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**COMPLETED AND ON-GOING PROGRAMME OF DIRECT SUPPORT
TO INDUSTRY IN DEVELOPING COUNTRIES FINANCED
BY THE GOVERNMENT OF DENMARK
THROUGH UNIDO SPECIAL TRUST FUNDS PROGRAMME**

TF/GLO/88/018 and TF/GLO/90/020

Report of the joint evaluation mission*

Prepared in cooperation with
the Danish International Development Agency and
the United Nations Industrial Development Organization

* This document has not been edited.

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1. INTRODUCTION:

1.1 Background:

During the past decade, numerous industrial plants in developing countries have faced difficulties ranging from simple technical or managerial malfunctions to major technological or financial bottlenecks. These difficulties have led to set-backs in the development efforts of the countries concerned. Many developing countries are therefore giving the highest priority to promote industrial cooperation for mobilization of domestic and foreign resources to salvage ailing industrial plants.

UNIDO has in this context developed and implemented new mechanisms for promoting enterprise-level industrial co-operation through special trust fund arrangements. In this regard, UNIDO has intensified its dialogue with business and industrial communities in both developing and in developed countries. The aim has been to provide direct support to developing country enterprises and also seek the active co-operation of companies in the developed world in facilitating the flow of technical, managerial and financial resources to the developing countries, particularly at the enterprise level, in an effort to promote industrial development.

The special trust fund projects aim at safeguarding and enhancing the value of new and existing investments made in industrial plants through the provision of pre-investment and/or diagnostic studies to enterprises concerned and to promote industrial cooperation between developed and developing companies.

The projects are being implemented by UNIDO's Special Trust Funds Projects Section which was established to develop additional mechanisms for mobilization of funds for financing development assistance to developing countries. One of their programmes was to develop a supplementary mechanism that would enable industrial partners in developed and developing countries to cooperate through UNIDO projects, to provide direct support to industry (public and private).

As part of the above programme the Danish International Development Agency (DANIDA) and UNIDO, in cooperation with the Federation of Danish Industries, have agreed to identify Danish partners as well as private companies in developing countries interested in implementing joint programmes and projects for revitalization, restructuring, rehabilitation, revamping, expansion and diversification of ailing industrial plants in developing countries. Two Projects sponsored by DANIDA have been launched in 1988 and 1991 respectively:

- **Project 1** **TF/GLO/88/018** - Programme of direct support to industry in developing countries: fact-finding and project identification missions (completed);
Budget: US\$ 400,000 (incl. 13% programme support costs).
- **Project 2** **TF/GLO/90/020** - Programme of direct support to industry in developing countries (on-going)
Budget: US\$ 600,000 (incl. 13% programme support costs).

The Projects are primarily intended to assist the low income developing countries in their industrialization efforts.

During the course of implementation of the Projects, UNIDO shall endeavour to ensure that environmental, sociological and socio-economic aspects are duly taken into account in order that the projects contribute to sustainable development.

The Project Documents require Project Evaluations to be carried out at suitable intervals and in May 1993 the first Evaluation Mission (a joint UNIDO-DANIDA Mission) was fielded with the main purpose to assess and possibly improve the effectiveness and efficiency of the Projects as well as their impact and relevance. Terms of Reference (TOR) for the Evaluation Mission is presented as Annex 1.

1.2 The Evaluation Mission:

The Evaluation Mission took place in the period 4 May 1993 to 8 June 1993. Field visits were undertaken to Yemen in the period 12 to 16 May 1993, to Tanzania from 17 to 22 May 1993 and to Mozambique from 23 to 28 May 1993.

The evaluation mission comprised of the following members:

- Mr. T.K.G. Ranasinghe, Agro Industry specialist, representing UNIDO;
- Mr. Freddie Hofman Andersen, Economist representing DANIDA.

During the stay in Yemen the Mission had consultations with:

- UNDP;
- Ministry of Fish Wealth (Aden Branch);
- Public Corporation for services and Fish Marketing of Mahra Governorate (Nishtun);
- Ministry of Planning and Development (Aden Branch).

In Tanzania the Mission had meetings with:

- UNIDO;
- Ministry of Industries and Trade;
- Tanzania Breweries Limited.

In Mozambique the Mission consulted:

- UNIDO;
- XIGAIO (Food Directorate);
- Mill CIM, Matola, Maputo;
- Mill SOCIMOL, Machava, Maputo
- Ministry of Industry and Energy.

A selective list of persons met is presented in Annex 2.

The Evaluation Mission wishes to thank all officials and individuals met for the kind support and valuable information received, which highly facilitated the Mission's work.

1.3 The Report:

Altogether the Report consists of 13 chapters.

Chapter 1: Introduces the Evaluation Mission and gives some background information;

Chapter 2: gives summary of the Mission's findings and recommendations;

Chapter 3: describes the concept and design of the 2 DANIDA Special Trust Fund Projects using the Logical Framework Approach, and presents the internal UNIDO appraisal of the Projects.

Chapter 4: presents some general information on Project 1 implementation such as characteristics of the requests, mechanism of approval, execution and quality of studies and quality of monitoring and backstopping.

Chapter 5: analyses and evaluates the 10 sub-projects under Project 1. Special consideration is given to the 2 sub-projects covered by field visits of the Evaluation Mission, i.e. Tanzania breweries and Mozambique milling industry;

Chapter 6 and Chapter 7: cover Project 2 in the same way as described for Project 1 in Chapter 4 and 5. Special consideration is given to Yemen fish processing sub-project which was covered by a field visit;

Chapter 8: presents an overall programme level analysis dealing with among other sub-project complementarity, geographical focus, UNIDO and DANIDA involvements and the effects of the UNIDO-DANIDA cooperation;

Chapter 9 and Chapter 10: describe in overall terms the results and achievement of objectives for Project 1 and Project 2 respectively, and also look into unforeseen effects;

Chapter 11: gathers the Evaluation Mission's main findings and conclusions through an overall problem analysis;

Chapter 12: presents the overall recommendations of the Evaluation Mission;

Chapter 13: concludes on lessons learnt.

It shall be stressed that the viewpoints stated in this report and the recommendations made are those of the Evaluation Mission. They are not necessarily shared by DANIDA and UNIDO and any recommendation need their consent for actual implementation.

2. SUMMARY:

This in-depth evaluation has been undertaken as a result of direct consultations between UNIDO and DANIDA and does not constitute a routine evaluation as designed in the two Project Documents.

The objective of the Danish Trust Funds programme is to improve productivity and viability of new or existing plants in low income developing countries through enterprise to enterprise cooperation. DANIDA may have selected UNIDO to execute these development programmes due to the capability possessed by UNIDO.

In a few cases (India mainly), these objectives have been achieved. However, in most cases, preliminary studies merely of a technical nature, have resulted in lack of progress towards increased industrial activity through enterprise to enterprise cooperation and therefore failed to achieve the objectives.

Whilst the Special Trust Funds section has provided a one stop facility for speedy execution and administration of this programme, this advantage has been far out-weighted by the disadvantages of quality owing to insufficient coverage in studies/reports, insufficient UNIDO monitoring and follow-up and insufficient UNIDO response for further assistance. On the other hand, low interest in enterprise to enterprise cooperation in low income developing countries by Danish partners and sub-optimal selection of Danish partners too have contributed to lack of success. Rapid political transitions in some countries and changing industrial policies were unforeseen adverse effects, also contributing to lack of success. In a few cases, insufficient UNIDO response to applications for further assistance due to lack of Trust Funds, has hindered hopes of keeping alive some sub-projects.

There has been a learning process because the on-going Project 2 is producing good results as compared to the completed Project 1. The Evaluation Mission is of the firm opinion that DANIDA-UNIDO cooperation through the Trust Funds Scheme is workable and after refining the modus operandi, a high level of success will be achieved.

For execution of future Danish Trust Funds programmes, the Evaluation Mission recommends that:

- 1) Investigations be carried amongst relevant Danish enterprises and financing institutions on their interest in the project on the present conceptual basis (section 12.1);
- 2) If the above is generally negative, then redesign the project to extend the target groups to include higher income developing countries, ensure consultancies be carried out by Danish companies but let other than Danish companies be eligible for cooperation if no Danish firms can be identified (section 12.1);
- 3) The project document itself be properly designed with a project proposal with detailed guidelines based on a Logical Framework Approach including an overall problem analysis (section 13.1). The sub-project identifications too should be clear, stating the responsibilities of the involved parties (section 12.1).
- 4) Procedures for selection of partners (Danish or non-Danish) and eligibility criteria should be established. Relevant finance institutions in Denmark or other countries if non-Danish partner, should be involved in the screening process of both sub-projects (local beneficiaries) and Danish/non-Danish partners (section 12.3).
- 5) Establish procedures and guidelines for follow-up and monitoring of sub-project proposals (section 12.6).

- 6) **The Special Trust Fund staff to concentrate on Programme Officer functions with responsibility of overall supervision of the project and sub-project activities, and project coordination and communication (section 12.6).**
- 7) **Improve coordination with specialized divisions with UNIDO such as Investment Promotion Division, Feasibility Studies Branch, etc. (section 8.6).**

The lessons learned are:

- A) **A flexible (insufficient) Project Document and absence of a comprehensive project proposal overlooked three major assumptions which led to lack of success - Availability of Danish Partners, willingness of Danish Finance Institutions to finance Danish deliveries, and financing of further technical assistance, training, and establishment of enterprise to enterprise cooperation will be handled by the partners themselves (section 13.1).**
- B) **Sufficient funds must be available for each sub-project to ensure reaching the project objectives. This implies that funds for necessary follow-up are included in the project budget (section 13.2),**
- C) **Diagnostic studies must take a global view of the enterprises and sub-project proposals shall be based on thorough overall problem analysis and the Logical Framework Approach (section 13.3).**
- D) **More expertise must be included in the Project Organization. Expertise on local conditions and expertise by local UNIDO/UNDP and local consultants, and Federation of Danish Industries in Denmark must be drawn upon with the capabilities of UNIDO Feasibility Studies and Investment Promotion activities. Also, relevant Danish Financing Institutions should be given a role.**

3. CONCEPT AND DESIGN OF PROJECTS:

3.1 Project 1 (TF/GLO/88/018):

3.1.1 Agreement Between UNIDO and DANIDA:

On 5 July 1988 DANIDA and UNIDO signed the Project 1 agreement entitled "Programme of Direct Support to Industry in Developing Countries : Fact Finding and Project Identification Missions".

Under the Agreement DANIDA placed US\$ 400,000 in a trust fund to be managed by UNIDO in implementing the Project.

The agreement requires UNIDO to provide DANIDA with:

- an annual financial statement of the project;
- a final financial statement within 6 months of project termination;
- a notification when, in the opinion of UNIDO, the purposes for which the Trust Fund was established have been realised.

3.1.2 Project Document (Project 1):

General:

The Project Document states the following as the main background and justification of the Project:

"Numerous industrial plants in the developing countries are facing serious difficulties of both technical, managerial and financial nature. In order to revitalize, restructure and rehabilitate these ailing industrial plants many countries are giving high priority to programmes for mobilizing domestic and foreign support and assistance. The success of these programmes depends greatly on the quality of information on which decisions are made for corrective measures at individual plant.

Recognizing the above needs and problems DANIDA and UNIDO have launched this project in order to assess the needs and identify the opportunities for improvement of ailing industrial plants in developing countries".

Objectives:

The development or long term objective of the Project is:

"Improvement of productivity and viability of industrial plants in low income developing countries".

The immediate objectives can be derived from the Project Document as follows:

- "Establishment of a portfolio of well-selected sub-projects for industrial plant rehabilitation, expansion and diversification in low income developing countries".
- "Increased awareness on rehabilitation, expansion and diversification needs in the above countries at plant level".

- "Establishment of technical (and possibly financial) cooperation sub-projects involving Danish companies and if needed UNIDO and/or DANIDA".

Outputs:

The outputs will comprise study reports/diagnostic appraisals of ailing industrial plants containing the following types of information:

- Major problems and constraints (technical and managerial) faced by the companies investigated;
- corrective measures for rehabilitation, optimization, diversification and/or expansion to be considered for immediate and long-term implementation, comprising technical solutions, investment plans, needed management and manpower training and plans for market and business development;
- brief description of the companies' main requirement for technical cooperation.

Target Groups:

The target groups are defined as ailing industrial plants in low income developing countries. Since Danish expertise is assumed to be involved it is implicitly given in the document that the industrial plants envisaged shall be within sectors and fields where Danish expertise of certain standards and extent exist.

Strategy and Main Components:

The project document does not include a specific description of the project strategy, but from interviews within the UNIDO Trust Fund Section and interpretation of the project document the Evaluation Mission has found the following strategy elements:

- 1) UNIDO identifies sub-projects and submit them in a certain format to DANIDA for approval.
- 2) Danish sponsors/consultants will be identified to participate in the fact finding missions. The sponsors are supposed to be suppliers or producers within the sub-project fields, interested in a future company to company cooperation with the ailing industrial plants in the selected developing countries. They shall be willing to carry out the consultancies themselves at a fee level not covering overhead costs, or, co-finance with the trust fund, the engagement of independent Danish consultants to normal consultancy fees.
- 3) To ensure Danish deliveries of needed machinery, equipment and know-how it is implicitly assumed that Danish financing of the proposed rehabilitations, diversifications or expansions will be available.
- 4) The assistance to ailing industrial plants is supposed to be undertaken in several steps of which the first is the fact finding/diagnostic appraisal study. Thereafter further studies, technical assistance and training, all if needed, will be carried out, joint venture or other forms of cooperation will be established, and finally the implementation of the rehabilitation, etc. will take place.
- 5) UNIDO, UNDP or DANIDA finance is implicitly assumed to be available for the further actions.

6) The project document defines 3 main project components:

- short term consultancies;
- UNIDO programme support;
- visit of developing country counterpart personnel to sources of technology, equipment and expertise.

Activities:

Activities to be carried out in order to reach the outputs will comprise of the following:

- 1) Analyze all available information on the concerned developing countries and companies in order to make a pre-selection for fact finding and project identification missions;
- 2) visit the identified countries and plants for diagnostic appraisals;
- 3) work out financial, market and business development plans together with all parties concerned;
- 4) discuss and negotiate with the concerned parties the main features of a possible rehabilitation, expansion or diversification programme;
- 5) prepare project proposals for future assistance to the selected plants under the DANIDA/UNIDO trust fund programme.

Inputs:

From developing country Government and/or company:

- 1) Counterpart personnel;
- 2) necessary information and statistics;
- 3) secretarial support;
- 4) local transport and office facilities.

from UNIDO/DANIDA:

- 1) Funds for 24 m/m Danish short-term consultancies and for 12 m/m national experts;
- 2) funds for visits of developing countries counterpart personnel to sources of technology, equipment and expertise;
- 3) funds for UNIDO programme support costs.

Project Organization:

The project Document does not include a separate paragraph on project organization with roles and responsibilities of involved parties clearly described.

Sub project identification seems to be the responsibility of UNIDO. The task might be dealt with both actively and passively. Actively from investigations done by the local UNDP/UNIDO offices, and passively by appraising sub-project ideas presented to UNDP/UNIDO by local Governments alone or assisted by Danish consultants or sponsors. Sub-projects shall be approved by DANIDA before actual implementation can take place.

