



UNITED NATIONS INDUSTRIAL  
DEVELOPMENT ORGANIZATION

*Restricted Distr.*  
ADM/EVA/R.6  
24 July 2003

ORIGINAL: ENGLISH

---



**Integrated Programme For Private Sector Development,  
Enhanced Industrial Competitiveness and  
Environmentally Friendly Production**

Report of the Independent Evaluation \*

---

\*The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

Mention of company names and commercial products does not imply the endorsement of UNIDO.

The views and opinions of the team do not necessarily reflect the views of the Government of Ethiopia and of UNIDO.

This document has not been formally edited.

## **Acknowledgment**

The evaluation team would like to thank all persons met and especially all persons involved in planning and realizing the mission. We hope that some of the proposed recommendations will contribute to the continuous improvement of the Programme and to the achievement of the expected results.

## Table of Contents

Map of Ethiopia	4
Acronyms and Abbreviations	5
Executive Summary	7
Follow up on Recommendations	11
1. INTRODUCTION	17
2. PROGRAMME WIDE EVALUATION	
2.1 Programme relevance	18
2.2 Programme design	20
2.3 Funds mobilization	21
2.4 Implementation, management and coordination	22
3. PROGRAMME RESULTS	
3.1 Results at policy level	29
3.2 Results at institutional level	29
3.3 Results in human resource development	30
3.4 Results at enterprise and community level	30
4. PROGRAMME INTEGRATION	
4.1 Coordination with UNDAF and other multilateral and bilateral programmes	32
4.2 Integration within the programme	32
5. THE FUTURE FOCUS OF THE INTEGRATED PROGRAMME	
5.1 Programme structure and priorities	36
5.2 Institutional linkages with the private sector and coordination mechanism	39
6. EVALUATION BY COMPONENTS	
6.1 Ranking of (Sub-) Components by Selected Criteria	40
6.2 Component 1A – Agro-Industries: Leader Industry	42
6.3 Component 1B – Agro-Industries: Food Industry	47
6.4 Component 1D – Agro-Industries: Agricultural Machinery and Tools	55
6.5 Component 2 – Promotion and Development of Micro, Small and Medium Enterprises	58
6.6 Component 3 – Quality, Standardization and Certification for Industrial Competitiveness	63
6.7 Component 4 – Investment and Technology Promotion	66
6.8 Component 5A – Cleaner Production	69
6.9 Component 5B – Industrial Energy Efficiency and Renewable Energy Development	74
6.10 Component 6 – Strengthening the MoTI and Related Institutions	78
7. LESSONS LEARNED	85
List of Annexes	
Annex I – Summary Terms of Reference of the In-depth Evaluation	86
Annex II – List of Persons Met	90

Map of Ethiopia



## **Abbreviations and Acronyms Used In This Report**

<b>ADLI</b>	Agriculture Development Led Industrialization
<b>BMEIA</b>	Basic Metals and Engineering Industry Agency
<b>CFC</b>	Common Fund for Commodities
<b>CP</b>	Cleaner Production
<b>ECPC</b>	Ethiopian Cleaner Production Centre
<b>ECST</b>	Ethiopian Commission for Science and Technology
<b>EMIA</b>	Ethiopian Manufacturing Industries Association
<b>EMS</b>	Environmental Management System
<b>EPA</b>	Environmental Protection Agency
<b>ESALIA</b>	Eastern and Southern Africa Leather Industries Association
<b>ESID</b>	Environmentally Sustainable Industrial Policies
<b>ETA</b>	Ethiopian Tanners Association
<b>ETP</b>	Effluent Treatment Plants
<b>ESID</b>	Environmentally Sustainable Industrial Development
<b>EU</b>	European Union
<b>FIAS</b>	Foreign Investment Advisory Service
<b>FEMSEDA</b>	Federal Government Development Agency for Small and Medium Enterprises
<b>GEF</b>	Global Environment Facility
<b>GTZ</b>	German Development Cooperation
<b>HACCP</b>	Hazard Analysis and Critical Control Point
<b>HQ</b>	Headquarters (UNIDO)
<b>IDDA</b>	Industrial Development Decade for Africa
<b>IIPP</b>	Industrial Investment Project Profile
<b>IP</b>	Integrated Programme
<b>JPO</b>	Junior Professional Officer
<b>LLPTI</b>	Leather and Leather Products Technology Institute
<b>MEDAC</b>	Ministry of Economic Development and Cooperation
<b>MIGA</b>	Multilateral Investment Guarantee Agency
<b>MoA</b>	Ministry of Agriculture
<b>MOFED</b>	Ministry of Finance and Economic Development
<b>MoH</b>	Ministry of Health
<b>MoTI</b>	Ministry of Trade and Industry
<b>MSME</b>	Micro, Small and Medium Enterprises
<b>NCPC</b>	National Cleaner Production Centre
<b>NGO</b>	Non Government Organization
<b>PDTS</b>	Pilot Demonstration and Training Sites
<b>PHL</b>	Post-harvest Losses
<b>PPP</b>	Private Partnerships
<b>PROINVEST</b>	Partnership Programme for the Production of Investment and Technology Flows to the ACP Countries
<b>PRSP</b>	Poverty Reduction Strategy Paper
<b>QSAE</b>	Quality and Standards Authority of Ethiopia
<b>REMSEDA</b>	Regional Government Development Agency for Small and Medium Enterprises
<b>R&amp;D</b>	Research and Development
<b>RTPDC</b>	Rural Technology Promotion and Development Centre
<b>SME</b>	Small and Medium Enterprise
<b>SPPD</b>	Support Programme for Project Development
<b>TL</b>	Team Leader
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNDP</b>	United Nations Development Programme

<b>UNDAF</b>	United Nations Development Assistance Framework
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>UR</b>	UNIDO Representative
<b>USD</b>	United States Dollar
<b>WB</b>	World Bank
<b>WHO</b>	World Health Organization

## **Executive Summary**

### **Programme Relevance**

***Private sector development and competitiveness are at the center of the new industrial development strategy of the Government.***

*The objective of the IP to support private sector development and investment, develop agro-industries, and mobilize internal resources to enhance industrial competitiveness and environmentally friendly production has been - and continues to be - of high relevance with respect to country priorities and policies. The programme is relevant in particular in light of the new Industrial Development Strategy, which focuses on the creation of an enabling environment for private sector development as the driving force for economic growth and which puts the competitiveness of manufacturing industries at its core. The programme is also of relevance to the ongoing efforts to strengthen public/ private sector dialogue and cooperation platforms as well as in light of present multilateral and bilateral assistance programmes in support to private sector development.*

### **Programme design**

***A comprehensive response to problem areas. However the IP document is basically a collection of projects and activities are spread too thin.***

*The IP document is a good attempt to provide a comprehensive response to problem areas and was, on the whole, prepared on the basis of a good consultation process with the Government and counterparts. However, also in light of funding limitations and along the lines of the “first generation” IPs, the Ethiopia IP spreads activities too thin and basically consists of a collection of projects under one umbrella.*

### **Funds mobilization**

***Most of the funding had already been identified prior to the IP; high contribution from UNIDO seed money; low Government contribution and participation in funds mobilization. Some fundamental components could not be implemented due to lack of funds.***

*The IP's original budget was in the amount of US\$ 10.5 million out of which around 50% had already been identified based on a series of pipeline projects for which potential donors were available. Actual funding mobilized was US\$ 7.5 million out of which US\$ 1 million was provided by UNIDO's own funds (Regular Budget). The government and counterparts' contribution were minimal and provided in kind.*

*Those projects that received full or most of the funding and which could be planned accordingly had much better prospects of success and indeed better and longer lasting results. Some fundamental components, which could have constituted the backbone of the programme and would have enhanced achievement of results (particularly those relating to Quality and*

*Investments), could not be implemented as originally conceived due to lack of funding. Major delays occurred in the course of the project approval process by the Government.*

### **Implementation**

***Inputs delivered efficiently; less use of international expertise, particularly of short-term nature, advisable; closeness to private sector is a pre-condition for successful delivery of services.***

*In general inputs were provided in an efficient manner. Most international experts provided excellent services, such as in the leather component; a few international experts were of lower quality (e.g. in information technology, food processing). Short-term advisory services by international experts (e.g. pilot companies under the quality and food processing components) were a costly approach of limited impact and sustainability. The national experts were of high standards.*

*The most successful components, like the leather products and the tannery pollution ones, achieved good results mainly in view of a strong private sector involvement.*

### **Management and coordination**

***An effective and committed team and good coordination mechanisms in place.***

*The IP team in Vienna and in the field, in particular the team leader, performed their functions in a committed and high quality manner. In addition to the technical backstopping functions, the team leader and some of the team members played a pro-active coordination, promotional and networking role. The national coordinator, conversant with country procedures, rules, regulations and expectations, has been of importance for the coordination of the IP.*

*Project and programme level coordination mechanisms have been in place and achieved in certain instances (e.g. food safety component) excellent results in terms of inter-institutional cooperation.*

### **Programme Integration**

***Benefits in economic terms rather modes but increased visibility in the country achieved.***

*Coordination of activities among several components, as well as with some external programmes has taken place. The most frequent form of internal integration is coordination of inputs and activities. Targeting the same group of beneficiaries also occurred in a number of cases (SME in leather sector) but sometimes (food sector) it “just happened” without coordination of the interventions in advance. In economic terms the current benefits of synergy among programme components are not very significant. Some of the cooperation is yet to be implemented; some benefits may evolve over a longer period of time. However, there are some intangible benefits resulting from cooperation among components such as better awareness of each other services and activities, mutual promotion and, thus, increased visibility of the programme in the country.*

### **Ranking by (sub) components**

*In the course of evaluation the evaluation team undertook an effort to rank each of the 16 components or sub-components along five criteria: relevance, ownership, results, sustainability and cooperation. The average values indicate that the IP as a whole reached the level “acceptable” in all criteria. The great majority of components (12 out of 16) performed better than acceptable. All components of the leather sector and some components of environment and food sector achieved high ranking. The only components indicating less than acceptable performances are the food processing, pesticides and information network. It is worth noting that particularly Relevance and Ownership could be on average considered as satisfactory. The ranking of Components is as follows:*

<b>Ranking</b>	<b>Value</b>	<b>Components</b>
1	24	1A Leather products
2	23	5A ESID
3	22	1A Tanneries; 1B Food safety; 5A ECPC
4	20	1A LLPTI
5	19	5B Energy
6	18	3 QSAE
7	17	2 MSME; 4 Investment promotion
8	16	1B Post-harvest losses; 6 Competitiveness
9	14	1D Agro machinery
10	12	1B Food processing
11	10	1E Pesticides
12	9	6 Information network

### **Programme Results**

***Tangible results in the leather sector and good prospects of impact at the environmental policy level.***

*The programme has produced a significant number of planned outputs and outcomes. Results with high prospects for impact have been achieved at the environmental policy level and at the institutional level through the establishment of the Leather and Leather Product Technology Institute and the Ethiopian Cleaner Production Center. Promising results have been achieved at the enterprise and community level through the effluent treatment plants, the upgrading of the quality of leather garments and footwear and the introduction of cleaner production and HACCP at the company level. The most tangible results with a bearing on the economy and on exports have been achieved in the leather sector also thanks to previous projects.*

### **Future focus of the IP**

***Enhancing the competitiveness of industrial products in the leather and food sectors and strengthening institutional linkages with the private sector should be the strategic focus of the next IP phase.***

*A sharper focus of the IP is recommended considering present Government policies and priorities and based on a realistic assessment of funding. In line with the new Government industrial development policy, the new phase of the IP should focus on strengthening the competitiveness of industrial products as a means for economic growth and poverty reduction. Quality and conformity in manufacturing should be at the center of the new phase. The leather sector should continue to be supported building upon the momentum already established with previous support. The food sector should be awarded priority particularly in order to improve the quality and safety of food products. Activities having a direct impact on the alleviation of poverty, in particular those in support to the development of micro and small scale enterprises should continue with a focus on regional and private sector development. Participation of the private sector (Chamber of Commerce and Industrial Manufacturing Association) in the management of the IP should be strengthened and formalized in order for the IP to be more effective and to constitute a platform for demonstrating public-private partnerships in a pragmatic manner.*

