

33) <u>Richard Moorsam - freelance consultant on Southern African affairs</u>

Mr Moorsam made some useful comments on particular countries:

1) **Tanzania** probably has the most advanced and serious rehabilitation programme in Eastern and Southern African and compares favourably to **Zambia** in this respect.

2) War-torn countries should not be disregarded; the need is greater and, potentially, so is the seriousness of government commitment to rehabilitation. **Angola** is a good example of this. To a lesser extent so is **Mozambique** (where the government controls less of the country than in Angola) and rehabilitation in the Beira corridor is already in progress.

34) <u>Christopher Rudd -Tate and Lyle Engineering Services</u>

His firm's rehabilitation activities have been mainly in the sugar processing subsector where they have carried out the following work:

1. In Angola all four sugar factories were analysed and management deficiencies, a shortage of spare parts (due to logistical reasons not to an FE constraint) and agricultural shortages were diagnosed as the main problems. (Mr Rudd pointed out that industry often suffers less direct impact from civil strife than does agriculture because it can generally operate with a small core workforce.) The study recommended a rationalisation of the subsector (including closing two factories), additional management and provision of key spare parts. The spares purchase was to be financed by commercial loans and the management by the Kuwait Fund. The total cost was implemented but the Angolan Government rejected the management recommendation because it could not give personal security guarantees and, in any case, it preferred to establish a new sugar factory rather than rehabilitate the existing ones to that extent.

2. In Mozambique a sugar-processing subsector review has been completed very recently.

3. In Sudan a study was carried out for the World Bank of two sugar factories. Deficiencies in key senior managers, FE availability for spares and expatriate skills and construction methods were identified. The recommendations were for a World Bank sector loan for spares and expatriate skills, rehabilitation of the buildings and short-term management assistance from Tate and Lyle.

4. In Cote d'Ivoire management was supplied following a World Bank study

but the project failed for agricultural reasons.

5. In Cameroon a study recommended rationalisation of the existing factory.

6. In Zambia management was provided after debilitation caused by managerial deficiencies and FE constraints on spares purchase.

7. In Egypt a sugar refinery is currently being studied.

8. In Mauritius technical studies on plant rationalisation have been carried out.

Typically, Tate and Lyle's studies are of entire subsectors since this is more cost-effective and because the sugar subsector usually has a high political profile being large, long-established and subject to a high level of government intervention. These studies may sometimes make policy recommendations, for example, on pricing.

Such a study would normally consist of 1-2 weeks initial analysis by an engineer and someone with relevant commercial experience (such as an ex-General Manager of a sugar factory) followed by closer analysis by a financial expert, a production engineer and a mechanical engineer. The time required for this depends on the number of plants and the ease of availability of information. In the Angolan case, where there were three plants, the second phase consisted of 6 weeks site work and 4 months desk work. In the Sudanese case, with 6 plants, there was 8 weeks site work and 10 months desk work.

The next phase would involve the provision of management (unless the problems were minor in which case ad hoc technical assistance would be provided). In less serious cases 2-3 key senior managers or technicians would be provided but in more serious cases a task force of approximately 20 people would be provided for 6 months. This would then be reduced to 6-8 in key areas and after one year reduced again to 2-3.

Mr Rudd reviewed U.N.I.D.O.'s focal countries and argued that Kenya, Cote d'Ivoire, Cameroon and to a lesser extent Sudan now have political climates favourable to rehabilitation in contrast to Zambia. In Cameroon his firm had identified rehabilitation potential in the fertiliser, coffee and rubber subsectors. In Angola there was enormous potential for rehabilitation but he questioned the adequacy of personal security. He also pointed out that areas which were now secure enough for rehabilitation to be carried out safely and effectively may become a military target because industry had been rehabilitated.

He also expressed the view that outside agencies, particularly the World Bank, often undermine the cause of rehabilitation by unrealistically high estimates of actually achievable capacity utilisation. He cited the case of World Bank involvement in Kenyan sugar processing where the Bank wrongly assumed that technically feasible capacities were attainable in practice.