The responsibility of identifying and selecting Danish consultants and sponsors is not clearly defined, but final approval of selection lies with DANIDA.

UNIDO is responsible for elaboration of TOR and workplan for the sub-projects and a UNIDO staff member will normally be part of the fact finding/diagnosing appraisal missions. Responsibility for appraisal of the sub-project proposals is not defined, with the result that no independent appraisal takes place.

Monitoring and back-up of sub-projects are not specifically mentioned as tasks to be undertaken, but it must be assumed to be the responsibility of UNIDO in cooperation with the Danish sponsor.

Time Schedule:

The project period is defined as 1 year. No detailed activity time schedule is worked out.

Financing:

The project is financed by DANIDA with a total amount of US\$ 400,000, distributed on activities and inputs as follows:

	US\$	255,000
UNIDO staff mission costs (travel and DSA)	US\$	55,000
Local experts to support project missions	US\$	15,000
Miscellaneous	US\$	29,000
UNIDO project support costs	US\$	46,000
TOTAL	US\$	400,000

Assumptions and Risks:

Assumptions and risks are not presented but the following main assumptions are implicitly given in order to fulfil the objectives:

Between inputs and activities:

That Danish sponsors can be identified who are willing; on a cost sharing basis to undertake/finance sub-project fact finding/diagnostic appraisal missions to low income developing countries with the view to establish enterprise cooperations on industrial rehabilitations, diversifications and/or expansions.

Between activities and outputs:

That the activities carried out will lead to "bankable" proposals for the enterprises concerned.

Between outputs and immediate objectives:

That the studies will actually lead to enterprise to enterprise cooperation.

Between immediate and development objectives:

That the needed rehabilitations, diversifications and/or expansions actually take place (loans and credit lines can be obtained) resulting in improved viability of the involved enterprises. This also implies that UNIDO/DANIDA assistance for possibly needed

further studies, technical assistance, training and joint venture establishment can be obtained.

3.2 Project 2 (TF/GLO/90/020):

3.2.1 Agreement Between UNIDO and DANIDA:

The Agreement for project 2 was signed by UNIDO on 30 April 1991 and by DANIDA on 6 May 1991. The project is entitled "Programme of Direct Support to Industry in Developing Countries".

Under the Agreement DANIDA has placed US\$ 600,000 in a UNIDO Trust Fund.

Apart from minor additions concerning patent rights, copyrights etc., this Agreement is identical with the Agreement for Project 1.

3.2.2 Project Document (Project 2):

General:

The Project Document of Project 2 follows to a large extent the document of project 1. However, certain important changes and additions have taken place and will be highlighted below:

Under background and justification the document includes some important statements which are also valid for Project 1 as follows:

- "The idea (of the Special Trust Fund Programme) is to develop a supplementary mechanism that would enable industrial partners to cooperate through project arranged, supervised and executed by UNIDO, the primary purpose being to provide direct support to industrial plants (public or private)"
- "The purpose was for UNIDO (for project 1) as executing agency to identify appropriate Danish partners in cooperation with the Federation of Danish Industries as well as individual selected private companies, and coordinate work in an efficient manner to implement programmes and projects for revitalization, restructuring, rehabilitation, revamping and optimization of ailing industrial plants as well as expansion and diversification of some others".
- "This project (project 1) has enabled UNIDO to intensify its cooperation with Danish companies and has contributed towards the spread of knowledge of Danish know-how and industrial experience to areas and countries where they were virtually absent or relatively unknown to local industrialists and decision makers. It has also enabled UNIDO to gain first-hand knowledge of Danish expertise and technologies".
- "There is a sizeable portfolio of projects to be executed under the DANIDA Trust Fund and this portfolio, which consists of requests through the respective Governments from companies in the developing countries, is expanding rapidly".

Objectives:

The development or long term objective of Project 2 is almost identical with that of Project 1, but the "term sustainable development" has been added and later as a special consideration has been explained as follows "UNIDO shall endeavour to ensure that environmental, sociological and socio-economic aspects are duly taken into consideration when implementing the project (2)".

The immediate objectives presented in the project document are actually a description of project activities. However, although left out it is believed that the immediate objectives for project 2 are the same as for project 1.

Outputs:

The outputs will comprise study reports and proposals for new plants as well as existing ailing industrial plants as follows:

- 1) Action oriented reports, containing a description of the major problems and constraints and recommendations on the technical, market, management and financial aspects of the proposed new industrial plant or programme of rehabilitation, expansion or diversification.
- 2) Well defined projects for technical assistance involving Danish technology, know-how, machinery and spare parts for the proposed new project or rehabilitation, expansion and diversification programme.
- 3) Proposals relating to collaboration between enterprises in developing countries and potential foreign partners with a view to increasing the formers' productivity.
- 4) Pre-feasibility and feasibility studies in order to develop investment projects to a negotiable stage.
- 5) Well prepared project profiles to facilitate utilization of the loans and lines of credit available with development finance institutions.

Even if it is not clearly stated under every output item it is believed that the study reports and proposals are all directed towards the overall Trust Fund enterprise to enterprise concept involving as the foreign partner a Danish enterprise.

Target Groups:

For existing industrial plants, the target groups of project 2 are the same as for project 1, but project 2 also encompasses planning of new industrial plants.

Strategy and Main Components:

There is for project 2 as for project 1, no specific description of project strategy. The same comments on strategy and components made by the evaluation mission for project 1 are valid for project 2 with the two following exceptions:

- consultancies are no longer required to be undertaken on a cost sharing basis. It seems as if the sponsor concept has been somewhat weakened.
- proposals for sub-projects submitted by UNIDO to DANIDA shall include an appraisal (UNIDO) of sustainability (for the enterprises concerned).

Activities:

Compared to project 1, project 2 include the following changes:

- Elaboration of pre-investment studies for new industrial plants, is added.
- prepare project proposals for future assistance to the selected plants under the DANIDA/UNIDO Trust Fund Programme, is omitted.

- Discuss and negotiate with Development Finance Institutions including Danish ones, loans and lines of credit for the identified projects to be executed through UNIDO with possible involvement of Danish companies, is added.

Input:

For developing country Government and/or company the same as for project 1 except for local transport which is now foreseen provided by the Trust Fund.

From UNIDO/DANIDA:

- 1) Funds for 18 m/m Danish short-term consultancies and for 18 m/m national experts;
- 2) Funds for visits of developing countries counterpart personnel to sources of technology, equipment and expertise;
- 3) Funds for UNIDO programme support costs.

Project Organization:

Same remarks as for project 1 are valid for project 2.

Time Schedule:

The project period is defined as 1.5 years. No detailed activity time schedule is worked out, but a rough budget proposes half the granted amount to be used during 1991 and the other half in 1992.

Financing:

The project is financed by DANIDA with a total amount of US\$ 600,000 distributed on activities and inputs as follows:

DANIDA consultancies	US\$	385,000
UNIDO staff mission costs (travel and DSA)	US\$	100,000
Local experts to support project missions	US\$	20,000
Miscellaneous	US\$	26,000
UNIDO project support costs	US\$	69,000
TOTAL	US\$	600,000

Assumptions and Risks:

As for Project 1, the project document for project 2 does not present assumptions and risks. The comments made on assumptions by the evaluation mission for project 1 is also valid for project 2.

Reporting, Monitoring and Evaluation:

UNIDO will provide DANIDA with the following reports:

- a report on each sub-project (study report) within 3 months after its completion.
- a final report on the implementation of the project, including appraisal of the results achieved within 3 months after the operational completion of the project.

The project document does not comprise anything on current project monitoring and back-up. But project reviews are supposed to be carried out by UNIDO in accordance with the rules, regulations and practices of the organization.

The project will be subject to evaluation at suitable intervals involving UNIDO or DANIDA or both. After project completion, a joint evaluation will be carried out by UNIDO and DANIDA.

3.3 UNIDO Appraisal of Projects 1 and 2:

No appraisal was carried out by UNIDO on Project 1, but Project 2 was taken to the Project Appraisal Section for their overall comments and viewpoints. They were as follows; Quote:-

"The Appraisal Process

The project proposal was submitted for urgent appraisal on 11 October 1990. An Appraisal Meeting was held with the Backstopping Officer of the Trust Funds Section, on the same day.

Relevance, Feasibility and Potential Effectiveness

The project is linked with an on-going Trust Fund project financed by DANIDA (TF/GLO/88/018). There is no report available on the accomplishments so far of this project, nor will there be any. It has therefore not been possible to appraise the present project proposal on the basis of the past achievements.

The project is of a general nature to allow for the elaboration of sub-projects consisting of advisory services on the formulation of pre-investment and diagnostic studies (under outputs, reference is made to prefeasibility and feasibility studies). The sub-projects are identified on an ad-hoc basis and will probably focus more on Africa (and Asia) than on other developing regions; although use may be made of the studies on rehabilitation prepared by IPP/REG, they do not constitute the basis for identifying sub-projects. The sub-projects may, apparently, take a variety of forms. Outputs are deliberately not quantified as it is not possible to define them at the present time.

Feasibility studies may or may not follow UNIDO methodology; similarly, investment profiles may or may not be prepared according to UNIDO requirements.

The project will be implemented not only by Special Trust Fund Consultants, (drawing also on UNIDO ex-staff members) but also by current staff who will act as experts for the duration of the advisory mission; US\$ 100,000 are foreseen for this purpose.

In view of the above, and that the project is written in a format for small-scale projects, the project does not meet established design standards and it is not possible to assess its potential effectiveness. Given the sensitivity of DANIDA to project quality, it is, highly advisable to take the views of APP conveyed in the Appraisal Meeting to STF into account.

Programme Criteria

Not applicable". Unquote.

Reading the above and also perceiving what is stated between the lines, it is clear that the Project Appraisal Section of UNIDO is quite sceptical to the many loose ends of the Project and the fact

that it is not meeting established design standards. As a consequence the section refrains from appraising the project, and just states that it is not possible on the basis of the project document to assess its potential effectiveness.

4. PROJECT 1 IMPLEMENTATION, GENERAL:

4.1 Characteristics of the Requests:

The countries for which the studies have been undertaken are mainly in Africa (7) and one each in South Asia, Central America and South Pacific. All these countries are developing countries and half of them belong to the least developed ones.

Seven countries dealt with were food processing type and the balance 3 countries for mineral based industries.

All the requests for technical assistance were made by Ministries which is the formal procedure.

About half the studies were sponsored by Danish consultancy companies who had made contact with the government and industry concerned and had prepared proposals. For the balance studies there were no Danish sponsors.

There were 6 cases involving diagnostic studies whilst 3 were for feasibility studies and one for pre-feasibility. The diagnostic studies were not multidisciplinary and mainly focused on technical matters.

4.2 Mechanisms for Approval:

The approval process by UNIDO was merely a matter of finding a Danish consultancy company who was willing to undertake the study. The approval process by DANIDA is not clearly stated in any of the basic documents such as the Agreement or the Project Document.

4.3 Execution of Studies:

The duration was 1 to 2 months in all cases.

Implementation of studies, in all cases were by Danish consultants, with one staff member from the Special Trust Funds section of UNIDO for each study.

Presentation of studies were not standard according to the UNIDO format. In many cases the contents varied and the job descriptions were not annexed to the reports.

4.4 Quality of Studies:

The accomplishment of TOR and job descriptions were satisfactory except for one or two cases where some items had not been fulfilled. For example, the master plan for rehabilitation of the Brewery Industry in Tanzania was not prepared. In the case of the milling industry in Mozambique the terms of reference for a full feasibility study was not provided in the diagnostic study.

In the case of the feasibility studies and the pre-feasibility study the quality and extent of analysis was satisfactory. In the case of the diagnostic studies, they were only technical though the technical aspect was dealt with well.

4.5 Quality of monitoring and backstopping:

This was satisfactory. However, there was very little follow-up of projects once the final report was submitted. This was less than satisfactory.

5. PROJECT 1 IMPLEMENTATION, SPECIFIC:

5.1 Tanzania: Diagnostic Study of Tanzania Breweries Ltd (sub-project):

5.1.1 General:

Tanzania Breweries Limited (TBL) which is a state owned monopoly for manufacture and marketing beer, is an important source of revenue for the government by way of excise duty.

During the recent past, the deteriorating situation with regard to balance of payments, resulted in difficulty in the importation of spare parts, auxiliary materials and raw materials. This in turn led to a gradual decline in production of beer and an inefficient supply to the Tanzanian people of beer and other beverages.

For some time, it has been in the interest of TBL to embark on a general rehabilitation programme. At the same time, there has been a strong need for the government to update existing studies of the general plan for the development of the Tanzanian beverage industry for the future.

In May 1988, the Export Coordinator of Danbrew Consult Ltd of Denmark participated in an official Danish government trade delegation to Tanzania. Danbrew is an affiliated company of the Danish brewery group Carlsberg/Tuborg which is very experienced in all phases of studies and implementation of rehabilitation, and new projects in the brewery/soft drink and malt factory projects.

During the visit at that time, discussions were held, resulting in a proposal from Danbrew for a rehabilitation study for TBL.

5.1.2 Brief Description of Study Contents and Proposals:

As a first step, a diagnostic study was undertaken to ascertain the technical status of the existing factories in Dar-es-Salaam and Arusha, along with brief studies of the market, organizational and management aspects, preliminary investigations regarding growing suitable barley as raw material and the preparation of Terms of Reference for a full feasibility for the industry.

The proposals contained in the report are:-

- 1) Rehabilitation and extension of the equipment in both Dar es Salaam and Arusha up to the capacity of the brewhouses in the long term, and in the short term to obtain a new bottling plant for Dar es Salaam and repair/replace cold storage tanks in Arusha.
- 2) Carry out further studies with regard to:
 - i) feasibility of rehabilitation and preparation of a master plan;
 - ii) feasibility study for establishment of a new brewery in southern part of Tanzania;
 - iii) raw material supplies - barley breeding, use of maize in breweries, establishment of maize milling facilities, growing of hops in Tanzania;
 - iv) education and training of middle management.

5.1.3 Objectives:

The objectives are to increase the production of beer to meet most of the local demand and thereby increase government revenue from excise duty. Growing of barley (raw material) locally will result in reducing foreign exchange requirements for imports.

5.1.4 Target Groups:

Not applicable.

5.1.5 Strategy and Main Components:

The strategy adopted is to balance the capacities of the different equipment to increase production.

5.1.6 Expected Outputs:

Output expected is a diagnostic study report summarizing the technical, marketing, financial, organizational and management aspects and growing of barley etc. as raw material.

Ultimately, through further studies and or action, efficiently operating breweries are expected with increased production of beer and excise duty.

The study report does not contain detailed Terms of Reference for a feasibility study as stipulated.

5.1.7 Activities:

The study concerns primarily rehabilitation and other activities to follow are, the setting up of new breweries, growing barley (raw material) and training middle management personnel.

5.1.8 Inputs:

The rehabilitation will cost 5,460 million Tanzania shillings. Other inputs have not been estimated at this stage.

5.1.9 Organization :

The study does not deal with this aspect as it did not arise at that time.

5.1.10 Time Schedule:

Not considered at this stage.

5.1.11 Financing:

Not considered at this stage.