## IP Ethiopia In-depth Evaluation Follow-up on Recommendations

Issue/ Component	Recommendations	Responsible for Action	Control Timeline
<b>Programme Design and focus of IP 2</b>	Better application of the logical framework, inclusion of baselines, specific result indicators, counterpart ownership and absorption capabilities as well as realistic assessment of funding possibilities. Draft IP 2 on the basis of the refocussing recommended in this report.	Generic management issue; Ms. A. Calabro for formulation of IP2	12 months
<b>Funds Mobilization</b>	UNIDO should revisit the seed money allocation strategy and avoid starting of activities which have limited funding prospects.	Mr. A. De Groot Ms. A. Calabro	12 months
	Donors should be approached as a group and requested to consider providing a pool of resources to the programme minimizing the project by project funding approach.	Mr. A. De Groot Ms. A. Calabro	12 months
	Study possibilities to introduce revolving fund mechanisms in the food sector along the lines of the Revolving Fund mechanism piloted by the Leather goods sub-component.	Mr. A. Ouauich Mr. A. De Groot	12 months
	Services relating to the private sector (e.g. cleaner production; energy efficiency; advice on design and marketing etc.) should increasingly be provided on cost sharing basis.	Ms. A. Calabro	24 months
	The Government should in future take a more active role in funds mobilization and, whenever possible, also co-sponsor key activities.	MoTI MOFA	12 months
<b>Implementation, Management and Coordination</b>	UNIDO should ensure an enhanced participation of counterparts in the decision-making process relating to implementation. Consultation should take place in particular on the selection of experts and on the evaluation of their performance. Counterparts should ensure a timely response.	Ms. Calabro Team Members MoTI	12 months
	Counterparts should use the newly established consultants' evaluation system.	All IP counterparts MoTI	12 months
	Counterparts should improve the selection of training candidates (priority criteria should be their professional qualifications).	IP counterparts	12 months
	UNIDO, in consultation with the relevant counterparts, should revisit the approach of providing short- term international advisory services.	Ms. A. Calabro Team Members	12 months

	The Government should continue improving the timing for internal processing of documents.	MoTI	12 months
	UNIDO and counterparts should ensure that implementation linkages with the organized private sector should be further strengthened.	Ms. A. Calabro Team Members MoTI	12 months
	UNIDO should ensure that the information flow to donors at field level be improved.	UNIDO Rep.	12 months
	UNIDO should ensure to the extent possible the continuity of component management.	Managing Directors	12 months
	UNIDO should address the issue of coordination, supervision and monitoring of the IP within the vertical/director level structure.	Managing Directors	3 months
	UNIDO and the Government should address the issue of IP coordinator and formalize this position. The Government should respond to the pending request by UNIDO to fund or at least co-fund the position.	UNIDO Rep. MoTI Ms. Calabro	3 months
<b>Component 1A Agro-Industries: Leader Industry</b>	a) LLPTI		
	Provide advice to LLPTI on institutional development, including salary schemes and other motivational mechanisms in order to ensure stability of professional staff. Assist LLPTI also in developing a strategy how to raise demand for LLPTI services.	Ms. A. Calabro	12 months
	Study the proposal made by EMIA to use – without any additional requirement for investment - some parts of the LLPTI for the textile and garment sectors (particularly training in design).	Ms. A. Calabro MoTI	3 months
	b) Tanneries		
	Complete and commission as soon as possible the two new ETPs.	Ms. A. Calabro	3 months
	In the new phase of the IP, focus primarily on technical advice to tanneries wishing to rehabilitate or establish ETPs with their own resources.	Ms. A. Calabro	12 months
	c) Leather products production capabilities		
	Continue this support (including partnership promotion) as key mechanism to enhance export performance of the sector. Combine direct support to companies with supporting activities hosted or carried out by LLPTI.	Ms. A. Calabro	12 months
Proceed with further elaboration of the leather district concept for Ethiopian conditions.	Ms. A. Calabro	6 months	
<b>Component 1B Agro-industries: Food Industry</b>	a) Post-harvest losses Review possibilities of allocating responsibilities and raising interest for maintenance services for the equipment delivered by the project, using also the repayment funds for this purpose.	Mr. A. Ouaouich	6 months

	Prior to continuation of such a PHL programme carry out a comprehensive survey of all PDTs focusing on - use of the delivered equipment, - replication of the technology in the area.	Mr. A. Ouaouich	6 months
	In case of continuation, establish contact with FAO in order to share their experience and make use of their training materials and manuals.	Mr. A. Ouaouich	12 months
	b) Processing technologies		
	Submit the reports as soon as possible.	Mr. A. Ouaouich	2 months
	Reformulate the project in such a way that the remaining funds are used for fully relevant activities.	Mr. A. Ouaouich	2 months
	If involved in initial planning of the Food Centre the IP may consider to pursue a stage-wise process starting with building up capacities for which the demand is most obvious (testing) and only later proceeding to training and advisory services.	Mr. A. Ouaouich	12 months
	c) Food safety		
	Continue supporting both the efforts to establish the food safety system and to introduce HACCP in the pilot companies.	Mr. A. Ouaouich	12 months
	When preparing Phase 2 of the IP consider food safety as an important factor of trade facilitation; in this context support establishment of an independent central laboratory with primary obligation for food safety.	Mr. A. Ouaouich	12 months
<b>Component 1D Agro-industries: Agricultural Machinery and Tools</b>	Agro-machinery remains a highly relevant area for UNIDO support. Two specific fields should be considered: -building up demand-oriented capabilities for maintenance of equipment procured by the PHL project as well as other equipment operated by the farmers, - building up demand-oriented capabilities to produce, maintain and service equipment for water pumping and conservation.	Mr. Samarakoon	12 months
<b>Component 2 Promotion and Development of Micro, Small and Medium Enterprises</b>	Continue and strengthen coordination with other Agencies, in particular UNDP and the EU.	Ms. T. Ulusay De Groot	12 months
	Identify synergies with Organizations providing financial services	Ms. T. Ulusay De Groot	12 months
	Continue regional and private sector orientation; work closely and directly through ReMSEDAs and use FeMSEDA mainly for coordination functions.	Ms. T. Ulusay De Groot MoTI	12 months
	Support the Oromia ReMSEDA in their matchmaking activities and expose their staff to methodologies, practices and experience of UNIDO Subcontracting Exchange.	Ms. T. Ulusay De Groot	12 months

	Continue assistance to bridge the period required for ensuring sustainability of the regional institutions. Look into the opportunities of additional funding by Austria and/or other donors in view of good results so far.	Ms. T. Ulusay De Groot Mr. A. De Groot	6 months
	Consider expanding the project to other regions in close dialogue with GTZ, EU, and other partners	Ms. T. Ulusay De Groot	12 months
	Prepare a joint study/publication with GTZ on the experiences acquired; involve Austria and other interested partners/ donors.	Ms. T. Ulusay De Groot	12 months
<b>Component 3 Quality, Standardization and Certification for Industrial Competitiveness</b>	Consider QSAE as one of the key organizations supporting competitiveness of industry and facilitating trade and provide support to these functions in the new phase of the Integrated Programme.	MoTI Mr. S.Kaeser	6 months
	Provide support particularly in the following areas: - establishing quality management systems (ISO, EMS, HACCP) -establishing and/or strengthening testing laboratories (microbiology; textile; coffee) - upgrading the metrology laboratory	MoTI Mr. S. Kaeser	12 months
	When designing future support to QSAE in the above areas adhere to the following principles: - participation of industry associations from the very beginning of the planning stage, - avoidance of duplication with testing services carried out satisfactorily by existing laboratories, - maximal use of available national expertise and networking with potential partners (laboratories in Ethiopia, quality and standardization bodies abroad)	MoTI Mr. S. Kaeser	6 months
<b>Component 4 Investment and Technology Promotion</b>	When completing the Austria funded project, promotional support should be given primarily to projects having a potential to be developed into partnerships with investment in manufacturing.	Mr. M. Kulur	3 months
	The future role of UNIDO should be primarily in networking for investment promotion. The approach followed should go beyond generic promotional activities. In order to make use of synergy advantages within the IP, project profiles should be identified and promoted within the context of the sectoral activities of the IP (Leather and Food).	Mr. M. Kulur Mr. Ouaouich Ms. Calabro	12 months
<b>Component 5A Cleaner Production</b>	a) ECPC		
	Proceed with implementation of the Action Plan as outlined in the Business Plan.	Mr. M. Eisa	12 months

<b>Production</b>	The Business Plan – due to its innovative features – should be used by the UNIDO NCP Program as a source of inspiration for other NCPs.	Mr. M. Eisa	3 months
	A modus operandi in backstopping EMS and ISO 14000 projects should be agreed upon at UNIDO HQs between the Environment and QSM Branches.	Ms. A. Calabro Mr. M. Eisa Mr. S. Kaeser Directors of AGR; PEM; and ITP	3 months
	<b>b) ESID</b>		
	Extend – without any additional funding requirement - the ESID project by additional 6 months to carry out awareness raising campaign in the regions and to elaborate ambient environmental standards.	Mr. M. Eisa	2 months
	Install the EPA laboratory equipment in the new premises and commission it as soon as possible in order to be ready to perform inspection functions once the policy and regulations are adopted.	Mr. M. Eisa	2 months
	Check mutual compatibility of the draft Environmental Policy and the newly drafted National Industrial Policy and try to introduce cross-references.	Mr. M. Eisa Ms. R. Touré Ms. A. Calabro MoTI	2 months
<b>Component 5B Industrial Energy Efficiency and Renewable Energy Development</b>	Carry out the missing training to complete staffing of the service unit	Mr. M. Eisa BMEIA	6 months
	So far training and capacity building has been carried mainly in technical fields. There is also a need for economic training (how to calculate the savings in economic terms) and management training (how to start, promote and manage the consultancy job).	Mr. R. Kaufersch BMEIA	6 months
	Prepare a business plan along the lines of the one prepared for ECPC (with identification of services for which demand can be created).	Mr. R. Kaufersch BMEIA	6 months
<b>Component 6 Strengthening MoTI and Related Institutions</b>	Immediate finalization by UNIDO of the competitiveness analysis and holding of a workshop to ensure that the study is accepted and broadly publicized. Funding for the workshop to be ensured.	Ms. R. Touré MoTI	2 months
	Additional training of MOTI staff to be organized and funded by the Ministry.	Ms. R. Touré MoTI	12 months
	Government to ensure that the Policy Review is circulated immediately. Capacities and capabilities for the continuation of this activity to be ensured by MOTI.	MoTI	2 months
	UNIDO with the support of MOTI to constitute integral part of the Private Public Dialogue fora promoted by UNDP on the basis of the concept that was originally conceived by UNIDO under the IP.	UNIDO Rep.	6 months

<b>Subcomponent 6.1</b>	<p>A three-step approach is recommended and listed below in order of priority.</p> <p><b>Priority 1:</b> immediate connection by UNIDO staff (to be selected among the Information Technology specialists) of the network within MOTI; training to at least allow for the use of the web server, the database server and the firewall.</p> <p><b>Priority 2:</b> subject to funding availability and backstopping capabilities, advise and decide with the nodes on the configuration of the database.</p> <p><b>Priority 3:</b> subject to availability of funding, design, programme and install the network.</p>	Ms. A. Calabro Mr. Rwendire (IT Task Force)	1 month
	Industrial information appears to be a field where a personalized approach is followed. The findings under this evaluation confirm previous ones that there is no common and corporate methodology. This lack of corporate approach is not of help to counterparts and wasteful in terms of resources.	Managing Directors of PTC, PCF and Comptroller General	3 months

## 1. INTRODUCTION

The mid-term independent evaluation of the Integrated Programme in Ethiopia was proposed by UNIDO within the context of a series of evaluations of the first generation of Integrated Programmes launched in 1999. The evaluation was discussed with the Minister of Trade and Industry, H.E. Girma Birru at a meeting in Vienna in February 2003 and was based on the Terms of Reference dated 24 March 2003, attached in Annex I.