Mr Rudd also emphasised that export rehabilitations are often given priority because they are the most easily identifiable means of alleviating FE shortages even though they may not be the most cost-effective.

35) Carolyne Stanforth - Price Waterhouse

Ms Stanforth pointed out an increasing tendency of clients to employ management consultants as project managers on rehabilitation contracts to bring in other specialists. Her firm would identify the need for rehabilitation as being any substantial underperformance but would only use the term "rehabilitation" at the request of the client hence much rehabilitation work would not be recorded as such.

Price Waterhouse's relevant experience includes studies of a cotton processing plant in the Sudan, a metalware manufacturer in Tanzania, sugar processing in Benin, a wide range of plants in Malawi, cotton processing in Cameroon, oil refining in the Cote d'Ivoire, and printing and publishing in Mali.

Ms Stanforth stated that from her company's recent experience in Africa and knowledge of government initiatives the following countries and subsectors would be worthy of further research: Uganda (textiles), Tanzania (agro-industry), Senegal and Mauritius (potential exporters and textiles), Malawi and Madagascar (small-scale enterprises), Kenya (potential exporters) and Ghana (agro-industry).

Price Waterhouse have recently been awarded a contract to study the rehabilitation needs of 44 state-owned enterprises in Ghana approximately half of which are manufacturers.

36) Henry Stott - White-Young

This firm, which specialises in edible oils and related subsectors (soap, animal feeds), have worked on rehabilitation in Gambia, Sierra Leone and Sudan but he was of the opinion that these subsectors were in need of rehabilitation all over Africa. In Sierra Leone the firm had been involved in analysis and implementation of the rehabilitation of a palm kernel oil mill which had been suffering from poor management and inadequate maintenance - he believed other firms in the subsector were in need of rehabilitation. In Gambia the firm had updated (in 1986) a 1975 study of groundnut processing. They had designed the rehabilitation of the power plant in the largest factory (debilitation due to difficulty of obtaining spares). Another plant currently requires physical rehabilitation (after standing idle for ten years) and African Development Bank funding is being sought for a study. In Sudan the firm had tendered for the physical rehabilitation of 3 edible oil mills (whose problems derived from low production levels in agriculture) but had not been awarded the contract.

37) Robin Theodore - Dar al Handasah

Mr Theodore had participated in a World Bank-funded study (managed by Malcolm McDonald and Partners) of 40 cotton-ginneries in Sudan in 1983. Rehabilitation in most cases was largely a question of the provision of FE to purchase spares or replace antiquated machinery. However, the older generation of creative engineers able to maintain machinery within severe constraints was not being replaced by younger people with comparable abilities which could eventually cause debilitation through inadequate maintenance.

In Angola he had recently led a study of the construction materials subsector in Luanda and Bengo Provinces. This subsector is considered to be one of the most crucial to the recovery programme.

The study consisted of a 5 week preliminary phase in which a production engineer and an industrial economist selected 45 from 75 factories for further study (excluding those which needed no rehabilitation, were already rehabilitating or only required FE for rehabilitation). In the second phase a team consisting of an industrial economist, a ceramics specialist and six engineers with appropriate specialities spent 5-7 weeks per person on detailed factory surveys which diagnosed problem areas and made comprehensive recommendations. In addition a general survey of quality control and training institutions was carried out. $22 million of external assistance needs were identified in detail, 54% of which were for technical assistance. Possible financiers are the European Investment Bank, the European Development Fund, World Bank and African Development Bank.

The main problems identified were inadequate management in all fields, compounded by FE constraints and minimal productivity incentives. FE allocations are highly irrational except that competent management tend to be effective lobbyists for FE allocation. Cash incentives to workers stimulate little production because much exchange is by barter. The common practice of paying workers with the products of their own factory can reduce output: since workers often sell these products on the black market they can increase their profits by restricting supply and hence raising prices.