5.1.12 Assumptions and Risks:

None considered in the report.

5.1.13 Sub-project results:

Since the completion of the study in June 1989, there has not been any supplies made from Denmark, no further consultancies for Danish companies and no joint ventures involving Danish enterprises have been formed.

However, as far as the Dar es Salaam brewery is concerned, after the diagnostic study, new bottling plants were obtained from Belgium. They were not able to perform as specified and at the request of the government, UNIDO assistance (separate from Danish Trust Funds) has been provided for a brew master to identify the problems. This in turn enabled TBL to negotiate with

the supplier to resolve the problems. This information was obtained by the evaluation mission during the field visit.

5.1.14 Present Situation:

The government, by letter dated 7 December 1989 made a formal request to UNDP Tanzania for further studies, as earlier proposed by Danbrew Limited. Thereafter, UNDP by letter dated 21 February 1990 requested UNIDO to assist in this regard under project DP/URT/88/013. There has not been any outcome from these requests.

During the field visit by the evaluation team the following information was obtained:

- 1) Danbrew Consult and their affiliated brewery companies showed no interest in any positive steps other than consultancies and supplies.
- 2) TBL had carried out a feasibility study to set up a new brewery in Mwanza (South of Tanzania) and steps were being taken to implement as it was found to be viable. Since rehabilitation was of the highest priority earlier for TBL, they have changed their priorities subsequently.
- 3) TBL has undertaken barley farming in over 10,000 h.a. during the past 2 years and another 10,000 ha is under development. (Tanzania has produced and exported barley in the years gone by).
- 4) TBL has in November 1992, called for worldwide proposals for joint venture partners with a view to increasing capacity, enhancing market share and introduction of modern methods and technology. The government has decided to partially privatize the ownership of TBL.

Proposals have been received and evaluation work is in progress. A decision will be taken within a few months as to which world renowned firm will be selected for the joint venture.

- 5) TBL is yet interested in training assistance for middle management.

5.1.15 Conclusions of Evaluation Mission:

The diagnostic study completed under Trust Funds has been very useful for TBL and the government of Tanzania.

Whilst further studies were being contemplated by the government, no assistance has been forthcoming from UNIDO/UNDP.

Owing to the profitability of the brewery business and the importance in terms of government revenue, TBL has taken steps to implement most of the proposals of the diagnostic study without going through more and more studies.

Due to change of policy by the government towards privatization, TBL has made good progress on their own to seek a joint venture partner. Training may become possible through joint venture arrangements in due course.

Enterprise to enterprise level cooperation with Danish companies has not been possible because the Danish company concerned appears to have been interested in consultancies and supplies only.

5.1.16 Recommendations:

Recommendations do not arise owing to the situation described above.

However, the only matter pending which is training, assistance can be considered if such facility cannot be had by TBL if the joint venture does not take place.

5.2 Mozambique: Diagnostic Study of Mozambique Milling Industry (sub-project):

5.2.1 General:

The milling industry in Mozambique comprises of five big enterprises that are private or state intervened, and located near the three international harbours. These enterprises consist of six wheat and three maize mills, with a total of 1600 employees. These mills have been operating since 1950s and 1970s. Xigaio (Food Directorate) is responsible for monitoring and regulating the milling industry.

Owing to the aging of the earlier established mills, lack of spares and limited maintenance due to worsening foreign exchange situation and shortage of trained personnel, the efficiency of the milling industry has declined over the last few years.

5.2.2 Brief Description of Study and Proposals:

Due to obsolete equipment and other problems caused by technical, managerial and financial deficiencies, this diagnostic study was undertaken as the first step of rehabilitating the milling industry. The study ascertains parameters such as economic, financial, technical, logistics, infrastructure affecting the industry to enable elaboration at a later stage, of a fully feasibility study for rehabilitation.

The proposals arising from the study are:

- 1) gradual replacement of obsolete plant and machinery which would be financially viable only with reasonable capacity utilization;
- 2) where appropriate, small inputs such as spares, tools and training are needed urgently as an interim measure;
- 3) in the long term, motivating the workforce has to be looked into if they are to be attracted to the milling industry.

5.2.3 Objectives:

The immediate objective is the preparation of a diagnostic study on the technical, economic and managerial problems encountered by the enterprises which have to led to reduction of production.

The ultimate objective is to put in place, viable milling industries to meet the food needs of the nation.

5.2.4 Target Groups:

In the first instance the assistance is for the five enterprises involved in milling but ultimately it would continue to benefit the people at large whose food supplies from the rural base have been disrupted due to the protracted civil war that went on until the recent past.

5.2.5 Strategy and Main Components:

The strategy is to improve operation and management and hence profitability through improvements to plant and equipment, training personnel.

5.2.6 Expected Outputs:

Output expected is a diagnostic study report summarizing the organizational, financial, technical, marketing and management aspects of the five enterprises, draw conclusions or causes of deficiencies and make recommendations on action to be taken to rehabilitate operations and assure profitability of production and marketing.

5.2.7 Activities:

Activities of the first stage is to diagnose the deficiencies and estimate costs of rehabilitation. In the next stage, a full feasibility study is planned, and finally implementation of what is needed for an efficient milling system.

5.2.8 Inputs:

Inputs in terms of finances required for replacement of obsolete plant equipment or other small inputs such as spares, tools and training needs have not been estimated in the study report. However, the replacement of obsolete plant equipment, and spares required have been itemised. Training needs have also been identified though not costed.

5.2.9 Organization:

Organizational aspects have been a matter of concern with the state intervened enterprises though the situation has, since changed, with change of policy by the government towards privatization etc. seen during the field visit by the evaluation mission.

As regards to the privately owned mills, organizational aspects have not been very serious except for state control in marketing and pricing and the pricing of donor grain. This aspect too will soon change as seen by the evaluation mission during the field visit.

5.2.10 Time Schedule:

This is not discussed in the study.

5.2.11 Financing:

Possible sources of financing have been suggested in the study report for different items of inputs.

5.2.12 Assumptions and Risks:

Assumptions and risks have not been dealt with in the study report.

As seen during the field visit by the evaluation mission, the risks involved are essentially delays in raising finances for rehabilitation, delays and declining supply of donor wheat, delays in resumption of local production of maize, and delays in privatization programme with regard to the intervened mills owing to the difficulty in valuation of assets of the previous owners at the time of their abandoning the plants around 1975.

5.2.13 Sub-project Results:

The diagnostic study which is of a technical nature has been found to be useful for the enterprises. No feasibility studies have been done for rehabilitation of any of the enterprises.

5.2.14 Present Situation:

Since the completion of the diagnostic study in January 1991 there has been change of policy by the government towards privatization of intervened enterprises. The privatization programme is bound to take a long time due to difficulties and delays in valuation of assets of the mills, particularly the assessment of what belonged to the previous owners at the time of their abandoning the plants around 1975.

The quantities of donor wheat has declined and will continue to decline, necessitating enterprises to purchase wheat from the open market.

The biggest mill (CIM at Matola) which is a state intervened mill has (as an interim arrangement pending privatization) just concluded a contract with ALFA (a Mozambican firm) for milling wheat on a fee basis (100 meticaís/kg). ALFA in turn has an understanding with NAMIB mills of South Africa (with mills operating in Botswana, Swaziland, Mauritius and in Angola) to cooperate in this milling operation and to maintain the plant, train personnel and participate in management of the operation. Through this arrangement CIM has resolved all problems faced by them (in the short term), including provision of funds for purchase of wheat from the open market, which will be done by ALFA. As regards rehabilitation of the plant, there is an allocation of US\$ 20.9m from the World Bank but its disbursement is being held up due to the lack of a proper legal status in such a state intervened enterprise.

In due course, CIM (state intervened) in Nacala too would be put into operation on this same basis with ALFA (and NAMIB).

As regards SOCIMOL in Machava (Maputo) which is a private enterprise, some rehabilitation and expansion work (cleaning section) has been implemented with their own funds. They are planning to rehabilitate and expand the milling equipment as well as the wheat reception facility (railway) as soon as further funds become available. SOCIMOL is also aware of the need for additional working capital that will become necessary to purchase wheat from the open market when donor wheat supplies decline. SOCIMOL is able to generate funds within the business despite the limited margin available due to controlled prices because it is managed efficiently (private enterprise) though the same is not true for state intervened enterprises which are managed by the government.

The Mobeira plant located in Beira is going ahead with the rehabilitation work on a grant of Swiss francs 4.609 million from the government of Switzerland for the equipment to be obtained from Buhler of Switzerland.

During the meeting the evaluation mission had with the Deputy Minister of Industry and Energy, the need for training 6 persons (CIM-2, Mobeira-2, Socimol-1, Xigaio-1) was stressed. Training is required both in milling technology as well as in commercial aspects for middle management. The above 6 persons are required to be trained overseas (even within SADAC or in South Africa to minimize costs). The government seeks financial support for this training.

5.2.15 Conclusions of Evaluation Mission:

The diagnostic study which is essentially of a technical nature, has been found to be useful to the enterprises concerned. However, due to lack of continuity of staff and due to the limited number of reports (3 copies) sent by UNIDO to the field, the chief executives of the enterprises neither possess the UNIDO study report nor have they seen it. The present Managing Director of Xigaio too has not seen the report.

The milling industry is profitable if efficiently run and would generate adequate funds to rehabilitate or expand but for purposes of timing, would require funds at reasonable levels of interest (as the current commercial rate is 45% per annum).

Feasibility studies for rehabilitating or expanding the milling industry does not appear to arise at this stage because the enterprises are aware of its profitability.

No supplies from Denmark will arise because all existing plants are based on Buhler technology from Switzerland.

No opportunity for joint ventures with Danish companies will arise as the enterprises do not require joint ventures.

Training (funds) are required for middle management in milling technology and in commercial aspects.

5.2.16 Recommendations:

The recommendation to be made by the evaluation mission is for UNIDO to pursue further with the government through the UNIDO Country Director regarding training needs. In the case of those enterprises which are able to arrange for training through suppliers of plant, assistance from UNIDO will not arise.

UNIDO should send to each of the milling enterprises and to Xigaio additional copies of the study report through the UNIDO Country Director as only 3 copies had been sent earlier.

UNIDO should review standard procedure in submission of final reports to recipient governments in consultation with UNIDO Country Directors.

5.3 Nicaragua: Diagnostic Study of Nicaragua Cement Industry:

5.3.1 General:

Compania Nacional Productora de Cemento (CNPC or Cementera) owned by the Government of Nicaragua (GON), is the only cement producer in the country. It operates one factory and one mill. The factory is located in San Rafael de Sur 60 km south west of Managua. The mill (Exmisa), which originally was established to produce puzzolanic cement, is situated close to Managua. Cement clinker is only produced at San Rafael. The factory has a yearly rated capacity of 315,000 tons of clinker. Exmisa is not producing puzzolanic cement today, but a smaller part of the clinker produced at San Rafael (10-15%) is ground here, reportedly because a major consumer of cement, Mayco, which is actually a daughter company of Cementera, is a neighbour to Exmisa.

The factory at San Rafael was built in the 1940s by F.L. Scmidt & CO.A/S. Exmisa was established in the early 1970s with a rather old second-hand dryer and three second-hand open circuit grinding mills from USA.

DANIDA supported Cementera with spare parts, equipment and machinery in 1987. The GON at the same time foresaw a rapid increase of the cement demand when peace was obtained in the country. This led to a request to UNIDO for assistance to formulate a programme of development for the cement industry of Nicaragua and to define the scope of work required for improvement in capacity, quality and types of products. UNIDO in 1988 accepted to undertake the study and F.L Scmidt A/S, which had promoted the request accepted to carry out the consultancy at reduced fees with the view to become the supplier of proposed needed equipment and machinery.

A team consisting of one mechanical engineer and one process engineer from F.L Scmidt and one special technical adviser from UNIDO as the team leader was fielded in December 1988. The tasks of the team according to the job descriptions were purely technical and included:

- preliminary description of available raw material reserves in the country, including recommendations for necessary investigations to be carried out in order to determine proper exploration of new raw material reserves.
- Specification of recommended work as well as equipment and parts needed for further modernization of the existing cement plant, including the puzzolana cement grinding plant at Exmisa.
- Preparation of preliminary list of necessary main machinery for a new dry process cement plant and a rough estimate of the total investment.
- Specification of necessary equipment under the feasible alternative of substituting puzzolana cement for normal cement.
- Specification of recommended equipment for distribution of cement in bulk, with cost estimate.

5.3.2 Brief Description of Study and Proposals:

The study gives an excellent overview of the production process, the capacities and state of repair of each section of the cement production plant, which have proved to be useful for later appraisals and investigations of the cement industry carried out by DANIDA.

By and large the study covers the issues stated in the job descriptions, and resulted in a project proposal as follows:

- assistance to geological studies of limestone and puzzolanic material	US\$.0.7m.
- spare parts and equipment for rehabilitation of the grinding plant at Exmisa	US\$.3.2m.
- Technical assistance and training	<u>US\$.2.0m.</u>
Total	<u>US\$.5.9m.</u>

5.3.3 Sub-project Results:

Of the total project proposal DANIDA accepted to grant the spare parts and equipment for rehabilitation of the grinding plant at Exmisa. F.L. Scmidth was selected as supplier, but no enterprise to enterprise cooperation beyond this has developed.

In connection with an additional request for Danish assistance to the Nicaraguan cement industry DANIDA decided in February 1993 to field a mission with the main objective to appraise the new request based on a review of past cooperation and general performance of the Nicaraguan cement industry. The conclusions of this review, which have a feed-back on the sub-project study proposal were as follows:

"The main objective of the second (1991) (the grant related to the sub-project study) and third (1992) (a later grant by DANIDA) packages was to increase the capacity of cement production by starting (re-starting) the production of puzzolanic cement at the Exmisa plant. The mission considers this plan to be technically and financially unfeasible."

"The grinding of clinker is distributed between the factory and Exmisa with the latter in later years producing about 15% of the cement. There is no technical or financial reason for this. The milling capacity at San Rafael (the factory) has all the years been sufficient to handle the total yearly production of cement".

"The main problem found at the factory is the plant's high cost of production, which at the prevailing sales price level for cement does not allow the company to generate sufficient earnings to carry out effective maintenance or to undertake the necessary investments and re-investments".

The Evaluation Mission realizes that the sub-project study was carried out in a Government directed economy where parameters such as output and employment were more important than efficiency and profitability. However, it is a significant weakness that a thorough problem analysis as the basis for the support design was not carried out. The study focuses on the most conspicuous problems such as the need for spare parts and confined production capacities (subject to a demand forecast, which later has proved to be far too optimistic), but forgets to dig deeper in order to find the causes behind the eye-catching problems, and reach the "end boxes" upon which the support should be designed.

5.4 Solomon Islands: Development of the Coconut Industry (sub-project):

5.4.1 General:

The coconuts produced in the Solomon Islands are converted to copra (and a little oil) for which the export market has been declining during the past decade due to competition from other vegetable oils. The declining export revenues and poor farm gate prices of coconuts had led the government to examine the possibilities of setting up alternative high value products processing facilities.

The Government had initiated a request for UNDP assistance which was referred to UNIDO. Since the DANIDA Trust Funds project (1) was in progress, funds were allocated after identifying a Danish Company APV/DTD who were experienced in coconut milk and coconut milk powder production and supply of equipment for same.