The evaluation aimed at assessing in a systematic and participatory manner and as objectively as possible the relevance, efficiency, results and sustainability of the programme. The evaluation was to be conducted at two levels: evaluation of funded programme components and evaluation of the programme as a whole covering programme integration and other organization wide evaluation issues.

The evaluation team was composed of:

*Donatella Magliani, Senior Evaluation Officer, UNIDO Evaluation Group, Team Leader*

*Lelissa Daba, National Consultant*

*Jaroslav Navratil, Senior Evaluation Consultant*

The evaluation team carried out an extensive analysis of various sources of information, including all the available programme and component level reports and the self-evaluation reports prepared by the team members and the team leader in consultation with the counterparts. All members of the UNIDO IP Team were consulted prior to the field mission and informed of the preliminary findings of the evaluation.

The field mission (5-16 May 2003) consisted of an extensive plan of visits and interviews of stakeholders, all counterpart organizations and selected beneficiaries. The evaluation team met with representatives of donor countries during the field mission. Representatives of Austria and Italy participated in meetings and visits relating to components funded by the respective Governments.

The list of people met is attached in Annex II.

The preliminary findings of the mission were presented to the counterparts upon completion of the field visit at a meeting chaired by H.E. Minister of State Tadesse Haile.

The evaluation was conducted following the guidelines for evaluation dated August 2002, which are based on international UN and DAC standards and principles.

The evaluation was funded by the UNIDO Regular Budget.

The evaluation team would like to express its appreciation to the IP management, the IP team and the Field Office for the excellent organization of the evaluation mission and the continuous support that was provided throughout the evaluation exercise.

## **2. PROGRAMME WIDE EVALUATION**

### **2.1 Programme Relevance**

#### **Relevance when the IP was formulated**

The objective of the IP was to support private sector development and investment, develop agro-industries, and mobilize internal resources to enhance industrial competitiveness and environmentally friendly production. The issues selected by the IP were of high relevance to the Government's efforts to introduce market oriented economic reforms and making the private sector engine of growth. This policy clearly called for developing or strengthening appropriate institutions and building the necessary human capacity to support them, an approach that was followed in virtually all the IP components. The IP was also formulated in support to the implementation of the Government's agriculturally led industrialization strategy (ADLI) which had been designed to bring about a structural transformation of the economy in which the relative weight of agriculture, industry and services would change significantly towards the latter two.

UNIDO support services were thus grouped into six broad categories, or components, selected as the most suitable response to the Government's and private sector's challenges, as follows:

1. Support to agro-industries with focus on leather, food and textiles aimed at creating linkages between agriculture and industry, utilizing domestic raw materials with labor intensive technologies and ensuring supply for domestic and export markets
2. Promotion of industrial partnership and investments with focus on establishing the capacity to identify and promote investment opportunities.
3. Development of environmentally sustainable industrial policies (ESID), cleaner production and energy efficiency with the objective of creating a sustainable balance between industrial development and environmental management and conservation.
4. Quality management, standardization and certification for industrial competitiveness of products for the local and export markets.
5. Promotion of Micro, Small and Medium Enterprises with the objective of integrating this important sector of the economy in the attainment of the ADLI strategy, enhancing its production capacities and emphasizing the advancement of women.
6. Strengthening the capacity of the Ministry of Trade and Industry (MoTI) in information technology and policy development and implementation.

The choice of this broad range of areas of support demonstrates relevance and the extent of the demand to the programme. Considering that prevailing international support to the country at that time mainly emergency and humanitarian, it is worth mentioning that the UNIDO IP was forward looking with its focus on private sector development, an issue that has now become central in Ethiopia's development agenda. The programme also represented a good attempt to identify in a comprehensive and coherent manner key industry related constraints, a worthwhile and relatively difficult exercise considering the absence at the time of programme formulation of a comprehensive industrial development strategy.

However, a few outputs proved to be too ambitious (see details in the evaluation of Components).

#### **Present and future relevance**

In the meantime a number of important policy developments have taken place that underline the present and future relevance of the IP.

1. A number of policies and strategies having significant direct relevance to industrial activities have been issued. These include the investment strategy and law, the export promotion strategy, the privatization strategy, the micro-enterprises development strategy and the standardization strategy and three

environment related proclamations by the Parliament, the most relevant for this IP being the environmental control proclamation.

2. The reorganized Ethiopian Manufacturing Industries Association (EMIA) has developed a five-year strategic plan. The strategic goals of the Association include the following:

- Work to build the capacity of the sector in order to empower it to face the challenges of global competition through skill development programmes, financial capacity building, coordination and integration of national private sector development efforts, enhancing the productivity of the sector by upgrading its infrastructure through introduction of appropriate technologies etc.
- Put industrial development at the core of the national development programme.
- Expand the Association's relationship with national and international organizations that target private sector development and build its own capacity.

In an interview with the evaluators, the President of EMIA stressed that EMIA's expectations with respect to UNIDO are the provision of support to overcome technological weaknesses and support the private sector to select the most suitable technologies available in the market. Entrepreneurial development and support in mobilizing industrial development financing through investments, subcontracting arrangements and revolving fund mechanisms are also of priority. Finally, UNIDO should help solve market impediments and support Ethiopia in overcoming its image problems, as was done successfully in the leather products sector.

3. Another significant development in connection with present and future relevance of UNIDO programme is the fact that the Poverty Reduction Strategy Paper (PRSP) prepared by MOFED in July 2002 stresses the importance of the promotion of economic growth and increasing the income earning capacity of the poor. The PRSP includes a full chapter on private sector development that envisages strengthening private sector growth and development, especially in industry, as means of achieving off-farm employment and output growth. The PRSP also emphasizes the need for a rapid export growth through the production of high value agricultural products and increased support to export oriented manufacturing sectors, particularly intensified processing of high quality hides and skins, leather and textile garment.

4. As far as the UN Development Assistance Framework (UNDAF) is concerned, the relevance of UNIDO is linked to the strategic area relating to sustained economic growth, particularly the support to be provided by the UN to Ethiopia in the transition to a market oriented economy and the strategic area relating to productive employment, in particular the development of entrepreneurial, skills and business capacity of SMEs.

5. Another relevant development in the last two years is the increasing recognition of the importance of public-private partnerships, a concept that had been included in the UNIDO IP and subsequently pursued by UNDP. In fact, according to information provided by the chairman of the IMEA, UNIDO pioneered the concept of private public partnership within the context of celebrations of the Industrial Development Decade for Africa (IDDA) three years ago. The Forum assembled more than 100 participants from the private sector and led to Government participation at subsequent meetings. The Government acknowledges the key role played by UNIDO Director General in providing advice on public private mechanisms.

Today the main public-private consultative forum is the one consisting of Government agencies, chamber of commerce and industry and business associations. The forum is co-chaired by the Minister of Trade and Industry and the President of the Ethiopian Chamber of Commerce. The Forum holds regular meetings every three months. The relevance of the UNIDO IP with respect to the PPP Forum relates to the possibility of enriching and complementing the policy level dialogue with concrete and practical, on the ground experience on cooperation with the private sector through technical cooperation. This issue is elaborated in Chapter 5 of this report.

6. The most important development in the last few months is Ethiopia's Industrial Development Strategy, a white paper (available only in Amharic at the time of evaluation) that was prepared by the MoTI and already discussed with the Government. The focus of the strategy is to create an enabling environment

for private sector as the driving force for economic development. Manufacturing industries are the core priority of the strategy. The strategy sets a number of guiding principles and objectives for the Government including the creation of an enabling environment for private sector development, ensuring macro-economic stability, removing constraints on public sector development, and establishing an efficient judiciary system. The strategy recognizes the key role of an effective private public dialogue and of the continuous and proactive participation of the private sector in the implementation of the strategy. Infrastructure development and a much-strengthened financial sector, including the effective mobilization of domestic and foreign investments, are given high importance. The sectoral focus of the strategy is agro-based industries and the interrelationship between agriculture and industry. Labor-intensive industry and technologies, micro and small enterprises and export orientation are core issues. The priority industrial sectors are: garment and textiles, meat processing, leather and leather products, agro-processing, construction industries, micro and small scale industries and information technology.

The future Government policy will be to support only those private sector and industry related programmes that fall within the above priorities.

Considering the above policy developments and Government guidelines, it is clear that the UNIDO IP had a high degree of relevance and that this relevance has the potential of becoming even higher based on an update and refocusing of the IP in light of recent developments.

## **2.2 Programme Design**

The country context and the identification of the principle industrial development issues and problem areas are well delineated and justified in the original Programme Document. UNIDO response was clearly linked with the country policy and strategy. The IP document makes reference to the previous assistance provided by UNIDO, which was of particular relevance for the leather and food processing components. The document also refers to the active UNIDO pipeline and is very transparent in indicating which projects had been formulated and promoted prior to the IP. The Programme Document mentions that 50% of the funds had already been mobilized prior to launching of the IP.

Based on a Joint Communiqué between the Government and UNIDO, a multi-disciplinary mission visited Ethiopia from 20 to 30 April 1999 in order to formulate the Programme. The existing pipeline projects were incorporated into the IP document and other components identified jointly with the government were added. The formulation mission also visited donors and UNDP and identified opportunities and fields for potential synergy and coordination with the UN system and bilateral donors, which are listed in the IP document.

### **Findings:**

- The IP provides a good analysis of the country context and industrial development constraints/problems to be addressed. This analysis is due to the good knowledge of the country by the team leader who had a long exposure to Ethiopia through backstopping responsibilities of previous projects as well as to the prior formulation of projects covering several of the fields addressed by the IP. Despite the short formulation mission, the IP in Ethiopia does therefore not face the shortcoming in terms of definition of problem areas and programme objective that was observed in other IPs.
- The programme was also based on a good consultation process with counterparts and the Government and, with the exception of one of its components, is demand oriented.
- The IP is basically a structured collection of projects under one umbrella, a problem that was increased by donor "project level" funding modalities. In spite of that, the document is a good attempt to provide a comprehensive response to critical issues. However, along the lines of the IPs that have been evaluated so far, it spreads activities too thin, particularly in light of funding limitations.

- The logical framework is applied to components and sub-components with different degrees of compliance and clarity. One weakness is the fact that almost all components identify several objectives to the detriment of a clear definition of the key problem to be addressed by that specific component. The components are however well defined in terms of activities and milestones. There is also a commendable attempt to identify result (success) indicators; however there is still scope for improvement in terms of qualitative and quantitative definitions and specificity of the indicators.
- Inputs and budgets for large components or sub-components (such as 1A, 1B, 5A, and 6) are broken down by distinct segments (implementation projects). However, inputs and budgets are not related to outputs. This shortcoming, which is common to several IPs, makes it difficult to assess cost-effectiveness of outputs produced.
- The internal and external linkages are identified in the IP Document but are of a somewhat “cosmetic” nature and fail to indicate the benefits expected from such integration. In fact, the linkages are in general just a descriptive listing of possibilities of integration among components and with outside programmes. This weakness is due to the fact that no guidelines were available at the time of the formulation of the IP and that the concept of integration was not yet completely ripe and understood.

**Recommendation:** Better application of the logical framework, inclusion of more specific result indicators and the application of a more focused approach based on criteria such as value added of UNIDO, counterpart ownership and absorption capabilities as well as a realistic assessment of funding possibilities. Based on the logical framework and considering the challenging environment in Ethiopia, risks and critical assumptions (preconditions) should also be analyzed and included in the IP document.

### **2.3 Funds Mobilization**

The IP’s original budget was in the amount of USD 10.5 million out of which around 50% had been identified prior to the launching of the IP based on a series of pipeline projects for which potential donors were available. Actual funding mobilized was USD 7.5 million out of which USD 1 million were provided by UNIDO’s own funds (Regular Budget) based on the MOU between UNIDO and the former Minister of Trade and Industry in October 1999. The government and counterparts’ contributions were minimal and provided in kind. As for all other IPs, based on donor requirements and priorities, the Ethiopia Programme was in most cases promoted, funded and subsequently implemented following a project approach.