The study recommended that priority be given to:

1) Rehabilitation in subsectors with low import dependence because of FE constraints

2) Rehabilitation of the 6 clay-brick factories of Luanda Province since these have very significant forward linkages.

38) Graham Walker - Dar al Handasah

Mr Walker described recent policy developments in Angola which could increase the probability of success for rehabilitation efforts. In particular:

1) There is pressure to devalue the kwanza. At present the official rate is 30 kwanza to the dollar whilst the unofficial rate is 2000 kwanza.

2) Management decisions are being decentralised to the plant level.

3) Skilled management and workers are no longer being automatically recruited by the armed forces.

4) Private sector commercial channels are being allowed to develop.

If these policy changes create more appropriate prices and more effective production incentives then rehabilitation efforts could increase output enormously. However, this would be greatly assisted in particular plants if:

a) management supplied as technical assistance could exercise considerable autonomy because centralised decisions are often irrational.

b) FE allocations for spare parts are fixed in advance because what little FE is left after the priority sectors (defence, oil) have received their allocations is distributed very irrationally.

c) basic goods are supplied on site to workers to minimise absenteeism because trade is very time-consuming.

There is also a pressing need for the establishment of training institutions particularly at the vocational level, a more welcoming policy towards expatriate technical assistance and more reliable transportation between the ports and population centres.

Considerable technical rehabilitation projects are being implemented without appraisal of market, manpower or infrastructural conditions and projects are not being prioritised. This is caused by an almost complete lack of project appraisal capacity in the Angolan administration combined with excessive haste amongst donor agencies to fund projects. In addition, the Angolan Government insists that project appraisals use only the official exchange rate the main effect of which is to vastly exaggerate labour costs.

39) Leslie Zuick - Peat, Marwick, McLintock

His firm supplied an engineer and a financial analyst who carried out (in 86 man days during 1984/85) a rehabilitation study of the three cocoa processing factories and one (related) insecticide formulation plant in Ghana (all were subsidiaries of the Ghana Cocoa Board). The plants were established to add value to Ghanaian cocoa but were then operating at only about 20% of capacity.

The fundamental problem identified was the low supply of cocoa beans. Output of cocoa beans had fallen considerably since the processing capacity was installed due to the low producer price (fixed by Government), disease, drought and fire. The low producer price was identified as the key factor and had caused smuggling to non-controlled markets and a shift away from cocoa production.

The cocoa bean supply problem was compounded by debilitated machinery. This in turn was caused by the fact that all the firms made persistent losses and could not afford spare parts and replacements or could not obtain FE for this purpose even when local funds were available. The persistent losses resulted from the overvaluation of the cedi, enormous overstaffing (primarily at the lower levels) and the low capacity utilisation.

The firms' engineers had shown themselves to be very resourceful in the face of these problems but local technical solutions were of limited potential. The study identified physical rehabilitation requirements of $10.8 million. No specific technical assistance needs were identified but a general shortage of competent computing and accounts staff was noted. However, of primary importance were the increase in the producer price of cocoa beans and the devaluation of the cedi both of which took place soon after the study was carried out.

40) Avril Harrison - Committee on Middle East Trade

Ms Harrison stated that no summary list of British investment in N. Africa exists but the best sources of such information would be:

1) The commercial sections of the various British embassies although they would not have comprehensive information;

2) The various national investment authorities for information to the subsector or even project level but such information would often be outdated.

41) Gerry Howe - West Africa Committee

The Committee's list of British companies active in West Africa is only available to its own members. They are aware that rehabilitation is a current issue and that there is activity amongst their members but could give not specific details.

42) Ernest Noble - Middle East Association

Mr Noble argued that of North African countries, Algeria presents itself as being both in need of rehabilitation assistance (the post-1986 fall in hydrocarbon exports has created a foreign exchange problem on top of existing bureaucratic restrictions, leading to low capacity utilisation) and increasingly receptive to it. In the case of Morocco stated that the marketing of agro-industrial exports was worthy of attention but that he could make no claim to having an overview. No list of British investment was available from his Association.