5.4.2 Brief Description of Study and Proposals:

The study provided a global market survey for coconut based products, concludes that coconut milk and coconut milk powder are the most favourable for export marketing. Owing to the advantage of coconut milk powder for transportation to any part of the world, coconut milk powder is selected as the better of the two products.

The study presents an account of the coconut production sector and the institutional/organizational aspects, and finds that the largest plantation (managed by Unilever) as the best location for setting up centralized coconut processing facilities.

The study has presented a prefeasibility study for the manufacture of coconut milk powder.

Since the study is for a new project, it is outside the scope of the Project Document 1 concerning Danish Trust Funds.

5.4.3 Objectives:

To manufacture the export high value coconut products so as to increase government export earnings and to increase income of coconut farmers.

5.4.4 Target Groups:

Coconut farmers of Solomon Islands.

5.4.5 Strategy and Main Components:

The strategy is to reduce the dependence on copra as the only commodity to be derived commercially from coconut. The proposed plant is to be operated and managed by Unilever who has worldwide marketing channels to export the coconut milk powder.

5.4.6 Expected Outputs:

A commercially operating coconut milk power factory exporting high value coconut products, based on the prefeasibility study for such a plant.

5.4.7 Activities:

Activities to follow are to determine the full feasibility, secure finance and finally set up the plant.

5.4.8 Inputs:

The setting up of the plant will involve fixed assets to the extent of US\$ 8.99 million of which plant and machinery including service facilities, freight, installation and engineering fees will cost US\$ 5.55 million.

5.4.9 Organization:

The study report indicates that the organizational aspects will be no problem as Unilever is a multinational company. However, they have subsequently declined to joint venture.

5.4.10 Time Schedule:

This is not presented.

5.4.11 Financing:

This aspect is well presented.

5.4.12 Assumptions and Risks:

These have been evaluated in the prefeasibility study. The sensitivity analysis shows that the project is yet viable within reasonable price fluctuations in export markets and raw material prices.

5.4.13 Sub-project Results:

The sub-project study report is a well prepared document showing the way for all parties concerned to take action arising from the study.

If the plant materialises, there is an opportunity for the Danish company to supply plant and equipment even with international competitive bidding.

Investment for the Danish company appears unlikely as the multinational company would probably invest without joint venturing. However the Danish company has shown interest in contribution up to 10% of equity.

5.4.14 Present Situation:

Since the final version of the report (March 1992) has been submitted to the government, there has been no progress as Unilever has decided not to proceed with the project.

5.4.15 Conclusions of Evaluation Mission:

Other than a useful study report, there has not been any action. There will not be any industrial activity arising from this study.

5.4.16 Recommendations of Evaluation Mission:

None.

5.5 Cameroon: Diagnostic Study for Rehabilitation of Fruit Processing Factory of SITRAF at Maroua:**5.5.1 General:**

SITRAF, a private company engaged in fruit-processing is located in Maroua in the northern part of Cameroon. Originally, the plant was set up to produce fruit-juice, fruit-nectar, jams and non-gaseous fruit drinks. The plant was delivered by end of July 1983 and went into operation only at the end of the same year. Due to managerial problems the plant faced very quickly technical and financial difficulties which led to serious losses in revenues. On the other hand, the raw materials were in good quantities in the region and the market for the finished products is also available. Unfortunately, low utilization of capacity as well as quality of output did not fulfil the demands of market. In October 1988 UNIDO contacted IFICON to undertake a diagnostic study of the plant in order to draw up a plan for rehabilitation.

5.5.2 Brief Description of Study and Proposals:

The study contains evaluations of the existing situation and propose improvements where necessary with regard to:

- 1) technical standards for the products;
- 2) packaging of products;
- 3) production technology and formulations;
- 4) quality control;
- 5) hygiene aspects;

The study report also presents on how to effect the improvements suggested and estimate costs involved in rehabilitation, spare parts and any new equipment.

5.5.3 Sub-project Results:

Since the Cameroon company is almost bankrupt, nothing will happen before a financial reconstruction.

5.6 Congo: Feasibility Study for a Fruit Processing Plant:**5.6.1 General:**

In 1984 the Government of Congo decided to establish a fruit processing plant in Loudina. After having purchased part of the equipment, the Government decided, due to economic and financial difficulties, to pull out of the project and to sell the equipment to any private national investor who would be able to take over and mobilize funds to complete the project. The company

l'Enterprise du Bâtiment Moderne a branch of the Groupe des Etablissements Bizonzolo Simon (GEBS) showed interest and was selected by the Government. GEBS intended to establish a new company SOAFCO including private local and foreign partners to manage the project for that reason. CODIS, another branch of GEBS with responsibility to mobilize partners and funds for the project, approached UNIDO and asked for a feasibility study in order to determine the technical and financial viability of the project prior to any investment decision.

UNIDO accepted in November 1989 to carry out such a study and asked the Danish company APV/DTD to undertake the task on sponsor conditions (i.e low fees), which were accepted.

The study team comprised one marketing and financial expert and one mechanical and process engineer.

5.6.2 Brief Description of Study and Proposals:

The study which is a fully fledged feasibility study following the normal standards for this concludes that the project is unfeasible. Raw materials are not present at sufficient quantities and the equipment to be taken over by the potential new private partners burnt in a fanned fire few days before the study teams arrival.

5.6.3 Sub-project Results:

Since submission of the report no further actions have been taken. The project as proposed is not viable, and there have been no attempts to look into other possibilities of project design. The case is terminated.

5.7 Zambia: Feasibility Study for Rehabilitation and Upgrading of a Mango Pulping Plant:

5.7.1 General:

A containerized mango-processing plant was delivered to ZAMHORT in 1982. The technical outlay of the plant was, at the time of the plant delivery, determined to process mango fruits into pulp, whereafter the pulp was preserved chemically at the processing plant.

The processing plant is a satellite plant supplying a "mother" installation with pulp. At the "mother" facility, the pulp is blended with sugar, water and preservatives into a mango drink. The blended mango drink "NAMBO" is marketed domestically.

In order to produce mango pulp with a quality acceptable to the world market, changes are required in terms of process as well as packaging, as the world market favours fruit pulps without preservations added. For meeting this specific demand, as well as contributing to increased technological level in general, the idea is to upgrade the process and packaging operation in Zambia to an aseptic processing and packaging system.

5.7.2 Brief Description of Study and Proposals:

The study has estimated the cost of rehabilitation to be US\$ 238,410 and cost of upgrading to aseptic packaging as US\$ 1,162,630. The study has examined the market situation (local and export), raw material (mango) availability and carried out a feasibility for rehabilitation and upgrading. The project is viable.

Financing has to be arranged. The supplies will be from Denmark.

5.7.3 Sub-project Results:

A feasible project has been formulated for rehabilitation and upgrading. The study further proposes that a decision to attract foreign capital needs to be supported by detailed descriptions of selected projects.

An appraisal conducted at the request of Zambia Development Bank revealed that the Danish equipment has been overpriced. Thereafter ZDB has backed out. There may not be any outcome from this.

5.8 Ivory Coast: Feasibility Study for Production of Banana Ketchup:

5.8.1 General:

Côte d'Ivoire is a large producer of banana. The bunches have been exported fresh until now. During the recent years, however, the Government has been pushing toward the promotion of export oriented industries using local raw material. The promoter of the planned banana processing plant, Mr. Kouadio of CIGE (Centre Ivoirien de Gestion des Entreprises) was authorized by the Government to investigate and obtain all necessary data and information on how to establish a new production facility based on technology and recipes developed by a Danish Company (IFICON) for making ketchup out of banana. It is planned also to further expand the facilities for production of baby food.

5.8.2 Brief Description of Study and Proposals:

The study originally was for a pre-feasibility but what was produced by the authors is a feasibility study for the manufacture and export of banana ketchup. The study reviews all the necessary aspects such as the market, processing technology, raw material and other inputs, plant capacity, costs involved, financing, financial evaluation, implementation, etc.

The Danish consultants saw an opportunity for supplies but not a joint venture. There may be no outcome from this study.

Since this study is for setting up a new facility, it is outside the scope of the Project Document 1 for utilizing Danish Trust Funds.

5.8.3 Sub-project Results:

The study is positive and a good result.

It provides an opportunity for supply of Danish equipment and also proposes joint venture involving a Danish enterprise.

When the project materializes, the objectives of DANIDA funding will be achieved in all possible ways and the recipient government too would benefit.

A letter of intent for joint venture was signed by all parties (including a British Company).

A self financing trust fund for UNIDO assistance has been pursued by the partners.

5.9 Nepal: Beneficiation Studies on Kharidunga Magnesite of Nepal Orind Magnesite Co.:

5.9.1 General:

The Nepal Orind Magnesite Co. (NOM) has experienced serious technical difficulties in manufacturing the designed quality Dead Burned Magnesite (DBM) for export to India. Almost

a decade of full scale trials have failed to obtain products with sufficiently high bulk specific gravity, low iron (Fe), and silicium (Si) content to meet the specifications for high quality DBM, which is in short supply on the Indian market. Medium quality can be produced on the basis of the available magnesite raw material, but this commodity commands relatively much lower price, and is furthermore imposed with high import duties on the Indian market.

The technical difficulties experienced by the NOM company was aggravated by a trade deadlock introduced by India in early 1989. This led to the formulation of a request to UNIDO to assist in investigating possibilities of upgrading the Nepalese magnesite ore, thus enabling the company to approach the non restricted part of the Indian market and alternative markets in South East Asia and Europe.

5.9.2 Brief Description of Study and Proposals:

The original, overall purpose of the study was to carry out bench scale tests to support a proposal of pilot testing, projected flow sheet, and equipment recommendations with preliminary plant design.

These objectives were changed, as a result of the first visit, and emphasis was put on searching for easily and speedily implementable measures to improve production schedules and product quality on a short term basis, while recommendations on longer term measures, emphasize possible solutions, requiring heavy capital investments.

At the end of the second field visit, a decision by UNDP in New York was made to launch a full fledged feasibility study of the project. Though this had no effect on the technical study, the present report can be used as a background source of information in the feasibility work.

The proposals for the short term are series a of technical steps to be taken though results will be limited.

The proposals concerning long term solutions are to undertake a series of further technical studies and thereafter to carry out a feasibility study. The long term solution foreseen at this juncture is to process the ore in a two stage firing sequence.

5.9.3 Sub-project Results:

Subsequent to the completion of the study, there has not been any positive steps taken by the Magnesite Company in Nepal.

This sub-project has provided a consultancy assignment for the Danish Company, Mineral Development International. There will not be any supplies from Denmark nor an opportunity for joint venturing for a Danish company, F L Schmidt of Denmark who has been contacted several times has shown no interest in a joint venture.

5.10 Madagascar: Evaluation of the Quartz Crystal Industry:

5.10.1 General:

In a drive to attract foreign investment to the mining industry, the government, through the department of OMNIS, has been carrying out a programme to rejuvenate it.

Within this programme, OMNIS decided to strengthen the available capacity and specialized competence and has requested UNIDO to provide technical assistance to improve mineral dressing techniques and enhance the overall value of the production from high quality quartz deposits.

As a first step, UNIDO arranged a fact finding mission in close cooperation with OMNIS.

5.10.2 Brief Description of Study and Proposals:

The study report deals with exploration (methods and results), production (methods, costs, quality control, generated waste), market (products, customers, market strategy).

The study proposes that developmental efforts be concentrated around the most viable site which is Mananara region, available waste to be characterized and on this basis to be marketed in Europe, USA and Japan.

The study further proposes that a decision to attract foreign capital needs to be supported by detailed descriptions of selected projects.

5.10.3 Sub-project Results:

The first study has put together much technical information but further technical studies are required.

Hence useful results cannot be expected at this stage.

The recent political changes in the country have resulted in inactivity on the part of the government.

It does not appear that DANIDA's objectives can be met with only this study that has been completed.

6. PROJECT 2 IMPLEMENTATION, GENERAL:

6.1 Characteristics of the Requests:

All three reports are for developing countries outside Africa. One report (Yemen) is for a least developed country. All three study reports deal with agro industries.

Origin of requests have been from Ministries which is the formal channel.

In the case of Yemen, the study was sponsored by a Danish company who was originally interested in joint venturing. The other two were not initiated by any Danish interests.

The study reports were essentially diagnostic in the case of Yemen and China. The report for India was for Investment Promotion by identifying Indian and Danish companies to cooperate.

6.2 Mechanisms for Approval:

As in the case of Project 1, there was no approval procedure as such, but the sub-project proposals were taken up once a Danish Consultancy company who was interested, was located. Mechanisms for approval by DANIDA are not stated in any basic documents.

6.3 Execution of Studies:

As in the case of Project 1, the duration was 1 to 2 months. In the case of China, two teams visited China (Beijing and the north by one team and the south of China by the other team).

Implementation in all cases was by Danish consultants.

The presentation of studies was not according to the standard UNIDO format, and the job descriptions were not appended as in the case of Project 1.

6.4 Quality of Studies:

The studies have fulfilled the TOR and job descriptions in a very satisfactory manner.

The quality and content of analyses are good and the studies were comprehensive.

6.5 Quality of Monitoring and Backstopping:

This was satisfactory. Follow-up to Projects was weak as in the case of Project 1. For Yemen, requests for further assistance were turned down for want of funds.

7. PROJECT 2 IMPLEMENTATION SPECIFIC:

7.1 Yemen: Diagnostic Appraisal/Rehabilitation study of Nishtun Fisheries Facilities (sub-project):

7.1.1 General:

The Nishtun bay in Mahra Governorate is situated 900 km northeast of Aden in the former People's Republic of Yemen, now Republic of Yemen (ROY) after unification. Financed by the World Bank, a harbour, cold store with fish processing facilities, ice plant, diesel electric generating plant and desalination plant were constructed by Danish contractors (DANDAR) at a cost of US\$ 48.5 million. Upon completion in 1984, the Government placed the responsibility of operating the fish processing facilities (including cold store and ice plant) with the National Corporation for Fish Marketing (NCFM) of the Ministry of Fish Wealth, and the operation of the electric generation plant and desalination plant was given over to the Public Corporation for Electric Power Supply (PCEP).

Owing to various technical and management problems, there has been severe under utilization of capacity in this large industrial plant with heavy investment. Fish being the only natural resource of this governorate, the government was very keen in reactivating these facilities, possibly through a joint venture.

Norstral Sea Food of Denmark submitted a proposal in 1990, to joint venture and as a first step, a diagnostic study was to be undertaken to assess the requirements for rehabilitation and thereafter a feasibility study was to be carried out.

This evaluation concerns the diagnostic study undertaken by Frigoconsult of Denmark on behalf of UNIDO.

7.1.2 Brief Description of Study and Proposals:

The study report has assessed the present state of all the facilities, suggested their rehabilitation with certain modifications to improve the reliability of operation, and recommended improvements in the overall organizational aspects of their operation.

The cost of civil, mechanical and electrical works for the cold store, ice plant and fish processing facilities is US\$ 0.5 million. The cost of same for electric power, sea and fresh water supplies and sewage systems is US\$ 0.9 million excluding a crackshaft for one diesel engine (of a generator) which may be necessary at a cost of US\$ 0.3 million.