Full funding was ensured for the Component Agro-industries, Leather (Italy, Switzerland, CFC and UNDP); ESID (Netherlands); Ethiopian Cleaner Production Centre - ECPC (Italy); Industrial energy efficiency (Austria). 80% of the component MSME Development and Promotion was funded by Austria.

Despite the limited freely programmable seed-money available to UNIDO, the Organization made a special effort to at least partially cover the following key components: Quality, Standardization and Certification (36% of original budget); Investment and Technology Promotion (33%) of the original budget; and Strengthening of MoTI (42%) of the original budget. UNIDO also funded the food safety sub-component of the Agro-industries component.

Textile and garments, a component that was of high priority for the Government, could not be implemented at all.

#### **Findings:**

- As can be seen in detail under the report chapters regarding the respective components, those projects that received full or most of the funding and which could be planned accordingly had much better prospects of success and indeed achieved better results.
- Some fundamental components, which could have constituted the backbone of the programme and would have enhanced achievement of results (particularly those relating to Quality and Investments), could not be implemented as originally conceived due to lack of funding.

- In recognition of the relevance of some un-funded components, UNIDO seed money was allocated for at least part of the activities. While this decision was well justified, the lack and ad-hoc nature of the funding made available did not allow for the achievement of the expected results and, above all, the sustainability of the projects.
- The allocation of UNIDO seed money was done without the definition of a follow up plan for the mobilization of the additional resources required. Such a plan would have enhanced the probability for additional funding.
- Major delays occurred in the course of the project approval process by the Government MOFED/ former MEDAC. While this situation seems to be improving, a faster processing of documents would facilitate implementation, synergies and also avoid that activities become outdated.

**Recommendations:**

- The Government should in future take a more active role in funds mobilization and, whenever possible, also co-sponsor key activities. The Government should also continue improving the timing for internal processing of documents.
- UNIDO should revisit the seed money allocation strategy and avoid starting of activities, which have little, or limited funding prospects.
- Donors should be approached as a group and requested to consider providing a pool of resources to the programme avoiding the project by project funding approach. Several donors do recognize the shortcomings of this approach and are willing to revisit their own policies.
- Study possibilities to introduce revolving fund mechanisms in the food sector along the lines of the revolving fund mechanism piloted by the Leather goods sub-component. Representatives of industry are very keen and interested to pursue this kind of approach.
- Services relating to the private sector (e.g. cleaner production; energy efficiency; advice on design and marketing etc.) should increasingly be provided on cost sharing basis. The openness of the private sector to this has been verified.

**2.4 Implementation, Management and Coordination**

The total programme delivery is about USD 5.1 million out of USD 7.4 million funded components.

Table 1 provides details on funding by components and the relating implementation ratio by component and for the whole programme.

Graphs 1 and 2 show that the programme budget and relating expenses were used to a large extent for international and national experts, provision of equipment and training. The table shows that overall programme delivery amounts to 68% of the approved budget; inputs were provided with different degrees of efficiency, as outlined in detail in the chapters relating to the respective components.

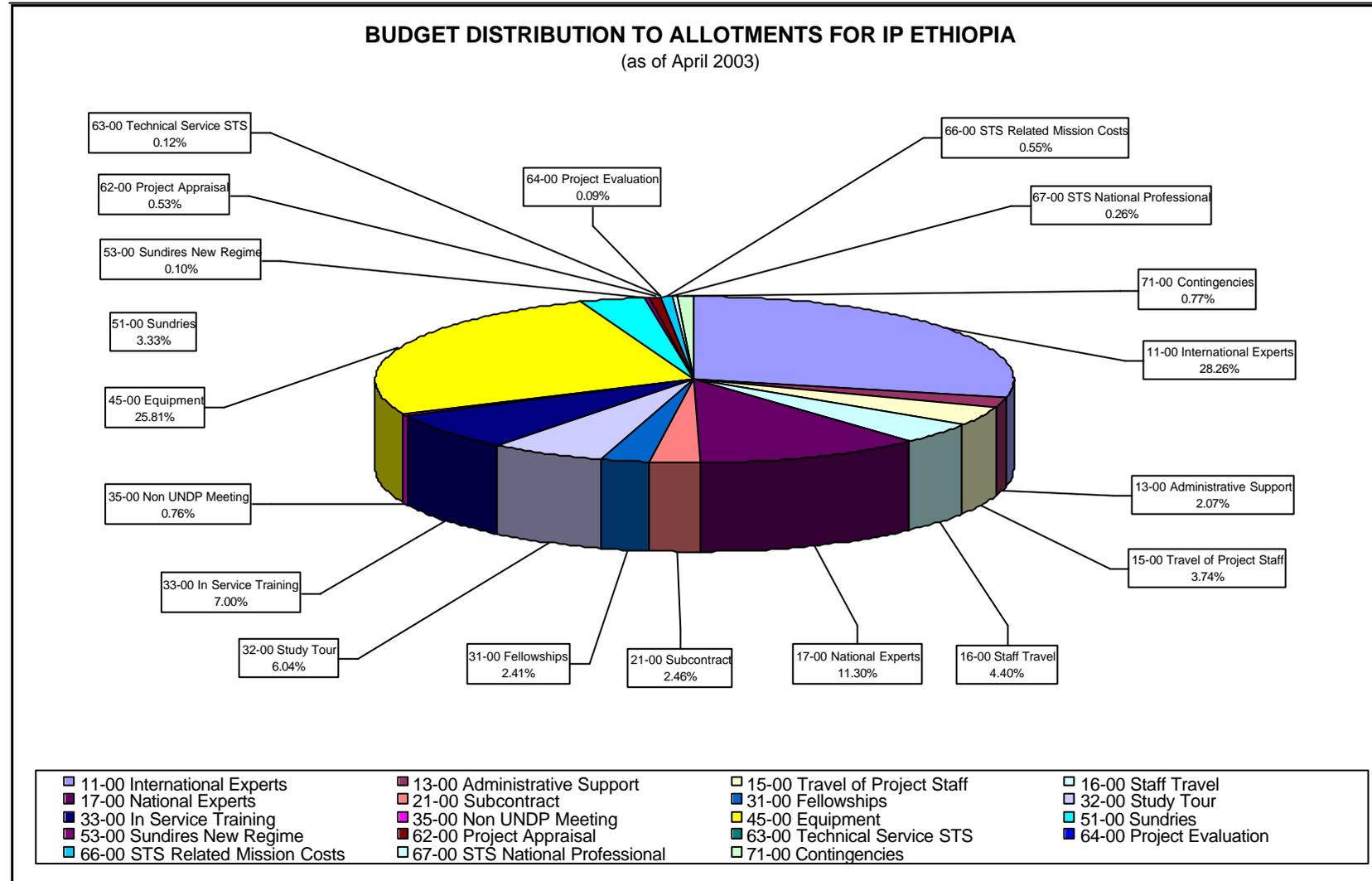
There were some delays in implementation due to funds mobilization procedures and failure to obtain funding for certain components as well as to the lengthy and cumbersome project approval procedures at Government's end. Furthermore, a number of changes of UNIDO staff in charge of backstopping (in particular the quality and the information technology components) resulted in a lack of continuity in approach and delivery.

Table 1

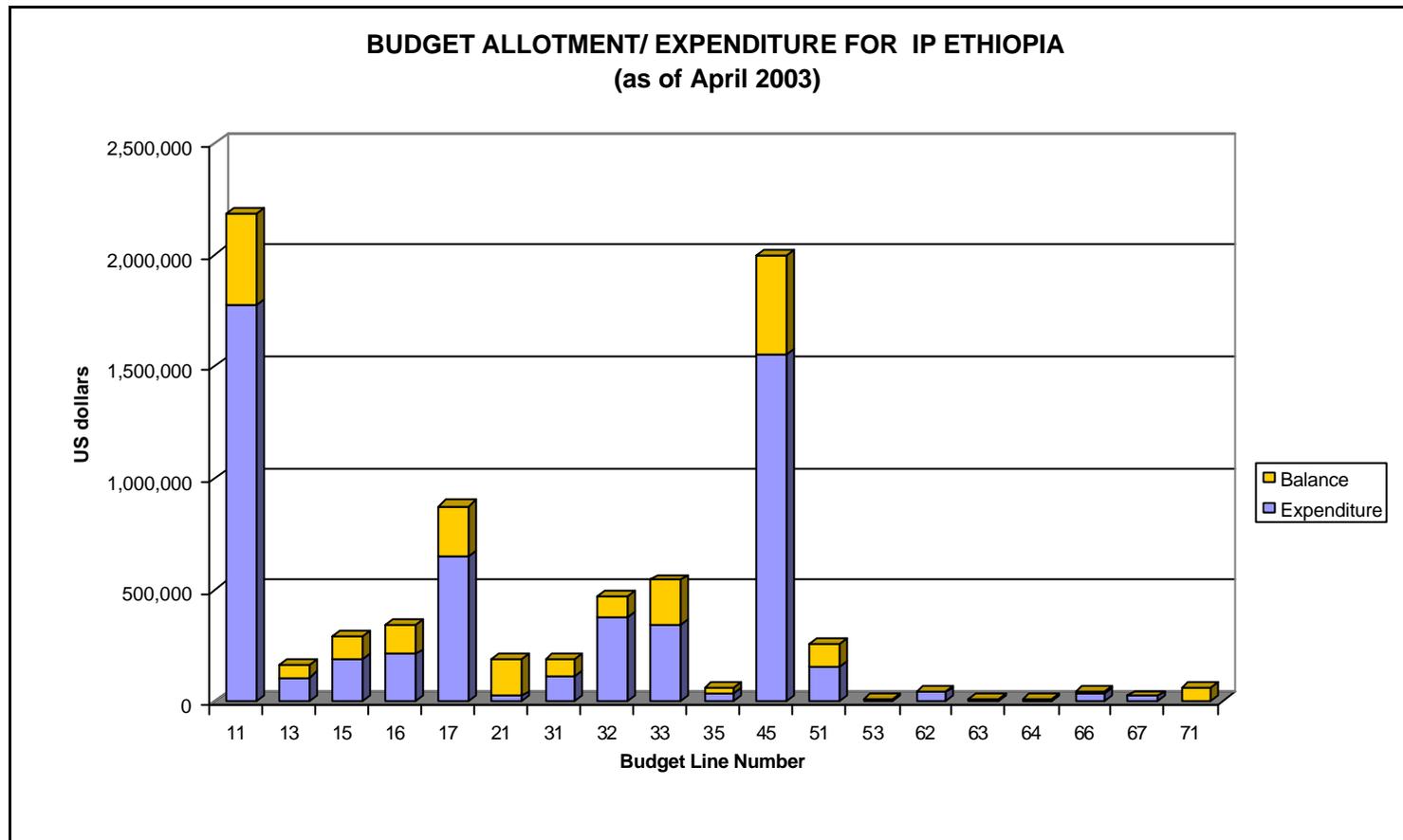
<b>IP Components</b>		<b>Original IP document</b>	<b>Funded (total allotment)</b>	<b>% Funded</b>	<b>Expenditures as of December 2002</b>	<b>% of Implementation</b>
<b>1A</b>	<b>Agro-Industries: Leather</b>	1,467,290	1,626,500	111%	1,012,079	62%
<b>1B</b>	<b>Agro-Industries: Food</b>	1,556,100	1,238,809	80%	1,113,946	72%
<b>1D</b>	<b>Agro-Industries: Agricultural Machinery and Tool</b>	786,000	232,966	30%	211,821	91%
<b>1E</b>	<b>Agro-Industries: Pesticides</b>	119,750	119,750	100%	102,823	86%
<b>2</b>	<b>Promotion and Development of Micro, Small and Medium Enterprises</b>	852,500	686,400	80%	349,911	51%
<b>3</b>	<b>Quality, Standardization and Certification for Ind. Competitiveness</b>	852,500	307,198	36%	301,995	98%
<b>4</b>	<b>Investment and Technology Promotion</b>	944,000	313,128	33%	160,437	51%
<b>5A</b>	<b>ESID</b>	1,327,000	1,413,546	107%	1,029,640	73%
<b>5A</b>	<b>ECPC</b>	708,000	708,000	100%	374,498	53%
<b>5B</b>	<b>Industrial Energy Efficiency and Renewable Energy Development</b>	497,000	487,000	98%	183,085	38%
<b>6</b>	<b>Strengthening the MoTI and related institutions</b>	737,500	310,500	42%	256,370	82%
	Total	9,847,640	7,443,797	76%	5,096,605	68%

**Graph 1**

Reproduced below are two graphs reflecting budget distribution, budget allotment versus delivery and programme delivery.