43) S. Road - Committee for Middle East Trade

Mr Road identified the main problem as being one of managerial deficiencies particularly of marketing experience (this being most acute in Algeria). This is of increasing importance as the need to earn FE from exports increases. He identified the Algerian engineering industry as a subsector in need of rehabilitation with poor quality control (which he attributed to state control of industry) being the main factor. In Egypt he identified an across-the-board problem of capital shortages (with a recent foreign exchange aspect) leading to machines not being replaced when optimal but argued that food processing as a resource-based export potential industry should be given priority. He believed that per plant Egypt had the greatest need for rehabilitation in North Africa but he stressed that assistance would face many frustrations.

In Morocco and Tunisia he differentiated between footloose industries such as textiles where European producers were involved in joint-ventures and resource-based ones such as food processing where they were not. The former had performed better because of superior appraisal of the European market so he identified the latter as being in need of export marketing assistance as part of rehabilitation. His impression from a recent trip to Morocco was that Government would be particularly receptive to such assistance at present.

44) Colin Shepherd - East Africa Association

This Association covers Kenya, Uganda, Tanzania, Mauritius and Seychelles. Only investment-related list it has available is of Association members. In his view, FE allocation in Kenya was a nuisance but not an impediment to production.

45) Willie Turner - Southern African Association

Mr Turner made useful comments on particular countries:

1) Mozambique would be worth attention only when transport and communication problems are significantly eased by improvement in the security situation. In this event particular attention should be paid to agricultural machinery production (obviously a key element in raising agricultural production) and transport related industries such as road construction and motor vehicle repair. Privatisation, under foreign pressure, is in process and may require technical assistance (T.A.).

2) Zambia has considerable need of T.A. (for rehabilitation but policies are not generally supportive to its success (although government would be receptive to T.A.). However, the bureaucratic allocation of foreign exchange reintroduced in May, 1987 after the 18-month auction experiment works more rationally than prior to the auction period. He suggested that T.A. might become worthwhile if Zambia reentered the foreign aid community which it may well do after the elections to be held by November 1988.

3) Zimbabwe has significant rehabilitation needs (although less of a shortage of skilled personnel than other countries in the region) and

would generally be receptive to T.A. The Confederation of Zimbabwean Industries has numerous in-house studies on this issue and would undoubtedly be very cooperative.

4) Angola - as for Mozambique.

5) Malawi has embarked on a policy of privatisation under World Bank/I.M.F./U.S. influence. The FE problem is being relieved by World Bank loans and a U.S.A.I.D. grant related to the extent of privatisation. Of particular interest is Admarc which was established as an agricultural marketing board but was later encouraged to diversify into small manufacturing and service investments. It is now in the early stages of divesting itself of these investments and considerable T.A. could be required given local shortages of entrepreneurial and management skills. The Washington D.C. office of Deloitte, Haskins and Sells has prepared a report on this issue and has posted a representative to Blantyre to coordinate its activities in this regard.