The study proposes a joint venture with foreign participation for operation and management with a view to export, as originally conceived by the government.

The study excludes a full feasibility with marketing and fish availability, and does not identify sources for financing the rehabilitation or working capital for operating the complex. The consultants had proposed a full feasibility study and joint venture with Norstral in their original proposal.

7.1.3 Objectives:

The immediate objectives of the study are to assess the technical status of the facilities and to estimate costs involved in rehabilitation and modifications.

The long term objectives are to have these facilities put into commercial operation through a joint venture and proper management of all facilities including water and power etc. but excluding the

commercial cargo handling at the port and bunkering of petroleum products as originally proposed by the government.

7.1.4 Target Groups:

Since the study is basically technical, these aspects have not been dealt with.

During the field visit by the joint evaluation mission, it became evident that the target groups were about 10,000 fishermen of the Nishtun area who have limited incomes at present due to limitations of the local market.

7.1.5 Strategy and Main Components:

The strategy to be adopted is the formation of a joint venture company in keeping with the government's original plan.

7.1.6 Expected Outputs:

A commercially operating fish processing and export business ultimately.

7.1.7 Activities:

Whilst the study deals with rehabilitation, the activities, to follow are conducting a full feasibility, formation of a joint venture, reorganization of management and training of personnel.

7.1.8 Inputs:

Inputs in terms of foreign costs have been estimated for the rehabilitation and modifications.

7.1.9 Organization:

A new management through the formation of a joint venture and to be responsible for all facilities as detailed in 7.1.3 above.

7.1.10 Time Schedule:

Not discussed in the study report.

7.1.11 Financing:

Not presented meaningfully. However, the sponsor (Norstral) was to provide funding according to section V B (p 66) and under Conclusions and Recommendations (p 4), the study recommends that the government seeks UNIDO assistance to identify sources of finance.

7.1.12 Assumptions and Risks.

Not discussed but assessment of fish availability and market situation need examination.

7.1.13 Sub-project Results:

At present no progress has been made beyond the technical study.

7.1.14 Present Situation:

The Government has by telex dated 15 November, 1992, requested UNIDO for assistance in (1) seeking a joint venture partner (2) Inspection of diesel electric generator which is defective. (The study report indicates that UNIDO may assist in this regard - p 85).

UNIDO has responded by (1) requesting information on the progress on rehabilitation as outlined in the study and (2) refusing assistance for inspection of the generator and suggested the use of a local expert. The reason for the Trust Funds Section of UNIDO to refuse (2) above is because DANIDA would not fund any further studies or follow up action. On the other hand, the government is not aware of this situation.

The Investment Promotion Division of UNIDO would be in a position to assist with regard to seeking joint venture partners if such requests are redirected to this division. No reference has been made to this division because, after the initial study is made through DANIDA funds, DANIDA expects Danish enterprises to get involved in joint ventures. This situation has resulted in lack of progress and positive action since the request of November 1992.

The Government has, by telex dated 14 April 1993, requested UNIDO for Technical Assistance to implement the rehabilitation work recommended in the study. UNIDO (Trust Funds Section) has responded by asking whether the government would be able to finance the cost of such assistance. A reply from the government is now pending. Here again, the government is not aware that no further Trust Funds are available for implementation.

Meanwhile, the operation of the facilities at Nishtun, Yemen has been halted for about an year and the facilities are subject to gradual deterioration due to lack of proper care. Owing to the political transitions that have taken place recently, the government too has been slow in taking action towards achieving an end result. A limited budget will be made available within a couple of months just to maintain the staff at Nishtun.

During the field visit the evaluation team was requested to arrange for copies of the final study report (May 1992). UNIDO has sent the draft reports (January 1992) as well as final reports to UNDP, Sanaa, Yemen and to the Ministry of Fish Wealth (Aden Branch) but somehow, the MFW has no copy of the final report.

7.1.15 Conclusions of Evaluation Mission:

The study for rehabilitation of fish processing facilities in Yemen is only technical and the sub-project proposal and study report do not adequately describe the need for further technical assistance for:

- 1) Implementing rehabilitation;
- 2) market study (export), assessment of fish availability and finally a full feasibility study;
- 3) seeking a joint venture partner.

Owing to the above reasons, no further DANIDA funds could be provided and hence there has been no progress beyond the technical study. However, if a suitable joint venture partner is found, a bankable feasibility study could be prepared by the partner to make a decision for investment.

Recent political changes in the country and delays on the part of the government too have contributed towards slow progress.

7.1.16 Recommendations of Evaluation Mission:

Future formulations of project documents and sub-project proposals should be properly conceived as to provide for all subsequent activities.

Even if DANIDA stipulates that the joint venture partner be Danish, the services of the Investment Promotion Division should be used to seek joint venture partners. If there are no Danish enterprises interested, then prospective partners from other countries could be sought.

The recipient governments should be kept informed very early regarding the conditions imposed and other limitations when using DANIDA Trust Funds for Technical Assistance.

On the other hand, if enterprise to enterprise level cooperation is not going to be a practical reality with Danish companies, the entire concept needs rethinking so that, future DANIDA Trust Funds could be utilized for consultancies involving Danish companies, without necessarily, any further involvement of Danish companies for the subsequent activities.

In order to arrest the deterioration of the facilities at Nishtun, the evaluation mission recommends that UNIDO advise the government to arrange for cleaning and "moth ball" the facilities until they are reactivated or rehabilitated.

UNIDO should send another 3 copies of the final report to MFW (Aden Branch).

UNIDO should review standard procedure in submission of final reports to recipient governments in consultation with UNIDO Country Directors.

7.2 India: Rehabilitation Programme for Food Processing Industries in Karnataka:

7.2.1 General:

The framework of this study is to undertake in co-operation with the Federation of Danish Industries, Department for International projects and the Karnataka State Industrial Investment and Development Corporation Ltd. (KSIIDC) an economic and strategic study with the following objectives:

- 1) identifying the potentialities offered for developing new projects or rehabilitating and revamping existing production facilities in Karnataka State;
- 2) identifying the main bottlenecks strangling up the local industry which constitute obstacles to developing it and make attractive and profitable ventures;
- 3) proposing various solutions in the form of strategic alliances, joint ventures, or other types of co-operation involving Danish private companies as partners;
- 4) defining a strategy for attracting financial collaborators to give their support to these co-operative arrangements that would be judged workable and bankable.

7.2.2 Brief Description of Study and Proposals:

The consultancy services have been provided by a team of consultants from Madappa Marketing & Management (Pvt.) Ltd., (MM&M), India and from the Department for Marketing and Project Consultancy (AFS), the Confederation of Danish Industries.

The study was undertaken by carrying out the following in stages:

- a) identification of Indian companies. Approximately 60 companies applied for being included in the programme. This was done by KSIIDC and MM&M, in Autumn 1991.
- b) Selection of 22 companies. The consultants from MM&M visited the companies. The selection was done by AFS and MM&M and approved by KSIIDC. This phase was carried out in early 1992.
- c) MM&M made a preliminary report covering a presentation of the selected 22 companies. This job was done from mid February to mid April, 1992.
- d) Based on said presentation, AFS selected 9 companies which they found had an ample opportunity for being a partner in an Indo-Danish business-to-business collaboration.

7.2.3 Sub-project Results:

Since completing the study in June 1992, 4 out of the 9 companies selected by AFS have initiated steps towards cooperation with Danish companies. According to information supplied to the mission, another 4 companies will also move ahead soon.

This sub-project appears to be producing very good results in that many Danish companies have had good opportunities for cooperation with Indian companies.

This sub-project is an excellent example of fruitful utilization of Danish Trust Funds through UNIDO.

7.3 China: Rehabilitation of the Chinese Dairy Industry:

7.3.1 General:

The Chinese dairy industry has been developed and formed a basic technical foundation since the establishment of The People's Republic of China. Now there are about 60 Universities/Colleges that have departments for special field education in relation to processing foodstuffs and agricultural (husbandry) products. In addition, and for the purpose of training local experts there are training centres of the dairy industry in Beijing, Shanghai, Tianjin and Harbin. The quality standards of dairy products have been made by the Government.

There are about 700 dairy industries all around the country. However, most of these dairy industries have been equipped with out of date equipment with high energy consumption and they are complicated to maintain, so that these plants are small, low quality and producing only a single product. It is necessary for these dairy factories to be rehabilitated and be shown as pilot projects accordingly.

On June 18, 1991, Mr. Ole Hybel-Hansen, the Senior Industrial Advisor to UNIDO Beijing Centre, wrote to Mr. Chen Yaochun, the Director of Department of Animal Husbandry & Veterinary Science, Ministry of Agriculture, with the suggestion of "rehabilitation of a number of dairy plants (8-10) by phases". This suggestion is rational and significant in development of Chinese dairy industry.

7.3.2 Brief description of Study and Proposals:

The study deals with diagnostic reports in respect of 9 dairy plants and 1 dairy equipment manufacturer. The report contains a diagnosis on the following:

- Organization, training and management systems;
- milk production, milk collection and milk quality;
- marketing, sales and distribution;
- economics and finance;
- process equipment and technology;
- future development of the plants with special emphasis on product programme and technical rehabilitation needs.

Some factories will be rehabilitated along the lines of existing (small scale) Chinese technology and those which are of high capacity, will be rehabilitated according to Danish technology.

7.3.3 Sub-project Results:

In respect of each plant, cost estimates for rehabilitation with Danish equipment are given. This provides an opportunity for Danish supplies.

Further technical studies and other assistance are required for implementation.

At least for the present, the study (October 1992) appears to be capable of achieving Danida objectives in providing Trust Funds to UNIDO. Nordic Investment Bank has shown interest in financing some of the projects. Chinese Government's guarantees for financing are awaited.

The Danish consultants are yet hopeful of implementation.

8. PROGRAMME-LEVEL ANALYSIS (PROJECTS 1 AND 2):

8.1 Connection of Complementarity Between Individual Sub-projects:

Out of the 13 sub-projects evaluated, 10 were within food processing and 3 within mineral industry as illustrated below:-

Food Processing

Cameroon	Fruit processing
Tanzania	Brewery
Mozambique	Wheat and maize milling
Congo	Fruit processing
Zambia	Mango processing
Ivory Coast	Banana processing
Solomon Islands	Coconut processing
Yemen	Fish processing
China	Dairies
India	Food Processing

Mineral Industry

Nicaragua	Cement
Nepal	Magnesite
Madagascar	Quartz crystals

The 13 sub-project studies were undertaken by 8 different Danish companies, but only 7 different technical experts (team leaders) were involved, since one expert was on two studies for two different companies.

The concentration on food processing, and the use of the same Danish companies and technical experts on more than one consultancy shows a relatively close connection in terms of industry type between the individual studies.

The Evaluation Mission has not found any significant complementarity between the individual sub-projects.

8.2 Geographical Focus:

The geographical distribution of sub-projects has been as follows:

Africa	7	Sub-projects
Indian sub-continent	2	"
Middle East	1	"
China	1	"
Central America	1	"
South Pacific	1	"
Total	13	"

8.3 Sub-project Examination or Appraisal:

Sub-project examination has been insufficient and no appraisals in the normal sense of this term have taken of the sub-project proposals. Reference is made to paragraph 11.4.4 which comments on the insufficient quality control of study reports.

8.4 Involvement of DANIDA and UNIDO in the Follow-up:

DANIDA has not in anyway been involved in the follow-up. The follow-up by UNIDO has been insufficient. For further details on this subject reference is made to section 11.6.

8.5 Effects on Any UNIDO Follow-up:

The weak follow-up by UNIDO has not produced any visible positive effects. In this connection reference is made to section 11.7 which deals with the inadequacy of UNIDO response to application for further assistance after sub-project study report submission.

8.6 Advantages and Disadvantages of the DANIDA-UNIDO Cooperation:

It is the firm opinion of the Evaluation Mission that the advantages of the DANIDA-UNIDO cooperation in the somewhat longer term will by far outweigh the possible disadvantages.

The Special Trust Fund programme is relatively new and the needed learning (trail and error) process has not yet come to an end. The Project 1 under the DANIDA-UNIDO cooperation did not produce any considerable results, but Project 2 seems to be on its way in the right direction. If the recommendations and lessons learnt of this report be followed by the parties, the Evaluation Mission trust that fruitful results in terms of industrial developments through enterprise to enterprise cooperation will be obtained.

UNIDO has a well-proven expertise in industrial investment promotion and cooperation and in pre-investment studies and if DANIDA wants to support the sector and at the same time promote Danish expertise and technology this DANIDA-UNIDO partnership seems well selected.

The possible disadvantages shall be found first and foremost in the identification of sub-projects and selection of Danish partners. For both UNIDO and DANIDA it is of utmost importance that the programme results in sustainable industrial developments in the countries concerned and to avoid sub-projects which from its identification and selection of Danish partners be more to the advantage of Danish Consulting Houses and suppliers than to the recipient in question.

9. PROJECT 1 RESULTS AND ACHIEVEMENT OF OBJECTIVES:

Reference is made to paragraph 3.1.2 which presents the output expectations and objectives of Project 1.

9.1 Outputs:

Generally speaking the sub-project study reports are strong on the technical side for both assessment and proposal, but weak on financial, organizational and commercial issues. Also (looking away from the Solomon Islands coconut processing) the studies concentrate on technical rehabilitations and do not look much into optimization, diversification and expansion.

Most proposals cover immediate measures (technical rehabilitations) but omit the long term perspectives and possible solutions.

Finally, the reports in general are too vague in their description, if any, of the requirements of the concerned enterprises for technical cooperation.

Project implementation took place over a 2 year period as against the planned 1 year presented in the Project Document.

9.2 Achievement of Objectives:

The Evaluation Mission finds that the immediate objectives of the project have not been achieved to a satisfactory level.

First, the portfolio of sub-projects cannot in general be defined as well selected. Second, the Evaluation Mission did not, at field level meet any awareness of technical rehabilitation which could be considered to be at a higher level than usually met in the concerned countries, and since the studies in general do not deal with expansion and diversification need no increased awareness on these issues were present. Third, no technical cooperation sub-projects involving Danish companies to implement the study proposals have materialized or is likely to materialise on the present level of information and potential back-up possibilities from UNIDO, DANIDA and relevant Danish finance institutions.

Since the immediate objectives are almost unachieved, the probability of reaching the development objective is fairly low.

9.3 Unforeseen Effects:

The effects of the radical changes of industrial policies by most governments in the developing countries were unforeseen for a number of studies. It goes for Nicaragua, Tanzania, Mozambique and partly Zambia. The proposals are worked out for enterprises operating as parastatals within a state directed economy, but soon after the sub-missions of the reports market economy and privatization became the issues of the day and the parastatals all went into a long and difficult period of transition.

For Congo Fruit processing, irrespective that the project is unfeasible, it was unforeseen that a fire was fanned, just before arrival of the UNIDO study team, on all machinery and equipment stored for almost 5 years for establishment of the fruit processing plant.

10. PROJECT 2 RESULTS AND ACHIEVEMENT OF OBJECTIVES:

Reference is made to paragraph 3.2.2. which presents the output expectations and objectives of Project 2.