Graph 2



Counterparts consider the quality of international experts in most cases as good and some as excellent, such as in the leather component. However there were also some critical comments on the work of some international experts (e.g. in information technology, food processing). Counterparts also are of the opinion that short-term advisory services by international experts (e.g. pilot companies under the quality and food processing components) was a costly approach carried out at the expense of national expertise. Short company visits were considered of limited impact and sustainability. The evaluators checked this point with selected companies and concur with the afore-mentioned conclusions. In fact, this approach is not the most cost effective particularly in view of the challenges faced by enterprises in Ethiopia, which require continuity in the provision of support rather than an occasional short term advise. Private industries are furthermore in need of technological upgrading (access to equipment) besides the support and advice by experts.

Government and counterpart representatives also expressed the wish to be more closely involved in the selection of experts and in evaluating their performance. They would also expect that a consistent system be followed whereby they are requested to clear the consultant's reports and evaluate their performance prior to final payment. This point had been raised already in the past and, in order to address it, UNIDO established one year ago a consultants' evaluation system. Counterparts, however, have not yet made use of this opportunity and should be encouraged to respond in order for the system to become operational and help meeting expectations regarding the quality of expertise.

National experts were on the whole of very good quality. The evaluators were actually impressed by the top-level expertise and the level of commitment of the national experts met during the evaluation mission. The approach of international experts working in tandem with national ones has on the whole been followed and contributed to ensure continuity of support at lower costs. Counterparts were vocal in advocating a higher use of national versus international expertise, particularly in those cases where international experts did not deliver up to the expected standards.

As concerns training, this was provided by the international experts and also through study tours. In general, the respective institutions have retained most of the staff trained and continuity could be ensured. The UNIDO project managers of some of the components lamented that the selection of trainees by the respective counterparts had not always been up to the required standards.

The IP was conceived as a programme of support to the private sector. De facto, however, implementation was carried out with a limited and mainly ad-hoc involvement of the private sector as an organized entity based on Governments' policies and priorities. The most successful components, like the leather products and the tannery pollution ones, achieved good results mainly in view of a strong private sector involvement. Other components, such as the SME one, changed orientation in the course of implementation and are now more strongly anchored to the private sector. Strengthening further the linkage with the private sector as an organized entity and promoting its active involvement in implementation should be one of the most important strategic considerations for the future orientation of the IP.

The information flow between UNIDO HQs and the Government, particularly MoTI, deserves improvement. This applies mainly to the management of the budget and the allocation of seed money resources. The concentration of both administrative and technical decision-making at HQs has caused considerable disappointment at counterparts' end.

The team leader was in full control over the implementation process and discharged her managerial function in a systemic manner and with good knowledge of the country. The decision making process has been swift, implementation is well monitored and documented. The Team Leader has also helped experimenting a number of new reporting systems (e.g. accounting of results based on outputs as a basis for the Organization wide result based management and reporting system) and has been instrumental in supporting UNIDO to develop and test the new self-evaluation system and modality of reporting for the Integrated Programmes. She has also plaid an active promotional, networking and funds mobilization role. The Team Leader prepared proposals for distribution of seed money based on the selection of key

un-funded components and some funds have been allocated from ongoing fully funded components to other (e.g. from leather to investments).

Her in-depth knowledge and commitment to the country played also an important role in ensuring the relevance of the interventions and the achievement of programme results. The visibility of UNIDO in the country has been enhanced through the IP. Her positive role has been fully recognized also by the counterparts in the country, as evident for the words of thanks expressed by the State Minister when concluding discussion on evaluation findings in May 2003.

The Team Leader has also played a proactive and very committed role to ensure that the HQs' team communicates and carries out synergistic activities. Interaction among the Leather, SME, Energy and ESID components has been successfully promoted. However, the extent of synergy among components still leaves much to be desired. Due to the PAD approach and the different working modalities of team members as well as weak vertical monitoring, the programme structure and implementation has been rather fragmented.

Field level coordination has been ensured at different levels. The Office of the UNIDO Representative, including, in addition to the UR himself, capable and committed junior staff (associate expert and JPO) has played an important coordinating and promotional function. Some weaknesses were, however, detected in terms of communication and information flow to donors.

The national coordinator, conversant with country procedures, rules, regulations and expectations, is of vital importance for the successful coordination of the IP. Like in other IPs, there has been no clear-cut policy on the allocation of resources for this key position. The national coordinator has been funded by specific components and this has created a sense of uncertainty. The Government never reacted to UNIDO's proposal/request to fund this position.

A national committee consisting of the national experts has been meeting on a more or less regular basis every 3 months under the chairmanship of MoTI and the UR. These meetings have been useful in terms of information exchange and establishment of some synergy measures. In addition, project/component level coordinating mechanisms, including all counterparts involved in the specific component have been established. Some of these project level committees, like the one on food safety, have proven highly successful and led to common positions and strategies that, if sustained, will definitely have an important impact (for details, please refer to the respective component chapters).

Like in other IPs, coordination within the vertical structure of UNIDO has been virtually non-existent. Quality assurance, supervision and monitoring by the respective Branch directors have been minimal.

#### **Recommendations:**

- UNIDO should ensure an enhanced participation of counterparts and beneficiaries, if possible in the decision-making process relating to implementation. Consultation should take place in particular on the selection of experts and on the evaluation of their performance. In order to avoid delays in implementation, counterparts should ensure a timely response.
- Counterparts should be encouraged to provide a feedback within the newly established consultants' evaluation system.
- Counterparts should improve the selection of training candidates, giving priority to professional competence and chances to make use of the acquired knowledge.
- UNIDO, in consultation with the relevant counterparts, should revisit the approach of providing stand-alone short-term international advisory services. Considering the limited results achieved through this approach and the specific conditions in Ethiopia, the provision of short term international experts should be discontinued in principle unless their advisory services are combined with follow up plans and with the provision of a package of services including, to the extent possible and subject to availabilities of funding for technology upgrading.
- UNIDO and counterparts should ensure that implementation linkages with the organized private sector should be further strengthened. The government, and in particular MoTI, should improve the communication flow and the coordination of activities beneficiaries and the private sector.

- UNIDO should ensure that the information flow to donors at field level be improved.
- UNIDO should ensure to the extent possible the continuity of component management.
- UNIDO should address the issue of coordination, supervision and monitoring of the IP within the vertical/director level structure. This should serve a quality assurance function and also limit the extent of individualistic implementation based on personalized approaches.
- UNIDO and the Government should address the issue of IP coordinator and formalize this position that is vital for the successful implementation of the programme. The Government should respond to the pending request by UNIDO to fund or at least co-fund the position.
- UNIDO should streamline coordination at HQ level and ensure that the previously fragmented programme structure and implementation move towards a more integrated programme level management. This could take place on the basis of a stronger anchoring of the IP within the vertical management structure.

### **3. PROGRAMME RESULTS**

Overview of all results (outputs produced and outcomes and impact achieved) is structured according to the level of intervention as follows:

- policy level
- institutional level
- industry and community level

Besides, results in Human Resource Development are singled out even though in most cases they could be related to the developed institutional capabilities.

#### **3.1 Results at Policy Level**

- 4 comprehensive volumes of draft documents on environmental policy, regulations and effluent standards prepared and translated into Amharic. They are expected to be submitted to the Government in July-August 2003.
- Three drafts on Sanitation Standards Operating Procedures prepared.
- Draft document for establishing a National Food Safety Council prepared.
- A competitiveness analysis was produced in draft form. Once completed and subject to meeting the required standards, the paper has the potential of being of high value and use for major policy decisions relating to exports, private sector development, investments etc.
- Contributions to the preparation of the new investment code.

Besides, recommendations on establishing a Food R&D Centre were formulated and the first issue of the Review on Industrial and Trade performance was prepared and published. However at the time of the evaluation mission the Review had not yet been circulated so that its use, if any, had been limited to the Ministry alone.

#### **3.2 Results at Institutional Level**

- Building up the Leather and Leather Product Technology Development Institute (LLPTDI) is still on-going but some training capacity has already been developed and training services are being provided. Training courses last from two weeks up to one year but typically approx 50% of courses last 4 months (6 hours per day, 3 days a week, fee 150-200 Birr per month).
- 82 Pilot Demonstration and Training Sites (PDTs) for reduction of post-harvest losses identified and established (in five regions), out of them 65 are actually operating. Over 500 pieces of equipment were dispatched to PDTs, out of which more than 30 were maize shellers or wheat threshers and more than 150 were animal-driven carts.  
To support the operating PDTs an institutional network was created consisting of trainers at woreda and regional levels and at the Rural Technology Promotion and Development Centres (RTPDC); 9 training manuals were made available in local language.
- A well established Ethiopian Cleaner Production Centre (ECPC), with four technically qualified professionals, methodologies in place, good networking and a system to record activities and their impact.
- Inspection capacity of EPA enhanced by training and procurement of laboratory equipment; after physical move the equipment needs to be re-installed.
- Technical food safety committee of 6 organizations established and operational.
- Six food and beverages inspectorates and six meat inspectorates upgraded as model inspectorates.
- Institutional capabilities strengthened in FeMSEDA and two ReMSEDAs (trainers trained; manuals prepared; physical facilities upgraded; information system and data base established).

- Capability of BMEIA to provide training and advisory services in energy conservation developed to a great extent (two staff trained, a training manual and measuring equipment available). Training of additional staff is needed, though.
- Ethiopian Investment Agency strengthened in investment promotion techniques and the appraisal of investment projects as well as the information system.
- QSAE strengthened in a modest way (strategy for metrology department formulated and used, training conducted, a gap analysis and a manual prepared for four testing laboratories). UNIDO support in upgrading the laboratories can be considered as a contribution on the way to their certification.
- Knowledge and skills of the policy team in MOTI upgraded but further enhancement of professional competence is still needed.

Besides, some RTPDCs were equipped with computers and conceptual studies and proposals were prepared both for a coordinating national mechanism and for restructuring each of the 9 RTPDCs. However, those recommendations were not implemented so that the only use of the 9 studies was for the preparation of project documents for the post-drought emergency assistance.

### **3.3 Results in Human Resource Development**

- 71 people trained by Leather and Leather Products Technology and Development Institute (LLPDTI) in stitching and other production techniques; trainees were partly from industry, partly secondary school graduates.
- Almost 600 people from various institutions and more than 200 people from enterprises were trained in entrepreneurship development, business development services and training of trainers.
- 366 professionals trained in Cleaner Production (CP) methodology, most of them in the Textile and Food sectors.
- 557 participants at various workshops exposed to CP issues.
- 150 people exposed to awareness raising on energy conservation in industry.

### **3.4 Results at Enterprise and Community Level**

- Effluent treatment plants (ETP) in two tanneries rehabilitated and operational. New ETPs constructed in two tanneries, to be completed and commissioned in the near future.
- Quality of leather garment upgraded in 5 companies, in one of them to the level of exporting 40 % of production. Three footwear companies reached the stage of having newly-designed export-oriented shoe models. Wallia tannery is in the process of adjusting quality of leather to meet requirements of the export-oriented garment companies.
- 7 food companies achieved good progress in introducing HACCP.
- In-depth Cleaner Production (CP) audits completed in six companies, with a total 113 CP options identified. 53 CP options were implemented or are under implementation with estimated annual saving in the amount of approx USD 1.2 mil. annually and reduction of effluent discharges.
- More than 40 companies were exposed to training and advice on energy conservation. Both the walk-through and particularly the full energy audits resulted in a number of recommendations on how to reduce energy consumption and save costs. Some energy saving has been achieved through improved housekeeping, some other non-investment measures and in a few cases through investment measures. However, information about implementation of these recommendations is sketchy and in most cases without quantification of the impact.
- 417 MSMEs benefited from provision of business development services. Approximately 10% can show improvement in their business.
- 786 farmers benefited from provision of training and equipment to reduce post-harvest losses. (In a number of cases they were members of a service cooperative or they established an informal group.) Some direct impact on the part of the participating farmers can be qualified as follows:
  - improved threshing (yield higher by 5%, better quality of grain)
  - improved storage (higher quality, higher price when selling)
  - improved transportation (reduction of losses by 10%).