3.3 List of Persons Contacted

Name	Organisation	Telephone
Academics		
Robert Cassen	Queen Elizabeth House	Oxford 273600
Chris Colclough	Institute of Development Studies	Brighton 606261
Sholto Cross	Overseas Development Group	Norwich 56161
Chris Edwards	"	"
Reg Green	Institute of Development Studies	Brighton 606261
Keith Griffin	Magdalen College	Oxford 276101
Charles Harvey	Institute for Development Studies	Brighton 606261
Adrian Hewitt	Overseas Development Institute	London 4877413
Michael Hodd	School of Oriental and African Studies	London 6372388
Rhys Jenkins	Overseas Development Group	Norwich 56161
Raphael Kaplinsky	Institute for Development Studies	Brighton 606261
Tony Killick	Overseas Development Institute	London 4877413
Richard Kitchen	Project Planning Centre	Bradford 733466
Sanjaya Lall	Institute of Economics and Statistics	Oxford 271073
Richard Lawless	University of Durham	Durham 3742000
Keith McLachlan	School of Oriental and African Studies	London 6372388
Paul Moseley	Institute for Development Policy and Management	Manchester 2752800
Roger Riddell	Overseas Development Institute	London 4877413
Douglas Rimmer	University of Birmingham (retired)	0214443516
Tim Sheehy	Queen Elizabeth House	Oxford 273600
Chris Stevens	Overseas Development Institute	London 4877413
Frances Stewart	Queen Elizabeth House	Oxford 273600
Chris Stoneman	Centre for Southern African Studies	0482811227
Graham Thomas	School of Oriental and African Studies	London 6372388
Peter Thompson	University of Manchester Institute of Science and Technology	Manchester 2363311
Michael Tribe	Project Planning Centre	Bradford 733466
Journalists		
John Colloff	Economist Intelligence Unit	London 4936711
Teresa English	Africa Economic Digest	" 4045513
Alec Gordon	Economist Intelligence Unit	" 4936711
Joe Hanlon	freelance	" 4051253
Michael Hollman	Financial Times	" 2488000
Diana Hubbard	Africa Economic Digest	" 4045513
George Joffe	freelance	" 6070154
Gill Lusk	Africa Confidential	" 5849141
John Marx	Middle East Economic Digest	" 4045513
Roger Murray	Africa Economic Digest	" "
Richard Synge	"	" "
Sue Turner	"	" "
Nick van Hear	freelance	" 6746385
Government Officials		
Mike Garrod	Department of Trade and Industry	London 2155209
John Smith	"	" 2155219
R.W. Wooton	Overseas Development Administration	" 2733000

Investors

Peter Banner	Guinness	London 9657700
Andrew Brzozowski	Commonwealth Development Corporation	" 6298484

Consultants

Paul Batchelor	Coopers and Lybrand	London 8224714
Mark Bustock	Ose Arup	" 6361531
Tom Boyd	Hunting Technical Services	" 9536161
D. Compston	Allott and Lomax	Manchester 9621214
Derek George	Cremer and Warner	London 7300777
Ollie Haggarty	Coopers and Lybrand	" 8224714
Ian Harder	Maxwell Stamp Associates	London 2510147
Cecilia Hope	Development Finance Consultants	" 8363424
Colin Humphreys	W.S. Atkins	0372726140
Keith Maddison	Commonwealth Secretariat (I.D.U.)	London 8393411
Richard Moorsam	freelance	Oxford 723436
Robert Payne	Ewbank-Preece	Brighton 724533
Adam Platt	Intermediate Technology Development Group	Rugby 60631
George Puddephatt	Parkman Consultants	London 6439128
Sally Quellin	Deloitte, Haskins and Sells	" 2483913
Chris Rudd	Tate and Lyle Engineering	" 4646556
E.L. Robinson	White-Young	Runcorn 715252
Carolyne Stanforth	Price Waterhouse	London 4078989
Henry Stott	White-Young	Runcorn 715252
Robin Theodore	Dar al Handasah	London 6378622
Tony Trimboy	P-E Incubon	078434411
Graham Walker	Dar al Handasah	London 6378622
Derek Wynn-Jones	PA Consultants	" 2359088
Leslie Zurick	Peat, Marwick, McLintock	" 2368000

Business Association Executives

D.H. Bush	Business Consultants Bureau	London 2223651
John Dorrell	London Chamber of Commerce	" 2484444
Avril Harrison	Committee on Middle East Trade	" 8391170
Gerry Howe	West African Committee	" 4082478
Ernest Noble	Middle East Association	" 8392137
Sinclair Road	Committee on Middle East Trade	" 8391170
Colin Shepherd	East Africa Association	" 8362540
Willie Turner	Southern Africa Association	" 2409545
L.J. Walters	West Africa Committee	" 4082478
	Institute of Management Consultants	" 2353897