10.1 Outputs:

The 3 studies examined by the Evaluation Mission under Project 2 are of two different kinds. Yemen fish processing and China dairy plants are in line with the studies carried out under Project 1, whilst the India food processing study links up with DANIDA's new private sector programme. This as an overall concept attempts to identify partners for future cooperation in Denmark and 3 selected developing countries among which is India, based on brief but well-prepared company and project profiles with the use of local consultants. Although still ongoing, the India sub-project seems to be on the right track to fulfil the output expectations.

The China report is action oriented and in compliance with the output expectations although it fails to work out feasible proposals relating to enterprise to enterprise cooperation.

The Yemen study is very biased towards technical rehabilitation issues. Financial, organisational and commercial (supplies and sales) problems are only lightly touched upon. It is the opinion of the Evaluation Mission that this study is not meeting the output requirements.

The Project implementation is still ongoing and has just entered into its third year. It was planned to last 1.5 years.

10.2 Achievements of Objectives:

With only 3 sub-projects to examine it is too early to conclude on achievement of objectives in general terms. However, for Yemen and China it seems most probable that no technical cooperation between the local enterprises and Danish companies will materialize and consequently the immediate objectives will not be achieved.

10.3 Unforeseen Effects:

Changes of Government Industrial policies in Yemen and China were to a certain extent unforeseen.

11. OVERALL PROBLEM ANALYSES OF PROJECTS 1 AND 2:

In order to give an overview of the main findings and conclusions of the Evaluation Mission, a so called "Problem Tree" for Project 1 and 2 has been worked out and presented overleaf.

The core problem of the projects is found to be the lack of spin-offs from the sub-project studies. In general, no enterprise to enterprise relationships have been established and no physical implementations have taken place since study submittals.

The main causes for this disappointing result are found to be the following:

- 1) Insufficient sub-project identification;
- 2) low interest in enterprise to enterprise relationships in low income developing countries amongst potential Danish partners;
- 3) sub-optimal selection of Danish partners;
- 4) insufficient studies/reports;
- 5) insufficient-distribution of reports;
- 6) insufficient UNIDO monitoring and follow-up on sub-projects;
- 7) insufficient UNIDO response to applications for further assistance.

11.1 Insufficient Sub-project Identification:

In retrospect it is relatively easy to see that a number of sub-projects should not have been chosen for implementation, since it is now obvious that the objective of enterprise to enterprise relationship establishment and project implementation based on Danish know-how and supplies would not be accomplished. This is for instance clearly the case for:

- the Cameroon fruit processing plant, where external financing is unattainable due to the very adverse financial situation of the local company involved;
- the Mozambique wheat and maize milling plants, which are based on Swiss technology and machinery;
- the Nepal magnesite beneficiation and;
- the Madagascar quartz production for both of which the market situation is such that a Danish partner would not be possible to attract;
- the China dairy plants where financing of the proposed rehabilitations seems impossible to obtain, since the enterprises in question have no access to foreign exchange, and therefore will not be able to service any foreign loans.

The main causes for the insufficient sub-project identification are found to be:

- unclear identification procedures;
- unclear eligibility criteria;
- lack of requirements (contributions) to be met by the recipient;
- unclear perspectives for assistance (enterprise to enterprise cooperation);
- lack of identification and involvement of potential finance institutions.

The project documents are weak in defining responsibilities, procedures and selection criteria, and it has resulted in ad hoc solutions and sub-optimal screening of applicants. In this process also the perspectives for assistance, the special feature of the trust fund support, the enterprise to enterprise concept, have been somewhat lost.

Project 2 requires under "activities" that the consultants as part of the sub-project studies shall discuss and negotiate with Development Finance Institutions, including Danish ones, loans and lines of credit for the identified projects. However, it is a deficiency that such discussions at least with the possible Danish finance institutions are not carried out as part of the screening process.

11.2 Low Interest Amongst Potential Danish Partners:

Denmark is a small country with a limited number of enterprises of a capacity to take upon themselves the tasks within the enterprise to enterprise model. For this reason, the interest of these relatively few potential partners to invest in low income developing countries especially in Africa have been low for some years. The main reasons are:

- prior bad experiences with investments here (especially in Africa);
- economic recession at home and a derived tendency to concentrate activities on "safe" markets and products;
- focus on Eastern Europe and prospering developing economies.

11.3 Sub-optimal Selection of Danish Partners:

The selection of Danish "Partners" seems to have been rather random and not a result of a well-defined screening procedure. Only few of the companies had serious intentions to enter into a thorough enterprise to enterprise cooperation. The only clear examples are IFICON in Zambia, where the company were willing to convert an old outstanding account with the local company involved into joint venture capital; and Norstal in Yemen, who discussed up to a certain stage a joint venture solution with the Ministry of Fish Wealth.

The remaining Danish partners (except F.L. Schmidt in Nicaragua and APV/DTD in China) were first and foremost interested in the consultancies, even to the low fee either for employment reasons for the consultants involved and/or to market themselves towards UNIDO in general. Also, they had a faint hope for some later deliveries, but knowing the difficulties of getting finance from Denmark for such projects there were never high expectations for this. For the Nicaragua project (cement) DANIDA grant was/is a possibility and for China (Dairy plants rehabilitation) Nordic Investment Bank and Danish Export Credit might be interested.

The main causes for the sub-optimal selection of Danish partners are found to be:

- unclear identification procedures;
- unclear eligibility criteria;
- insufficient requirements to be met by Danish partners (contributions);
- unclear perspectives for assistance (enterprise to enterprise cooperation).

At the same time it must be mentioned that the probability of identifying relevant Danish partners will diminish with increasing requirements in the selection process and to the potential partners.

11.4 Insufficient Studies/Reports:

In general the Evaluation Mission finds the sub-project studies/reports insufficient. The main causes for this are found to be the following:

- insufficient TOR and job-descriptions;
- no format defined for studies and reporting;
- no overall problem analysis carried out, which has resulted in
 - main problems not properly addressed and;
 - studies biased towards technical rehabilitations.
- insufficient quality control of reports.

11.4.1 Insufficient TOR and Job Descriptions:

For some sub-projects one can find TOR, but only as a part of the respective consultants' proposal to UNIDO for undertaking the job. Since most of the reports do not contain TOR or job-descriptions for the studies carried out the status of these proposed TOR is difficult to assess.

UNIDO does not work out TOR for the studies but only job descriptions for the consultants and staff involved. These job descriptions contain information which would also be found in elaborate TORs, but they do not with their present contents conform to the normal TOR concept of DANIDA worked out on the basis of the Logical Framework Approach.

Besides, the Evaluation Mission finds that the job-descriptions are very biased towards technical issues which also reflects the fact that most of the consultancies are manned with technical experts only.

11.4.2 No Format Defined for Studies and Reporting:

There is no format requirements for studies and reporting under the Special Trust Fund programme. All 13 reports are different in appearance, lay-out and presentation of findings and recommendations. No standard table of contents are followed. It is not possible to see on the report covers whether they are drafts or final documents.

11.4.3 No Overall Problem Analysis Carried Out:

The fact finding/diagnostic appraisals do not in general take a global view on the problems faced by the concerned local enterprises, but concentrate mainly on the technical requirements in physical terms. Even technical training needs are generally not described in any larger detail. As examples the following can be mentioned:

- **Nicaragua, cement industry:** A later DANIDA Appraisal Mission on support to the Nicaraguan cement industry found that the main problems were "too high production costs due to excessive energy consumption, and a resulting too low income margin to maintain the plant efficiently". The UNIDO study only looked into the technical problem on how to increase the production of cement. It should be mentioned that the DANIDA Appraisal Mission found part of the UNIDO proposal unfeasible.
- **Tanzania, brewery industry:** This industry is fighting with managerial and disciplinary problems, which must be solved prior to any technical solutions. The UNIDO reports were dealing only with the technical matters.
- **Cameroon, fruit processing:** This is a pure technical survey, which should also be in accordance with the job description of the task, but an interview with the Danish "partner" by the Evaluation Mission revealed that the main problem is that the local enterprise is almost bankrupt and that a financial reconstruction is a necessity before any technical solution can be considered.
- **Yemen, fish processing plant:** The core problems found by the Evaluation Mission of this plant are raw materials supply (fish) and marketing of the end products. Without having solutions on these problems any technical rehabilitation will be waste of funds. The UNIDO report concentrates almost exclusively on technical issues. As long as the Danish company "Norstral" was an interested partner to the local enterprise this might have been sufficient since Norstral was supposed to solve the raw materials and marketing problems. But with Norstral now out of the picture, the report is less useful to attract other interested investors.

11.4.4 Insufficient Quality Control of Reports:

There seems to be no formalised quality control of the sub-project reports. Since a UNIDO staff member is normally part of the study team, the quality control is anticipated to be carried out by him/her. Since this is partly a kind of self control, it is insufficient. No appraisal of the sub-project proposals takes place.

11.5 Insufficient Distribution of Reports:

Occasionally study reports fail to reach end-users. The Evaluation Mission met this problem in Mozambique and partly in Yemen, where receipt of the report by end-user only happened because of his own active attempt to get a copy. Also, in certain countries as for instance Mozambique it is a major draw back that the English language reports are not translated into the local language.

The main causes for the problem are found to be the following:

- Limited budget for report production which has resulted in:
 - Too few reports produced and forwarded;
 - lack of translation into local languages.
- Formal distribution lines normally followed;
- long-winded procedure to produce additional reports.

UNIDO Head quarters forward study reports to the concerned local UNIDO/UNDP office. The local office will normally then distribute the (few) copies along the formal lines, which means to the Ministry involved. The Ministry is then supposed to undertake the distribution to involved parties and end-users. However, since there are normally only few copies and no (or difficult) photocopying possibilities the reports tend to remain at the ministerial level.

For some reason or another, which has not been further investigated by the Evaluation Mission, it is a long-winded process to get additional reports from UNIDO.

11.6 Insufficient UNIDO Monitoring and Follow-up on Sub-projects:

After report submission it is the impression of the Evaluation Mission that the sub-projects in question become of less concern to UNIDO. It is anticipated that the recipient and the Danish "partner" takes over the further initiatives. However, since the selected Danish "partners" in general are not interested in a close enterprise to enterprise cooperation, and ailing enterprises in low income developing countries normally do not take upon themselves any leading role, the cases fade and eventually die.

The studies carried out are not bankable and a number of further investigations, discussions and negotiations must be accomplished, including a fully fledged feasibility study, before financing can be obtained and the project proposals be implemented.

The Evaluation Mission has found the following main causes for the insufficient UNIDO monitoring and follow-up:

- Unclear guidelines for follow-up and monitoring;
- follow-up activities are not considered in the Project Documents, and consequently there are no funds for such actions;
- unclear role for local UNIDO/UNDP offices in follow-up and monitoring;
- industrial investment promotion is not a main activity, in the Special Trust Fund Section of UNIDO, and in-house coordination with other departments insufficient.

The roles and responsibilities in the follow-up and monitoring on sub-projects are undefined. According to STF staff, DANIDA is not willing to fund supplementary consultancies on sub-projects through the Trust Funds. It indicates that DANIDA is of the opinion, that this is a task which should be financed by UNIDO from its own means or may be in-cooperation with the respective Danish partners.

From the field visits, the Evaluation Mission got the impression that the local UNIDO/UNDP offices in general do not undertake any active follow-up on the sub-projects. They are kept

informed by the involved parties, they keep a project file for the cases, and they assist to the best of their abilities when asked for support by the involved parties.

Industrial investment promotion is a basic UNIDO discipline, which has been improved and conceptualised to a very high and efficient standard over the years. The expertise is found mainly in the Industrial Investment Division under Department for Industrial Promotion, Consultations and Technology. For reasons which the Evaluation Mission has had too short time to investigate in-depth, the STF section has not handed over any sub-project to this Division, but tried to cope with the matter itself. Since that kind of job is on the side-line of the sections scope of work, and it is not properly staffed to undertake such tasks efficiently, the results have been almost nil.

11.7 Insufficient UNIDO Response to Applications for Further Assistance:

This is a matter which relates closely to what is described in the foregoing paragraph. Reference is also made to the Yemen fish processing project where the recipient has applied for UNIDO assistance in finding a joint venture partner and to establish technical specifications and item lists for rehabilitation of the projects power supply, both without a positive response.

The main causes seem to be much the same as for the insufficient UNIDO monitoring and follow-up, but the following can be added:

- Insufficient guidelines for appraisal, approval and implementation of further assistance to sub-projects;
- insufficient involvement of the local UNIDO/UNDP offices.

The STF section seems to lack guidelines on how to handle applications for further support. Who shall appraise, who approve, who implement and which financial sources are available.

In the Yemen case the local UNDP office was not involved neither in formulating and processing the application nor in the later appraisal and decision by the STF section.

12. RECOMMENDATIONS:

12.1 Project Concept:

Almost all sub-projects under this Project evaluation have faced low interest amongst Danish "partners" for close enterprise to enterprise cooperation in the countries in question. Also it has proved to be very difficult to find Danish financing for the proposed supplies.

Before additional Trust Funds are granted for future programmes it is proposed that a comprehensive investigation be carried out amongst relevant Danish enterprises and financing institutions on their interest in the Project on the present conceptual basis.

If the response is generally negative it is recommended to redesign the Project for instance as follows:

- extend the target group of countries to include higher income developing countries;
- ensure that consultancies under the Project be carried out by Danish companies, but;
- let other than Danish enterprises be eligible for enterprise to enterprise cooperation if no Danish firms can be identified.

12.2 Sub-project Identification:

It is proposed to improve the Sub-project identification by the following means:

- Establish clear identification procedures stating the responsibilities of the involved parties. The local UNIDO/UNDP offices should play a major role in the initial identification, and the UNIDO's Industrial Investment Division and the Federation of Danish Industries should be actively involved in the screening and approval process together with relevant Danish finance institutions.
- Establish clear eligibility criteria for the local enterprises, For instance type of production and products, size of enterprise, management, financial situation, possibility of obtaining local loans/credit lines, acceptance of the enterprise to enterprise concept and willingness to contribute financially and/or in kind to the necessary studies. Some of this work can be carried out using local experts/consultants.

12.3 Selection of Partners:

It is recommended to improve the selection of partners, being Danish or non-Danish as follows:

- Establish clear identification procedures stating the responsibilities of each involved party. The Federation of Danish Industries and UNIDO's Industrial Investment Division should play major roles. Relevant finance institutions in Denmark, or other countries if non-Danish partner, should be involved in the screening process.
- Establish clear eligibility criteria for the partners in line with those for the local enterprises. Experience in import/export and foreign business relationships could be added to the list.

12.4 Studies and Reports:

It is recommended to work out comprehensive TORs for all sub-projects based on the Logical Framework concept. Job descriptions can be presented as annexes to TOR.

All studies, including diagnostic studies, are recommended to be carried out and presented using the Logical Framework Approach. This implies elaboration of a thorough problem analysis, which will identify for the enterprise in question all major problems and their interconnections, technical as well as non-technical.

Standard formats for presentation and lay-out of reports are recommended to be established, and different cover colours are proposed to be introduced to indicate the stage of the document, e.g. first draft, final draft and final document.