The transport equipment contributed also to reduction of the hard work of women. However, the total impact has been rather modest and replications of the demonstrated equipment are minimal and confined to the less expensive technologies (several replications of the grain storage structures were reported).

In addition to the above tangible results, the industry could benefit also from other activities: all tanneries were made acquainted with principles of the advanced wastewater ponding system and other pollution control and cleaner production techniques; technical cooperation needs were assessed in 6 food companies and detailed recommendations for upgrading food processing technology were prepared for one company; five food companies were visited by quality management and cleaner production experts but follow up is reported by one company only.

Thanks to long-term support of UNIDO to the leather sector in Ethiopia the most distinct changes with tangible impact can be observed in this sector. After commissioning of the two new ETPs approx. 50% of all tanneries in Ethiopia will have modern pollution control systems in place. Previous UNIDO projects as well as the current one have upgraded the Ethiopian footwear and garment industry and contributed to improved image of the Ethiopian products on the world market.

## 4. PROGRAMME INTEGRATION

The concept of integration relates to the following levels:

- integration with national development priorities (this aspect is addressed in this evaluation report under Relevance)
- coordination with UNDAF and other multilateral and bilateral programmes
- integration within the Programme itself, through
  - coordination of UNIDO services and multidisciplinary expertise
  - inter-actions among counterparts supported by UNIDO services

### **4.1 Coordination with UNDAF and other multilateral and bilateral programmes**

- Comp 1A and CFC (Common Fund for Commodities) and ESALIA Eastern and Southern Africa Leather Industries Association). One project of Comp 1A (TF/RAF/99/002) constitutes a part of the CFC/ESALIA regional programme, which aims primarily at the improvement of quality of raw hides and skins in the region.
- Comp 1A and PROINVEST. (EU programme): Organization of a forum in Nairobi in June/July 2003 for the leather and leather products industry where Ethiopia is one of the target countries. Comp 1A supports some Ethiopian manufacturers participating at the forum.
- Comp 2 (SME) and GTZ : a useful division of work by regions; joint preparation of programmes; use by UNIDO of GTZ experts. UNIDO/GTZ also promoted an informal donor network to identify areas of cooperation.
- Comp 2 and UNCTAD/EMPRETEC: cooperation in entrepreneurship training in leather and metalworking; UNIDO provided financing from a budget separate and over and above the IP (US\$90.000+ US\$45.000); UNCTAD provided contributions in kind.
- Comp 2 and the Dutch Craft Programme Group: The Minister for Trade and Industry requested UNIDO to expand activities by covering the craft industry, a sector that was already assisted by the Dutch cooperation. Distribution of work was identified. Some trainees benefited from training by both sides.
- FIAS/MEGA: Good coordination with Comp 4 (Investment) in supporting EIA.
- Austrian bilateral programme supporting construction of hydropower stations. Comp 5B engages an expert from that programme also for the project output on micro hydropower.

As evident from the overview, the most extensive cooperation with external programmes was practiced by Comp 2 (SME).

UNIDO office in the field participated at UNDAF meetings but actual coordination seems to result from working contacts at project level. Apparently it is easier at this level to identify and agree on possibilities to coordinate activities defined in sufficient detail to allow for practical solutions.

This does not imply that all possibilities for cooperation were made use of. For example, as mentioned in the evaluation of Comp 1B, reduction of post-harvest losses is a theme also for FAO so that sharing of experience could benefit both organizations.

### **4.2 Integration within the Programme**

As in most earlier UNIDO Integrated Programmes, also the programme in Ethiopia was a structured collection of projects rather than an integrated response to a focused set of critical issues. In spite of that cooperation (as the elementary form of integration) among components and among counterparts

supported by these components did occur, both thanks to coordination by the Team Leader and some Project Managers and thanks to the coordinating and steering mechanisms at country level. Regular review meetings of all IP stakeholders organized by MOTI and the UR contributed a lot to inter-actions among Components and counterparts. Direct interventions of the UNIDO Representative and UNIDO staff in the field with the objective to establish cooperation among groups of counterparts were also an important factor.

There are various mechanisms how to achieve cooperation/integration, each of them resulting in different synergy benefits. The overview below categorizes those recorded within the IP in Ethiopia:

#### **4.2.1 Coordination of UNIDO services and multidisciplinary expertise**

##### *a) Coordination of UNIDO inputs and activities resulting in cost saving on input side*

- Comp 1A (Footwear) and Comp 4 (Investment): the same expert was utilized to support the leather sector under Comp 1A and to prepare investment profiles for the leather products sector (saving of expert costs for compiling information and learning about the sector).
- Comp 1A (LLPTI) and Comp 5A (ECPC) are well-informed about each others' activities and they plan to support introduction and diffusion of clean technology in the leather sector in a coordinated manner. ECPC organized a workshop devoted to tanneries.
- Comp 1A (Leather) and Comp 5.A (ESID) : all stakeholders of the leather sector were cooperating with counterparts of the ESID programme (primarily EPA) in the elaboration of appropriate effluent discharge standards for the leather sector (resulting in increased efficiency of the process, better ownership and application of the standards).
- Comp 5A ESID and 5A ECPC: intense cooperation EPA inspectors were trained on the CP concept by the ECPC; ECPC provided technical information on CP and was involved in policy dialogue within ESID; EPA carried out some lab analysis for ECPC free of charge; participation of ECPC at ESID workshops generates job requests for ECPC
- Comp 5A (ESID) and Comp 1A, 1B, 5B : participation at ESID workshops
- Comp 5A (ECPC) and Comp 5 B (energy): borrowing some measuring equipment from BMEIA, exchanging info on companies
- Comp 5B (energy) and Comp 5A (ECPC): four ECPC staff participated at training on energy conservation
- Comp 4 (Investment) and Comp 1A, 1B: Sectoral studies carried out under the leather and partly under the food components were used in the preparation of the Industrial Investment Project Profile (IIPPs).
- Comp 6 (Info) The nodes were selected among the counterparts of other IP components. Some link was established with Component 5 A in order to incorporate environment related information in the IRMS questionnaires but as the IRMS is not operational, there have not been any actual benefits from this coordination.

##### *b) Services provided under two or more components to the same counterpart or target group, resulting in increased effectiveness and impact of the services*

- Comp 1A (Leather) and Comp 2 (MSME): the same target group of companies (20) were trained in entrepreneurship development and in leather products technology

- Comp 1A (Leather) and Comp 5.A ( ECPC): ECPC carried out CP audits in selected tanneries supported by Comp 1A
- Comp 1B Food technology and 1B Food safety: targeting the same group of companies, using the same expert
- Comp 1B (Food) and Comp 3 (Quality), Comp 5A (ECPC ) and Comp 5B (energy): to some extent targeting the same companies, but without planned coordination in advance

#### 4.2.2 Inter-actions among counterparts supported by UNIDO services

##### a) *Improved inter-institutional cooperation resulting in increased efficiency and effectiveness of their operations/services*

- Comp 1B (Food safety) prompted intense cooperation of 6 organizations (Ministry of Health, Ministry of Agriculture, Ministry of Trade and Industry, Livestock Marketing Authority, Quality and Standards Authority of Ethiopia, Ethiopian Manufacturing Industries Association) in elaboration of draft documents and policy proposals related to food safety
- Comp 2 (MSME) and Comp 1B (Food): One recommendation of the SME expert for the food sector was taken over and its implementation is pursued by the Oromiya ReMSEDA: the SME expert recommended to the farmers/milk suppliers planning to build a new dairy plant that they instead make an arrangement with an existing dairy plant (supported by Comp 1B) operating well below capacity and utilize that idle capacity. This cooperation materialized upon impulse by the Project Manager of Comp 2
- Comp 1B (Post harvest losses) and RTPDCs : there have been very intense business relations between the PHL project and the RTPDCs (most of the project equipment was procured from RTPDCs); some RTPDC staff were trained by the project, on the other hand the RTPDCs carried out training of woreda extension officers and farmers. However, all these contacts and cooperation would have happened irrespective of the UNIDO project reviewing RTPDCs under Comp 1D.

It is apparent that most frequent form of internal integration is coordination of inputs and activities. Targeting the same group of beneficiaries also occurred in a number of cases but sometimes, particularly in the Food sector, it “just happened” because the set of companies in the sector willing to participate in technical cooperation projects is limited so that the same company may be supported by two or more Components without coordination of the interventions in advance (see also below).

In economic terms the actual synergy benefits from the above cooperation are not very significant. Some of the cooperation is yet to be implemented, some benefits may evolve only over a longer period of time. However, there are intangible benefits resulting from such cooperation: better awareness of the other’s services and activities, mutual promotion and, thus, increased visibility of the Programme in the country.

On the other hand there exist additional opportunities how to extend cooperation both within and outside of the Programme and, thus, to enhance the synergy benefits:

- Comp 1B (Post harvest losses) Though more than 75 % of the farmers participating in the project are women and the project was originally designed as a gender project, there was no cooperation with Comp 2
- Coordination of expert visits to companies. For example, pilot enterprises under Comp 3 were selected jointly with Comp 1B (25 companies in the Food sector). However, actual work in the (5) pilot enterprises was carried out without coordination with the assistance provided to the same companies by Comp 1 B. As a result, some companies were visited and advised on the same

issues by experts provided by different Components. This to some extent reflects existence of a gray zone between service modules implemented by different UNIDO Branches. Similarly some companies were visited by experts working under Comp 1A, 1B and 3 also without planned coordination in advance.

- Industry-wide analysis such as the competitiveness study should be elaborated in cooperation with sectoral studies elaborated under the sector-specific Components.

There is also scope for more intense cooperation with other international organizations such as FAO (food security and post harvest losses), World Bank (competitiveness analysis) and UNDP.

## **5. THE FUTURE FOCUS OF THE INTEGRATED PROGRAMME**

Based on the experience made under the ongoing IP phase, both the Government and UNIDO management have come to the conclusion that the IP in Ethiopia needs to be refocused and narrowed down to a more limited number of key problem areas. The findings of this evaluation confirm this. Also, in order to enhance effectiveness and relevance, there is a need to anchor the programme more strongly and from the institutional point of view to the private sector.

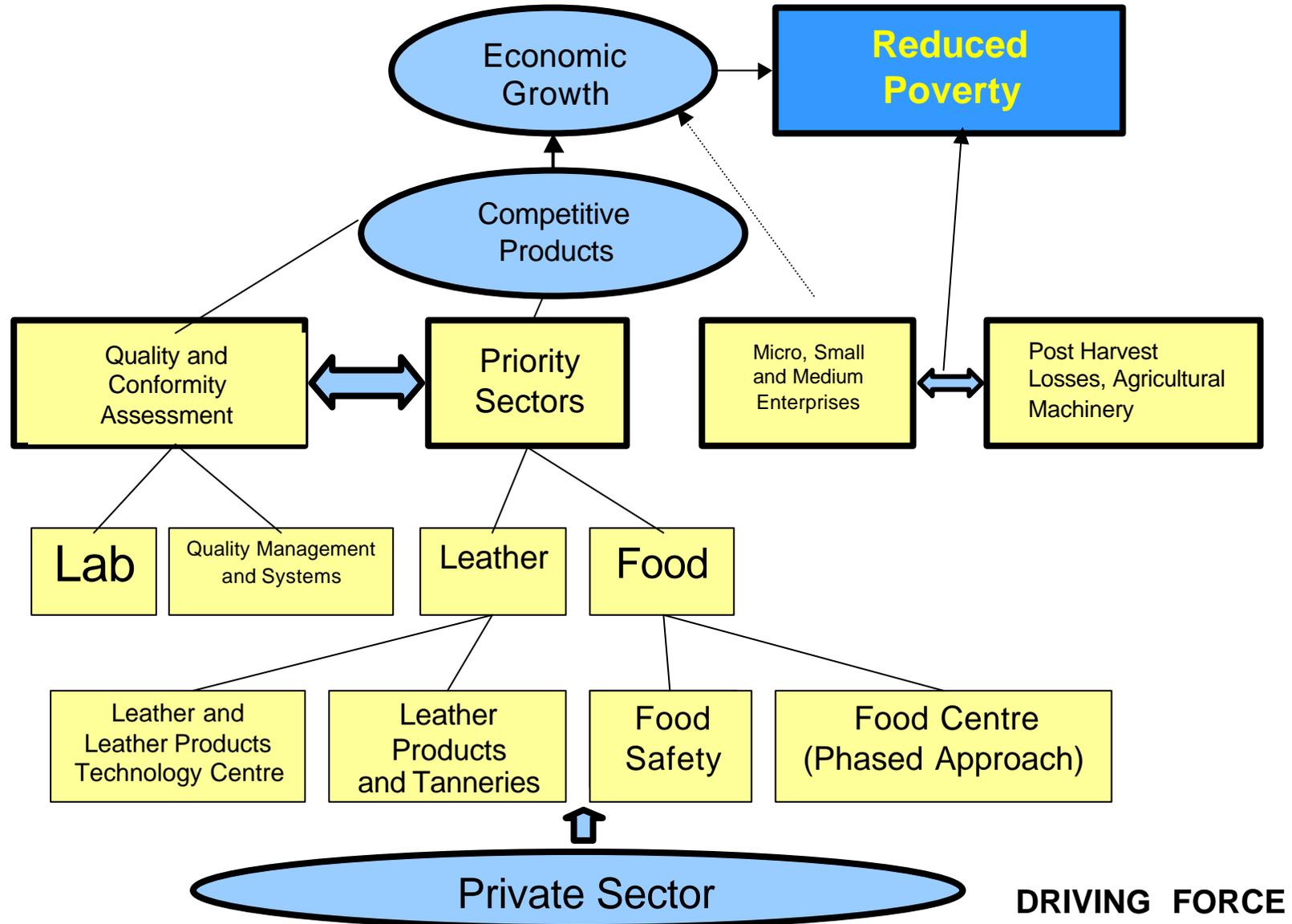
### **5.1 Programme structure and priorities**

The new policy developments outlined under chapter 2.1 should constitute the policy and programmatic entry points for the next phase of the Integrated Programme. The ultimate objective of the Programme must be to reduce poverty through economic growth, along the lines of the Millennium Development Goals. According to Government policy and based on UNIDO mandate and corporate strategy, the pillars of the programme should be promoting competitiveness of manufactured products and working through the private sector as the driving force for economic growth. Considering the special situation of Ethiopia, activities that have a direct linkage with the alleviation of poverty should be maintained.

The evaluators recommend that the following criteria be followed in order to decide on the continuation or phasing out of components and on introducing new activities:

- Relevance to the present Government policy, including sectoral priorities.
- Issues critical to competitiveness improvement should be awarded priority.
- Funding possibilities of a component as a whole (avoid pursuing piecemeal approaches with limited results).
- Active and institutional participation of private sector counterparts.
- Assessment of counterpart ownership and capacities.
- Capabilities of established institutions to continue without external but with Government support.

Reproduced below is a flowchart reflecting the proposed structure and priorities of the IP.



The most important aspect of the new phase of the IP is the component relating to quality and conformity in manufacturing, considering that this type of support is key and central to competitiveness of industry. The previous phase of the programme did include a quality component but activities could be implemented only to a very limited extent, and with limited results, because of lack of donor funding. The evaluators strongly recommend that the component be developed anew with QSAE (Quality and Standards Association), the Industry Manufacturing Association, and with the cooperation of the Cleaner Production Center and of the Leather and Leather Products Technology Institute. A donor or donors should be identified at the outset and the programme developed hand in hand with the prospective donor(s). In this context it must be stressed that, in light with recent policy and economic development, basically all donors are awarding increased importance to private sector development and to the issue of improving product quality for access to trade. The prospects for funding are thus better today than a few years ago when the first phase of the IP was launched.

The quality and conformity assessment component should be built around two main interrelated lines:

- Supporting the establishment of quality management systems (ISO 9000; ISO 14.000; EMS)
- Strengthening of laboratories with priority awarded to microbiology and food-safety.

The Government has identified three sectors of priority: food, leather and textiles. Based on its expertise UNIDO would be in a position to support activities under the three sectors. However, prospects for funding of the textile sector seem rather limited whereas the food and leather sector can continue to be supported based on the successful activities carried out under the first IP phase and considering good funding prospects.

Under the *leather sector*, the Leather Technology Institute will be supported through already identified funding by Italy in connection with a large bilateral programme. The leather products sub-component is also of key relevance in view of the good results achieved so far and the relevance of the leather products for the export market. Concerning tannery effluent treatment, previous and on-going UNIDO assistance has already created a sufficient critical mass of demonstration sites. This type of cooperation should be continued only subject to availability of funds.

Concerning the *food sector*, the evaluators strongly recommend that the activities under the food safety component be continued. As outlined in the chapter on this sub-component, activities so far have been very successful; a breakthrough in terms of policy cooperation among concerned institutions has been achieved; strategies and plans in terms of regulatory and policy measures for the future have been clearly established. The relevance of food safety is huge in terms of consumers' health and impact on the local as well as on the export marketing.

The Government also awards importance to the establishment of a food technology center. Considering the costs involved and also the mixed experience with respect to institution building in general (high cost, long term gestation period, sustainability problems etc), the evaluators recommend that a phased approach be followed in building up the institutional capacities, starting with services for which there exists proven demand (testing) and only gradually proceeding to building up training and advisory services. Building up testing laboratories needs to be coordinated with the other existing and planned labs, particularly those of QSAE. In this context it should be mentioned that food safety requires an independent central laboratory with primary obligation for food safety.

The ongoing components with direct relevance to poverty alleviation and/or to emergency that should be continued and/or expanded are:

- MSME: continue and possibly expand the component based on the ongoing approach with focus on regions and private sector that starts producing tangible results. Consider establishing a pilot sub-contracting exchange mechanism with one ReMSEDA.
- Agro machinery: support strengthening production capabilities with focus on equipment related to water such as pumps, irrigation and moisture conservation.

- Post harvest losses: support to this programme should be continued only subject to an in-depth assessment of the programme carried out at all the demonstration sites established so far, reviewing in particular the use of the delivered equipment and replication of the technology in the area

The following components/ sub-components should be phased out:

- Support to MOTI: phasing out subject to the competitiveness analysis and the information system being completed without further delays.
- ESID: the strategy and policy have been completed and are expected to be considered by the authorities for approval. The evaluators strongly recommend that the drafts be also considered within the framework of the Government's industrial development policy.
- NCPC: After project completion, the Center should continue its activities based on a commercial approach as outlined in the Business Plan, coupled with temporary support of Government subsidies. UNIDO should continue to link the Center to the NCPC network and provide technical support and advice also after project completion.
- Energy efficiency: after project completion, BMEIA to provide services on commercial basis and also on the basis of a subsidy for an interim period.

It should be noted that activities of high relevance such as those relating to environment, energy efficiency and investments should not be discontinued but rather mainstreamed into other components and/or continue to be supported by the Government until the respective institutions have become sustainable.

## **5.2 Institutional linkages with the Private Sector and coordination mechanism**

The importance of the private sector as driving force for economic growth and the related Government policy and dialogue mechanisms has already been described. In this context it is important to stress that the UNIDO IP has been -and should increasingly be- an opportunity and a platform for testing public-private partnerships in a pragmatic manner and implementing them through on the ground action.

Furthermore awarding the private sector an institutional role in the IP can enhance the relevance, effectiveness and ownership of the programme.

The evaluators therefore recommend that the Chamber of Commerce/Industrial Manufacturing Association become jointly with MOTI the Institutional Central Counterpart of the IP. The IP should furthermore be coordinated and monitored through a high level Committee including all Government counterparts/Ministries involved in the IP as well as key industrial associations and organizations. Along the lines of the existing dialogue mechanisms between public and private sector, it is recommended that the coordinating and monitoring committee be co-chaired by the Minister of Industry and the President of the Chamber of Commerce or of the Ethiopian Manufacturing Industries Association. Based on present practice, which proved to be effective, project level steering groups should continue to function in support to the higher level Coordination Committee.

## 6. EVALUATION BY COMPONENTS

### 6.1 Ranking of (Sub-) Components by Selected Criteria

The Integrated Programme consists of 16 distinct Components or Sub-components (further on referred to as Components). In the course of evaluation the evaluation team undertook an effort to rank each of the Components along five criteria, using a numerical scale 1 – 5, with 5 being the best ranking value.

The following criteria were selected and applied:

Relevance	What is being done – is it -actually needed (addressing key constraints actually felt by the beneficiaries)? -related to the UNIDO Business Plan and the international development targets?
Ownership	Motivation and capability of the national partners to plan, manage and use (absorb) technical assistance
Results	Outputs produced, outcomes and impact achieved
Sustainability	Capability of the partners to maintain and keep upgrading the results
Cooperation	Cooperation with other IP Components for synergy benefits and with other multi-bilateral programmes

Ranking of Components on the scale 1 – 5 according to the above criteria yielded the following results:

Component	Relevance	Ownership	Results	Sustainability	Cooperation	Total
1A LLPTI	5	4	4	4	3	20
Tanneries	4	5	4	4	5	22
Leather products	5	5	4	5	5	24
1B PHL	4	3	3	3	3	16
Process techn.	3	2	2	2	3	12
Food safety	5	5	4	4	4	22
1D Agro-machinery	4	3	2	1	4	14
1E Pesticides	3	4	1	1	1	10
2 MSME	4	3	3	3	4	17
3 QSAE	4	4	3	4	3	18
4 Investment Prom	4	3	3	4	3	17
5A ECPC	5	5	4	4	4	22
ESID	5	5	4	4	5	23
5B Energy	4	4	4	3	4	19
6 Competitiveness	5	4	3	3	1	16
Info network	2	2	2	1	2	9
Total	66	61	50	50	54	281
Average	4,1	3,8	3,1	3,1	3,4	17,6

Allocation of the values to Components was discussed first within the evaluation team and then with the project staff in the field. A few values were subject of intense discussion with the project staff resulting in some modifications but these modifications did not change the basic picture and did not question the whole exercise.

If one takes the level 3 on the scale as a proxy for “acceptable”, then the average values indicate that the IP as a whole reached or exceeded this level in all criteria. It is worth noting that particularly Relevance and Ownership could be on average considered as satisfactory.

There are, as apparent, considerable differences among individual components. The highest possible value for a Component is 25, the lowest possible value is 5, with the value 15 (=3x5) indicating a proxy for "acceptable". The ranking of Components is as follows:

Ranking	Value	Components
1	24	1A Leather products
2	23	5A ESID
3	22	1A Tanneries; 1B Food safety; 5A ECPC
4	20	1A LLPTI
5	19	5B Energy
6	18	3 QSAE
7	17	2 MSME; 4 Investment promotion
8	16	1B Post-harvest losses; 6 Competitiveness
9	14	1D Agro machinery
10	12	1B Food processing
11	10	1E Pesticides
12	9	6 Information network

From the above table it follows that a great majority (12 out of 16) Components performed better than "acceptable". (This corresponds with the average Component value 17,6 for the whole IP, as calculated above.) All Components of the Leather sector and some Components of Environment and Food sector achieved high ranking. The only Components indicating significantly less than acceptable performances are the Food processing (part of 1B), Pesticides (1E) and Information network (part of Component 6).