Quality control of the sub-project proposals is recommended to be carried out by UNIDO experts, probably within the Industrial Investment division and if the proposals exceed a certain complexity and level of financing a field appraisal is proposed to be undertaken.

12.5 Distribution of Reports:

A sufficient budget for production and possible translation of reports must be established. Reports shall be submitted in at least 15 copies.

It must be ensured that all involved parties receive a report. This means that distribution often has to happen along both formal and informal levels.

In non-english speaking countries, it is recommended to translate the reports into the local (international) language.

Procedures for producing additional reports on requests must be streamlined.

12.6 Follow-up:

It is recommended to work out procedures and guidelines for follow-up and monitoring of sub-project proposals with clear description of responsibilities of involved parties. Besides, a budget must be established for additional necessary studies, inclusive of full feasibility studies, for searching and selection of partner enterprises and establishment of sustainable enterprise to enterprise cooperations (for instance in the form of joint venture). It is proposed that the main responsibilities for follow-up be placed with the UNIDO Industrial Investment Division and that also the local UNIDO/UNDP offices be actively involved in this activity. Pre-appraisal and monitoring of further assistance should be the responsibility of the local offices, while the Industrial Investment Division should undertake final appraisal and implementation.

The Special Trust Fund staff is recommended to concentrate on Programme Officer functions only, which include the responsibility of overall supervision of the Project and resulting sub-project activities and Project coordination and communication.

When staff in follow-up functions be exchanged an efficient hand-over of tasks must be ensured.

13. LESSONS LEARNED:

13.1 Project Documents:

The overall nature of the Project Documents and the lack of a basic Project Proposal or other detailed guidelines make the project implementation very flexible. "Everything" fits under the umbrella, and selection, appraisal and approval procedures are speedy and non-bureaucratic. The Evaluation Mission decided to take a positive view in appraisal of this concept, but along the course it became more and more clear that it was more a disadvantage than an advantage. So the lesson learnt can be put as follows:

A Project Document should be based on a thorough Project Proposal which again is worked out on the basis of the Logical Framework Approach including an overall problem analysis. This would probably have revealed 3 killer assumptions (crucial project assumptions with a low probability of accomplishment) in the present Project design, namely:

- that it is possible to find sufficient numbers of industrial partners in Denmark for ailing industrial plants in low income developing countries;
- that Danish finance institutions are willing to finance supplies in accordance with sub-project proposals for above industries in above countries, and thereby ensure Danish deliveries;
- that financing of needed further studies, technical assistance, training and establishment of enterprise to enterprise cooperation will be handled by the industrial partners themselves, UNDP or others.

13.2 Number of Sub-project:

For the relatively minor amounts comprised by Project 1 and 2 the Evaluation Mission are of the opinion that too many sub-projects have been undertaken. There has been a drive towards quantity at the expense of quality. It has resulted in meagre diagnostic studies concentrating on technical issues, no money for further follow-up actions and even a too low budget for producing sub-project reports.

The lesson learnt is that sufficient funds shall be available for each sub-project to ensure that optimal conditions be established for reaching the Project objectives. This also implies that funds for necessary follow-ups are included in the project budgets.

13.3 Scope of Studies:

The sub-project studies are generally of technical nature, launched as such by the UNIDO job descriptions. However, technical solutions must be seen in the context of an enterprise's overall situation. How can for instance the level of technical rehabilitation be assessed without knowing the raw materials supply and finished products' market situation and possible future development?

The lesson learnt is that diagnostic appraisals must take a global view of the respective enterprises and that sub-project proposals be based on thorough overall problem analyses and the Logical Framework approach.

13.4 Project Organization:

The Project Organisation is undefined in the Project Documents, but actually the Special Trust Fund Section has tried to cover all organisational aspects of the Projects. It means that no real use is made of UNIDO's extensive expertise within Industrial Investment programmes and feasibility studies, since it is placed within a different UNIDO department. Also, the local UNIDO/UNDP

offices are not really actively involved in the Projects. Hardly any use has been made of local experts/consultants for the studies though budgeted in the Project Documents.

This concentration of all tasks in one section and within this on very few persons has proved to be counter productive to the Projects. It has resulted in insufficient sub-project identifications, deficient TOR/job descriptions for diagnostic appraisals, insufficient reports and distribution of these and a clearly unsatisfactory monitoring and follow-up on sub-project proposals.

The lesson learnt is that more expertise must be included in the Project Organisation. Expertise on local conditions and enterprises represented by the local UNIDO/UNDP offices in the envisaged developing countries and by the Federation of Danish Industries in Denmark must be drawn upon together with the practical experience and expertise of the Industrial Investment Section and the Feasibility Studies branch of UNIDO. Also relevant Danish financing institutions should be given a role within the overall Project organisation.

IN-DEPTH EVALUATION OF SPECIAL TRUST FUNDS PROJECTS**Terms of Reference**

Project 1: TF/GLO/88/018 - Programme of direct support to industry in developing countries: fact-finding and project identification missions (completed)

Budget: US\$ 400,000 (incl. 13% programme support costs)

Project 2: TF/GLO/90/020 - Programme of direct support to industry in developing countries (on-going)

Budget: US\$ 600,000 (incl. 13% programme support costs)

INTRODUCTION

UNIDO has been developing and implementing new mechanisms for promoting enterprise-level industrial co-operation through trust fund arrangements. In this regard, UNIDO has intensified its dialogue with business and industrial communities in both developed and in developing countries. The aim has been to provide direct support to developing country enterprises and also seek the active co-operation of companies in the developed world in facilitating the flow of technical, managerial and financial resources to the developing countries, particularly at the enterprise level, in an effort to promote industrial development. The main purpose of this in-depth evaluation is to assess and eventually improve the effectiveness and efficiency of the above projects as well as their impact and relevance. Furthermore lessons will be learned for future projects of this kind.

I. BACKGROUND

During the past decade, numerous industrial plants in the developing countries have faced difficulties ranging from simple technical or managerial malfunctions to major technological or financial bottlenecks. These difficulties have led to set-backs in the development efforts of the countries concerned.

Many developing countries are therefore giving the highest priority to promote industrial cooperation for the mobilization of domestic and foreign resources to salvage ailing industrial plants, and in this context, programmes of revitalization, restructuring and rehabilitation, revamping and optimization are being carried out. The success of these programmes depends greatly on the quality of information on which decisions are taken for the corrective measures at the enterprise level, as well as of the measures taken at the policy level.

The aim of the programme is to contribute to the safeguarding and enhancing the value of new and existing investments made in industrial plants through the provision of pre-investment and/or diagnostic studies to enterprises concerned and to promote industrial cooperation between developed and developing companies.

The projects are being implemented by UNIDO's Special Trust Funds Projects Section which was established to develop additional mechanism for mobilization of funds for financing development assistance to developing countries. One of their programmes was to develop a supplementary mechanism that would enable industrial partners in developed and developing

countries to cooperate through UNIDO projects, to provide direct support to industry (public and private).

As part of the above programme the Danish International Development Agency (DANIDA) and UNIDO, in cooperation with the Federation of Danish Industries, have agreed to identify Danish partners as well as private companies in developing countries interested in implementing joint programmes and projects for revitalization, restructuring, rehabilitation, revamping expansion and diversification of ailing industrial plants in developing countries.

Special considerations

The projects are primarily intended to assist the low income developing countries in their industrialization efforts.

During the course of implementation of the projects, UNIDO shall endeavour to ensure that environmental, sociological and socio-economic aspects are duly taken into account in order that the projects contribute to sustainable development.

Development objectives of the projects

The broad development objective of the projects are to contribute to:

- Sustainable development;
- Improvement of the productivity and viability of existing industrial plants;
- Measures towards attainment of the target set for increased industrial production, as outlined in the Lima Declaration and Plan of Action.

The overall aim is to contribute to safeguard and enhance the value of investments made in industrial plants by optimization and diversification programmes and by short-term pre-investment and post-investment technical support in appropriate cases.

Immediate objective of the projects

- To obtain reliable, updated and detailed information on the needs of industrial plants in the selected target countries for rehabilitation, expansion or diversification, in order to improve, in the short term, their productivity and performance immediately and to ensure their long-term technical and commercial viability. Through fact finding and project identification missions, the project will thus carry out diagnostic appraisals of ailing industrial plants and identify corrective measures for immediate and long-term actions. Eventually, a portfolio of selected projects for industrial plant rehabilitation, expansion or diversification will be established (project 1).
- To undertake fact finding and project identification missions at the pre-investment state, to carry out the necessary pre-investment studies including basic design and conceptual studies and raw material investigations, etc.; to identify technological options and to seek technical and joint venture partners as appropriate; and to negotiate and arrange project financing (project 2).
- To undertake, at the post-investment stage, diagnostic studies for improved performance of existing industrial plants through a variety of measures designed to alleviate their technical, marketing, management and financial problems (project 2).

Outputs

The projects will specifically focus to produce the following outputs, which may vary from one sub-project to another:

Project 1 - TF/GLO/88/018

1. Reports containing the following types of information:
 - Description of the major problems and constraints (technical and managerial) faced by the companies and corrective measures proposed;
 - Technological processes and description of machinery, equipment and spare parts needed to effectively implement a rehabilitation programme;
 - Financial scenarios with main financial indicators (e.g. internal rates of return, pay-back periods, financial ratios, etc.) and investment plans for plant rehabilitation;
 - Manpower resources and managerial skills and profiles needed to implement the rehabilitation programme;
 - Market and business development plans and a time table for implementation.
2. Annotated list of plant identified during the fact finding missions with a brief description of their main requirements for technical co-operation.

PROJECT 2 - TF/GLO/90/020Project implementation

1. A number of project proposals will be prepared for consideration by UNIDO, DANIDA and Danish companies under the Trust Fund scheme.
2. Well defined projects for technical assistance involving Danish Technology, know-how, machinery and spare parts for the proposed new project or rehabilitation, expansion and diversification programme.
3. Proposals relating to collaboration between enterprises in developing countries and potential foreign partners with a view to increasing the former's productivity.
4. Pre-feasibility and feasibility studies in order to develop investment projects to a negotiable stage.
5. Well prepared project profiles to facilitate utilization of the loans and lines of credit available with development finance institutions.

The UNIDO Trust Fund Programme relation with the two projects**PROJECT 1 - TF/GLO/88/018**

In the first phase of the UNIDO/DANIDA cooperation programme, there were ten sub-projects which constituted missions to ten countries covering activities like fact finding and project identification. Activities have been reported to be as follows:

	<u>Country</u>	<u>Title</u>	<u>Budget (US\$)</u>	<u>Danish partner</u>
1.	Nicaragua	Cement industry	27,500	F.L. Smith

Objectives: To formulate a programme of development of the cement industry and define the scope of work required for improvements in capacity, quality and type of products.

Status: Mission completed. A report containing the strategy to be followed by the Nicaraguan cement industry and describing the technical and financial support needed to meet the market requirements was prepared and distributed to the parties concerned. Report finalized.

2.	Cameroon	Fruit processing	22,600	IFICON
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Objectives: Technical survey for planning the required rehabilitation of the plant.

Status: Mission completed. UNIDO, together with IFICON, carried out a diagnostic appraisal of the plant. Rehabilitation programmes on the basis of the diagnostic appraisal are being discussed with parties concerned, including finance institutions. Report finalized.

3.	Tanzania	Brewery industry	41,340	DANBREW
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Objectives: Feasibility study on existing plants, and possible set-up of new plants.

Status: Mission completed. The result of this project is an integrated set of technical assistance, consisting of four main projects. Both the Government of Tanzania and UNDP highly appreciated the project and UNDP then decided to finance at least two main projects. Report finalized.

4.	Mozambique	Wheat & maize plants	45,456	United Milling System A / S
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Objectives: To prepare a diagnostic appraisal report on the technical, economic and managerial problems encountered by the enterprises which have led to reduction of production.

Status: Mission completed. A diagnostic appraisal was then prepared. Several European companies are presently in negotiation for undertaking rehabilitation projects. Report finalized.

5.	Congo	Fruit processing	45,200	APV / Danish Turnkey Dairies
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Objectives: Feasibility study: to create a private company called "la Société Agro-Industrielle des Fruits du Congo" (SOAFICO) with a capital of 200 million CFA Francs. It would be divided in 20,000 shares of 10,000 CFA Francs each for shareholders in Congo and abroad. The amount to be invested is estimated at 800 million Francs.

Status: Mission completed. A feasibility study was undertaken for the establishment of the plant, which would lead to finalization of production programme. Report finalized.

6.	Zambia	Mango processing	39,625	IFICON
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Objectives: To carry out a feasibility study for upgrading of the ZAMHORT mango processing plant to aseptic processing and packaging.

Status: Mission completed. A feasibility study has been carried out. On this basis a full scale rehabilitation project has been prepared. Report finalized.

7. Côte d'Ivoire Banana processing 40,510 IMIDAN/DANMILK and IFICON

Objectives: Fact-finding mission to evaluate existing banana production and transformation facilities and gathering of technical and commercial data for a project proposal.

Status: Mission completed. To investigate and obtain all necessary data and information on how to establish a new production facility based on a technology and recipes developed by a Danish Company (IFICON) for making ketchup out of Banana. Report finalized.

8. Nepal Magnesite beneficiation 52,849 Mineral Intern. Development A/S

Objectives: Fact-finding mission to carry out bench scale tests and project proposals for pilot scale tests.

Status: Mission completed. Report under preparation. Recommendations to produce high quality magnesite for the international market.

9. Solomon Islands Coconut processing 60,850 DTD/APV

Objectives: To carry out an opportunity study for establishment of coconut processing plant.

Status: Mission completed. A pre-feasibility study and market survey for establishment of coconut processing plant. Report under preparation.

10. Madagascar Quartz production 22,566 Carl Nielsen

Objectives: To prepare and carry out inspection on site of existing production and infrastructure facilities and gather technical and commercial data for a project proposal.

Status: Report finalized covering technical and commercial aspects of quartz production.

PROJECT 2 - TF/GLO/90/020

The second phase of the UNIDO/DANIDA cooperation programme with broader scope covers activities at both pre-investment and post-investment stage.

<u>Country</u>	<u>Title</u>	<u>Budget (US\$)</u>	<u>Danish partner</u>
1. Yemen	Fish processing plant	76,626	FRIGOCONSULT

Objectives: To carry out a diagnostic appraisal of the technical, managerial and financial problems encountered by the plants including possible future programmes for rehabilitation, expansion and diversification of production activities.

Status: Agreement made by the Government of Yemen and a Danish company, NORTRAL, to set up a joint venture company, which will rehabilitate and upgrade the processing lines and provide equipment required. As a first step, UNIDO/FRIGOCONSULT undertook a diagnostic appraisal of the technical, managerial and financial problems encountered by the plant including identification of future programmes. Mission completed. Report under preparation.

results or whether other approaches could have improved the results. The evaluation will include a review of the following:

- (a) Origin of requests:
 - (i) Countries, type of countries;
 - (ii) Type of industries (medium vs. large, agro vs. other);
 - (iii) Were the studies requested by Ministries, enterprises, associations, financing organizations?;
 - (iv) Was there a sponsor for the study?;
 - (v) What types of studies were financed (opportunities, diagnostic studies, economic and strategic studies and feasibility studies)?;
 - (vi) Was the project a follow-up to previous pre-investment work or just the start of it?
- (b) Mechanism of approval:
 - (i) Approval process (selection procedure, including criteria for selection of the DANIDA as donor, review of similar, if any, co-financing programmes with other donors);
 - (ii) Time required for approval by UNIDO and by the Government of Denmark;
 - (iii) Criteria for approval;
- (c) Execution of studies:
 - (i) Usual duration; how much delay in implementation?
 - (ii) Who implemented the studies: sub-contracts, individual experts, use of national capabilities?;
 - (iii) Was there any training component, computer-aided analysis component;
 - (iv) How were studies presented to decision-making - meetings presentation, "push"?
- (d) Quality of studies:
 - (i) Scope (e.g. was the feasibility study really a full feasibility study; was too much effort devoted to financial analysis vs. technical)?;
 - (ii) Quality and extent of technical analysis;
 - (iii) Quality and extent of market analysis;
 - (iv) How completed were the studies, including identification of sources of finance and structure of investment?;
 - (v) Was an economic (cost benefit) analysis done?;
 - (vi) Did the study review environment and other considerations (such as position of women)?.
- (e) Follow-up to project:
 - (i) Have the projects resulted in reports that are in fact of practical value?
 - (ii) How are the results assessed and appraised and how are the resulting conclusions used?
 - (iii) What has been done to follow up the individual project, for instance, in promoting proposals for investment?
 - (iv) Have the proposals led to actual investments, and if positive, what have been the results?
 - (v) How many of the studies resulted in decision or actual investment?
 - (vi) Impact of actual investments.

(f) Programme-level analysis:

- (i) Was there any connection or complementarity between individual projects;
- (ii) Was there a focus on specific region, type of country or type of industry;
- (iii) Are studies/reports examined or appraised by DANIDA and UNIDO, either in progress or after completion?
- (iv) Was there any feedback from DANIDA and UNIDO on the studies?
- (v) Was there any involvement of DANIDA and UNIDO in the follow-up?
- (vi) Did the contribution from DANIDA and UNIDO improve the effectiveness of the programme (more studies, more rapid implementation, etc.);
- (vii) Advantages and disadvantages of the cooperation between DANIDA and UNIDO in such programmes.

III. COMPOSITION OF THE TEAM

The evaluation team will be composed of the following:

- One nominee of DANIDA;
- One nominee of UNIDO;

Qualifications:

Team should possess a combination of technical cooperation project evaluation and extensive pre-investment study expertise, preferably in the field of food processing. One team member should be knowledgeable of UNIDO pre-investment study standards.

- Team members selected are expected to be an independent body who have played no role in the design, implementation and monitoring of the project.

IV. CONSULTATIONS IN THE FIELD

The mission will maintain close liaison with the resident representative of the countries visited, the concerned Government organizations, local UNIDO staff and the projects' national and international staff.

The mission is expected to visit project sites of the countries selected and establish close contacts with the target group and end users.

The team, other than the field trips will spend time at UNIDO HQ to review project files and interview relevant officials responsible for the programme in the substantive units and associated branches to gather information on project implementation.

There may also be a need for the DANIDA representative to collect information from relevant Danish Government Officials and to interview Danish companies who may have been involved in carrying out the studies.

Although the mission should feel free to discuss with the authorities concerned all matters relevant to its assignment, it is not authorized to make any comments or commitments on behalf of the donor country or UNIDO.

V. TIME TABLE AND REPORT OF THE EVALUATION

- The donor and UNIDO representative will receive briefing and carry out desk-work in UNIDO HQ. to review project documentation.
- The mission will undertake field assignment to Mozambique, Tanzania and Yemen.
- Preparation/Presentation of the Evaluation report in UNIDO HQ.

The mission will conclude its findings with an evaluation report according to the UNIDO format, as stipulated in the Director-General's Bulletin UNIDO/DG/B.106. The team will be expected to make a presentation of the report before formal submission to the Danish Government and to UNIDO.

Proposed Tentative Schedule: 22 February to 27 March 1993*

1st Phase:		
UNIDO Headquarters	8 days	Review Project files, meet substantive units and relevant officials. (22 February to 1 March)
2nd Phase		
Field Trip	18 days (with 6 days in in each country)	collection of data information (2 March to 19 March)
3rd Phase		
UNIDO Headquarters	8 days	Follow up interviews, Preparation/Presentation of the report (20 March to 27 March)
Total	<hr/> 34 days <hr/>	

Note: The exact commencement of the evaluation will depend on the identification and availability of the team members.

ORGANIZATIONS VISITED AND PERSONS MET

6-11 May 1993, UNIDO, Vienna:

Mr. O. Gonzalez-Hernandez	Head, Evaluation Staff
Mr. I. Farooque	Associate Evaluation Officer
Mr. A. de Faria	Chief, Project Appraisal Section
Mr. T. Otsuka	Industrial Development Officer, Industrial Cooperation and Management Services Branch
Mr. H. May	Chief, Industrial Cooperation and Fund Mobilization Division
Mr. M. Maung	Chief, Industrial Cooperation and Management Services Branch
Mrs. Q. Li	Industrial Development Officer, Industrial Cooperation and Management Services Branch
Mr. J.X. Barthelemy	Associate Expert, Formerly Special Trust Fund Section ¹ , Industrial Co-operation and Funds Mobilization Division, Department for Programme and Project Development
Mr. A. El-R Marei	Senior Special Technical Adviser, Industrial Cooperation and Fund Mobilization Division
Mr. N.G. Biering	Chief, Non-metallic Minerals, Ceramic, Glass and Building Materials Unit
Mr. B. Calzadilla-Sarmiento	Backstopping Officer, Industrial Cooperation and Management Services Branch.
Mr. S.S. Sachdeva	Industrial Cooperation and Management Services Branch
Mr. Y.Y. Okello	Associate Industrial Development Officer, Africa Unit, Industrial Investment Programmes Division, Department for Industrial Promotion, Consultations Technology

12 - 16 May 1993, Republic of Yemen:

Mr. M. S. Refaee	National Programme Officer, UNDP
Mr. A. W. Sharaf	Permanent Secretary, Ministry of Fish Wealth (Aden Branch)
Mr. A.A. Khan	Senior Project Officer, Ministry of Fish Wealth (Aden Branch)
Mr. S. Muslem	Acting Director, Ministry of Fish Wealth, Mahra Governorate

¹ present name: Industrial Co-operation and Management Services Branch

Mr. A. Saeed Director, Public Corporation for Services and Fish Marketing, Nishtun, Mahra Governorate

Mr. A.S. Abaddan Deputy Minister of Planning and Development, Aden Branch

Mr. M. A. Saleh Director of Fisheries, Aden

17 - 22 May 1993, Tanzania:

Mr. A. Krassiakov UNIDO Country Director, Dar es Salaam

Ms. A. Kostian Junior Professional Officer, UNIDO, Dar es Salaam

Mr. J.G. Mrema Senior Industrial Economist, Ministry of Industries and Trade

Mr. M.P. Nkelebe Industrial Economist, Ministry of Industries and Trade

Mr. A.B.S. Kilewo Managing Director, Tanzania Breweries Limited

Mr. P.J.I. Lasway Planning and Development Manager Tanzania Breweries Limited

23 - 28 May 1993, Mozambique:

Mr. I.D.C. Fraquelli UNIDO Country Director, Maputo

Ms. G. Ott Junior Professional Officer, UNIDO, Maputo

Mr. B.G. Dava Managing Director, Xigaio

Mr. R.D.P. Romao Managing Director, CIM, Matola

Mr. F. Garagorry Acting CTA, UNIDO Project on Industrial Policy and Institutional Adjustment - DP/MOZ/86/014

Mr. J. Parruque Head Miller, SOCIMOL, Machava, Maputo

Mr. T. Belane Administrative Manager, SOCIMOL, Machava, Maputo

Mr. L. de Sousa Managing Director, SOCIMOL

Ms. L. Guilbride Director, SOCIMOL

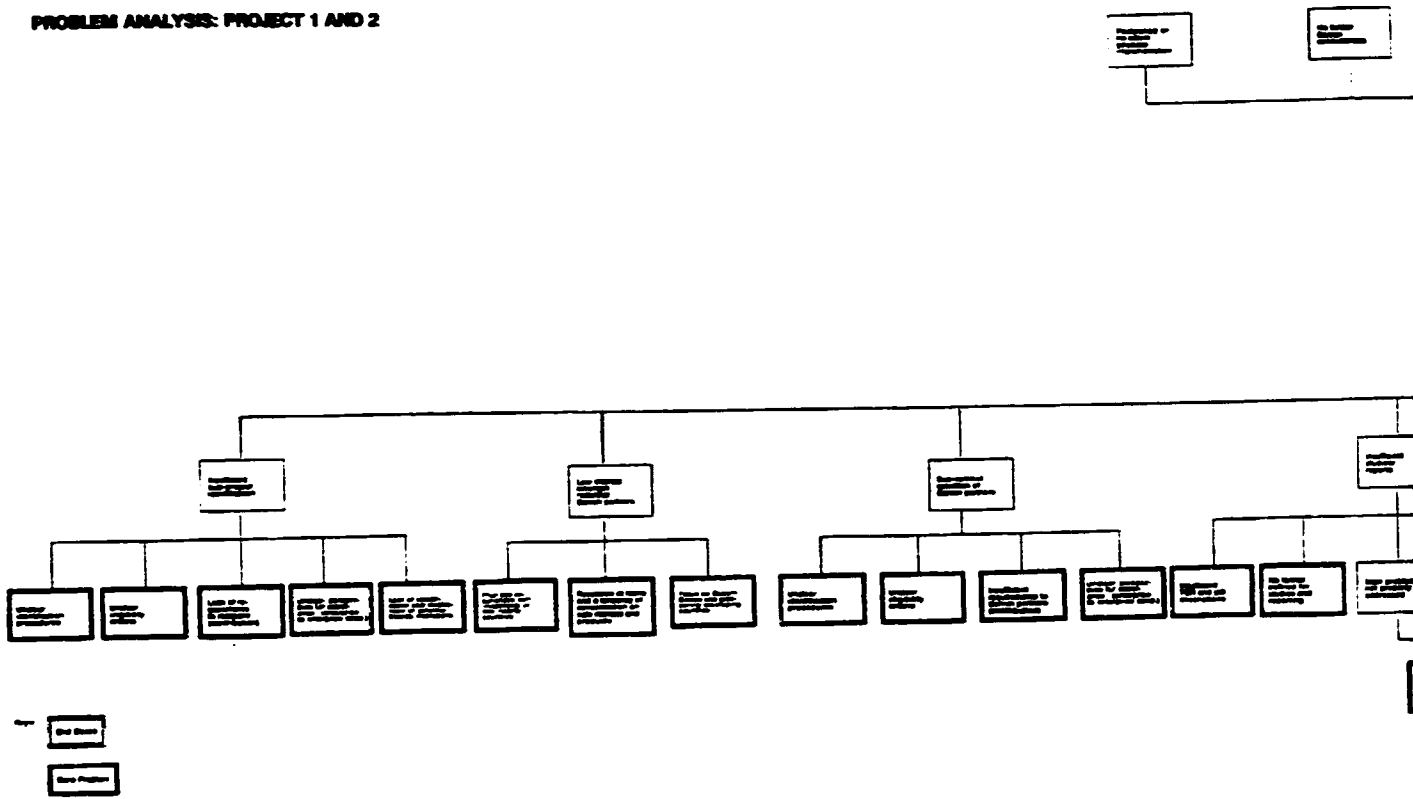
Hon. R. Fernandes Deputy Minister of Industry and Energy

Ms. L. da S. Carilho Former team member (local) for UNIDO study on milling

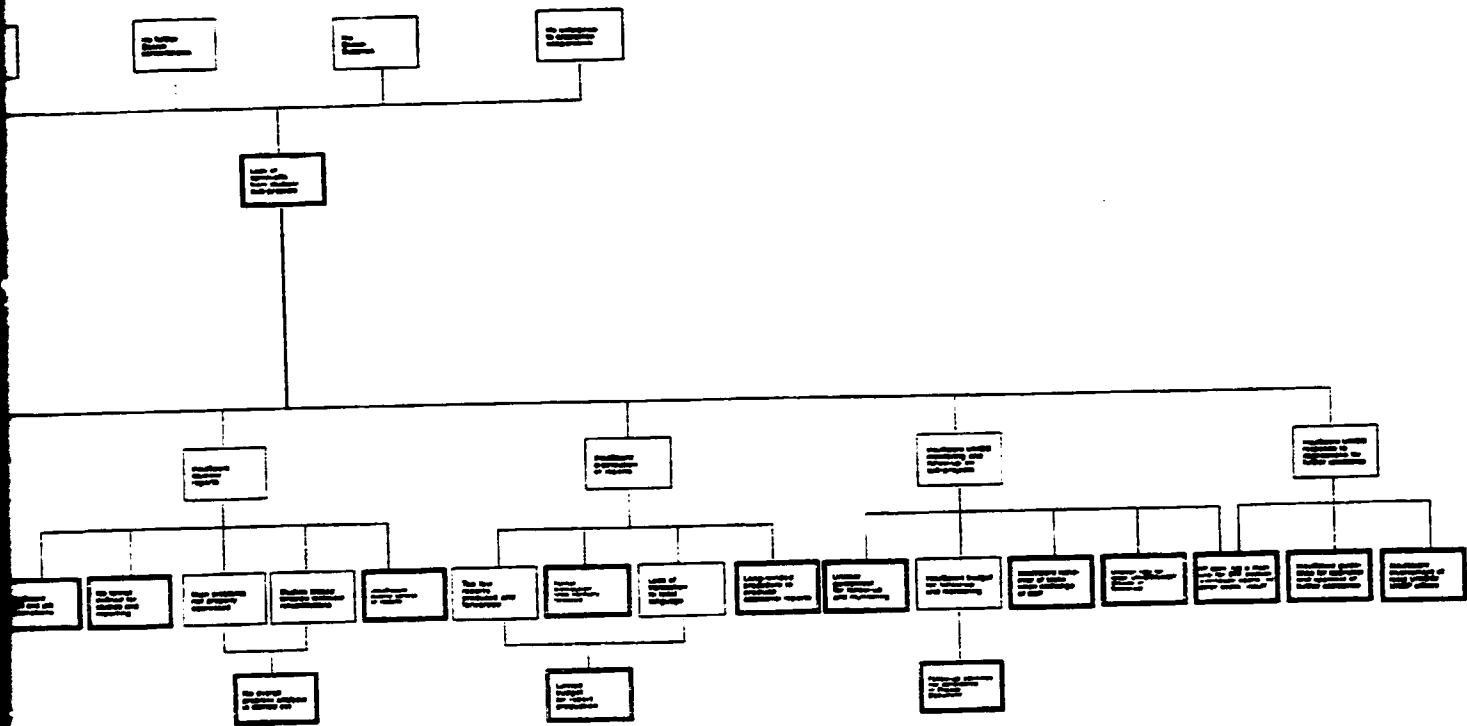
1 - 8 June 1993, UNIDO, Vienna:

Miss A. Suzaki Industrial Investment Division

PROBLEM ANALYSIS: PROJECT 1 AND 2



SECTION 1]



SECTION 2