## **6.2 Component 1A - Agro-industries: Leather industry**

### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

Original IP doc		Funding		%	Expenditures 31 Dec 2002	%
Institutions (LLPTI)	246,290	CFC	253,000	103	220,988	
Pollution Control	581,000	Switzerland	581,000	100	548,779	
Leather products	640,000	UNDP	171,500	123	41,571	
		Italy	621,000		241,841	
Total	1,467,290		1,626,500	111	1,012,079	62

### **DESIGN**

Three rather autonomous projects with a large direct support to industrial companies

The Component covers three distinct and rather autonomous interventions: (i) a capacity building support to the establishment of the Leather and Leather Products Technology Institute (LLPTI), (ii) direct support to at least three tanneries in establishing or rehabilitating their Effluent Treatment Plants (ETP) and (iii) direct support to at least 10 leather products production facilities in accessing international markets. Anticipated services of the LLPTI are not spelled out in the IP document. The direct support to tanneries is accompanied by an awareness-raising seminar on pollution control and cleaner technologies. The direct support to companies is subject to repayment of the equipment to a fund administered by the LLPTI.

### **FUNDING**

Funding exceeded the original IP budget

Diverse sources were successfully mobilized. Funding by Italy of the leather products project is motivated by their policy of supporting private sector development. In fact, in combination with the huge bilateral hardware support to the LLPTI the role of the UNIDO support to LLPTI exceeds by far its nominal financial value.

### **IMPLEMENTATION**

#### **a) LLPTI**

UNIDO inputs of good quality, activities unfolding

UNIDO inputs consisted primarily of equipment (approx. USD 180,000) and advice, including preparation of training material and syllabi for training courses. LLPTI also benefited from sharing experience with a well-established training institute in Kenya (TPCSI), a Kenyan Instructor was fielded at LLPTI.

The inputs were of good quality; particularly the international expertise was much appreciated. As the Institute is only unfolding its training activities, the use of equipment is commensurate to the current scope of training (approx. 100 trainees in all training courses). Furthermore, LLPTI duplicated procurement of some equipment delivered already under the UNIDO project so that currently some equipment is not used. LLPTI is, however, confident that the equipment will be well used once two parallel training courses are organized (for workers from industry and for secondary school graduates).

## **b) Tanneries**

UNIDO inputs of good quality, delays in commissioning of the two new ETPs

Approximately 60% of UNIDO inputs consisted of equipment for the ETPs, the remaining inputs were expertise and training. In general inputs were of good quality. Construction of two new ETPs was slower than planned due to delays in civil work as well as clearance of the equipment. In fact due to a few missing parts not delivered with the principal consignment and subsequent procedural obstacles in rectifying the delivery the ETPs could not be commissioned so far and it was expected to take place by end of June 2003.

Two tanneries were assisted (through expertise and very limited provision of equipment) in rehabilitation of their effluent treatment plants (ETP). The rehabilitation proceeded smoothly and was completed. Three awareness raising events dealing with pollution control and problems of the sector were organized (total duration 5 days, 170 participants in total)

## **c) Leather products, production facilities**

After failure with the SPPD project the new project is proceeding well

SPPD project (upgrading leather products production facilities) was prematurely terminated by UNDP because of different views on modalities of implementation. These outputs have been however funded through a new project, which was officially launched in October 2002. Although this subcomponent is at an early stage of implementation, it has been able to carry out several activities and achieve some results. Two study tours to major trade fair events were organized, 15 companies (including one tannery) were selected for assistance in export marketing and partnership development. Some of them were assisted in participating at trade fairs, designing products for export and formulation of project profiles for international partnership promoted through UNIDO website. In general the services were appreciated by the industry. Particularly the quality of the leather garment designer was highly praised. In the case of one expert the work had to be interrupted due to his health problem and started again with another one.

## **RELEVANCE**

Support to LLPTI and competitiveness of leather products highly relevant, demonstration function of building up new ETPs abates but need to reduce water pollution continues.

The leather industry was selected by the Government industrial policy as one of the priority development sectors. Establishment of LLPTI is a Government-driven project implemented with strong support of the Italian bilateral assistance; complementary UNIDO support is, therefore, highly relevant. However, measures will have to be taken to raise the interest of industry in sending their employees for training. Assistance to the leather products industry aims at enhancing competitiveness of the sub-sector, which is also one of the top priority objectives of the Government and industry as well. Improving tannery pollution control and application of cleaner production in the sub-sector has been a long-lasting UNIDO objective with considerable results achieved through several projects in the past. While the growing number of ETPs in the country and the high level of environmental awareness among the tanners (to which the previous projects contributed) suggest that demonstration function of building new ETPs is no more so apparent as it was in the case of the first pioneering projects, the tanneries supported by this particular project consider without any doubt the support relevant and ETA expects that this type of support will continue.

## OWNERSHIP

Strong ownership because of involvement of high-level policy makers, industry associations and strong motivation of pilot companies.

Leather projects are carried out with the Ethiopian Tanners Association (ETA), Ethiopian Manufacturing Industries Association (EMIA) and the MoTI as main counterparts. Industry associations (EMIA, ETA) are on the Board of LLPTI. Most of the pilot companies benefiting from the project are well motivated to make full use of the support. Another demonstration of strong national ownership was the involvement, and interest shown by high-level officials in promoting the project within Ethiopia and abroad (e.g. the Industry Minister heading a study tour of entrepreneurs to Italy).

## SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP

Adequate and beneficial cooperation within IP as well as outside the IP

Component 2 (MSME): same target group of companies (20) were trained in entrepreneurship development and in leather products technology.

Component 4 (Investment): the same expert used by Component 1A (Footwear) was utilized to prepare investment profiles for the leather products sector – saving of expert costs for compiling information and learning about the sector.

Component 5A (ECPC): ECPC has carried out CP audits in selected tanneries supported by Component 1A. Furthermore, LLPTI and ECPC are well informed about each other's activities and they plan to support introduction and diffusion of clean technology in the leather sector in a coordinated manner. A workshop devoted to tanneries was organized by the ECPC.

Component 5A (ESID): all stakeholders of the leather sector were cooperating with counterparts of the ESID programme in the elaboration of appropriate effluent discharge standards for the leather sector (resulting in increased efficiency of the process, better ownership and application of the standards).

### Coordination with other Development Cooperation Programmes:

CFC (Common Fund for Commodities) and ESALIA (Eastern and Southern Africa Leather Industries Association). One project of Component 1A (TF/RAF/99/002) constitutes a part of the CFC/ESALIA regional programme, which aims primarily at the improvement of quality of raw hides and skins in the region.

PROINVEST. (EU programme): Organization of a forum in Nairobi in June/July 2003 for the leather and leather products industry where Ethiopia is one of the target countries. Component 1A supports some Ethiopian manufacturers participating at the forum.

ESALIA, the UNIDO Regional Leather Programme in Nairobi, Kenya: Cooperation in Cleaner Production Technology.

## RESULTS

### a) LLPTI

Some training capacity developed, training services being provided

The Institute was formally established 5 years ago but it has only recently started training and much of the physical development is still in process. Once completed it is going to be a large and comprehensive testing and training organization with the capacity to provide services also to other countries in the region.

With the current technical staff (26) and using the UNIDO inputs the LLPTI trained 71 people in diverse training courses, lasting from two weeks up to one year but typically approx. 50% of courses last 4 months (6 hours per day, 3 days a week, fee 150-200 Birr per month).

#### ***b) Tanneries***

Two ETPs rehabilitated, two new ETPs awaiting commissioning, high environmental awareness achieved

- Two rehabilitated ETPs have been in operation since 2002.
- New ETPs have been constructed in two tanneries, however for reasons mentioned above the new ETPs have been standing idle for several months, waiting for final completion and commissioning.
- All tanneries were made acquainted with principles of the advanced wastewater ponding system and other pollution control and cleaner production techniques.

In combination with results of previous UNIDO projects the tanning industry has acquired high level of environmental awareness and responsibility. After commissioning of the two new ETPs approx. 50% of all tanneries in Ethiopia will have modern pollution control systems in place.

#### ***c) Leather products production facilities***

Tangible results with good prospects in footwear and leather garment to access international markets

- 3 footwear companies reached the stage of having newly-designed export-oriented shoe models. There are good prospects for the three companies to form a joint venture with a UK company for marketing of their shoes in the UK.
- 5 garment companies upgraded, one of them to the level of exporting 40 % of production
- Wallia tannery in the process of adjusting quality of leather to meet requirements of the garment companies participating in the project.

The industry acknowledges that previous UNIDO projects as well as the current one have upgraded the Ethiopian footwear and garment industry and contributed to improved image of the Ethiopian products on the world market. Though in value terms the export is not yet significant, capability for growth and expansion has been created. (Export of the largest garment exporter employing 42 permanent staff amounts to USD 70,000 representing 40% of the company's sale.) Good results prompted some demonstration effect – some companies took the initiative and participated at trade fairs, covering themselves a larger part of their cost. So far results in the leather goods sub-sector have been less spectacular than those in footwear and leather garment. The process of promoting international partnership is still at an early stage to show results. At an early stage is also the process of establishing a leather district in Ethiopia. A study was completed and recommends to proceed with implementation of the concept.

### **SUSTAINABILITY**

#### ***a) LLPTI***

After full completion LLPTI capacity may exceed effective demand of the local market

LLPTI has a strong government and industry backing and considerable bilateral support by Italy. For the near future there is no concern about sustainability. The problem may arise once the whole physical development of LLPTI is completed. In view of the large training and testing capacities to be at hand

LLPTI may face problems of insufficient demand by local industry as well as maintaining qualified professional staff on board. These issues need to be addressed already at this time.

#### **b) Tanneries**

Good prospects for sustained operations of ETPs.

It is in the interest of the tanneries to have an ETP in order, "to stay in business". Furthermore, in view of the forthcoming environmental regulations and strengthened inspections and monitoring it can be expected that the ETPs will be well operated and maintained.

#### **c) Leather products**

Good prospects to sustain and further develop the results achieved.

The companies are highly motivated to make the best use of the direct support provided to them by the project and of capabilities developed through this support.

### **RECOMMENDATIONS**

#### **a) LLPTI**

- Provide advice to LLPTI on institutional development, including salary schemes and other motivational mechanisms in order to ensure stability of professional staff. Assist LLPTI also in developing a strategy how to raise demand for LLPTI services.
- Study the proposal made by EMIA to use – without any additional requirement for investment - some parts of the LLPTI for the textile and garment sectors (particularly training in design).

#### **b) Tanneries**

- Complete and commission as soon as possible the two new ETPs.
- In the new phase of the IP, focus primarily on technical advice to tanneries wishing to rehabilitate or establish ETPs with their own resources.

#### **c) Leather products production capabilities**

- Continue this support (including partnership promotion) as key mechanism to enhance export performance of the sector. Combine direct support to companies with supporting activities hosted or carried out by LLPTI.
- Proceed with further elaboration of the leather district concept for Ethiopian conditions.

### **6.3 Component 1B - Agro-industries: Food industry**

#### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

Original IP doc		Funding		%	Expenditures 31 Dec 2002	%
Assessment	96,000	UNDP	88,809	93	88,809	100
Post-harvest losses (PHL)	750,000	Japan	750,000	100	720,000	96
Processing technologies	710,100	Korea	177,000	56	110,580	62
Food safety		UNIDO	223,000		193,319	87
Total	1,556,100		1,238,809	80	1,113,946	72

Evaluation of the PHL project may be influenced by the fact that due to time constraint the evaluation mission could visit only 3 demonstration sites.

#### **DESIGN**

The Component aims at two sets of objectives: economic (competitiveness) and social (poverty reduction through food security, reduction of hard labour of women, and health)

The Component intervenes at different vertical levels of the food sector: post-harvest operations – food processing technology – food safety. The latter interventions (upgrading technology and enhancing food safety) are closely related and aim at increasing competitiveness of the food sector, the first intervention aims primarily at food security and secondarily at increasing the inputs to the food production sector.

The post-harvest project was designed with consideration of all important input requirements but the large number of Project Demonstration Sites planned in the prodoc (82) turned out to be rather ambitious.

In the course of discussing the Component with the Government it was decided to split the originally integrated food safety project into two: food safety system (with Ministry of Health – MoH - as the core counterpart) and upgrading of processing technology (strengthening R&D institution and food companies, with MoTI as the core counterpart). While the two projects are formally separate, in reality there is a close linkage as both projects work (at company level) with almost identical target group of companies.

#### **FUNDING**

All outputs funded, but food safety and technology upgrading projects short of funds

The post-harvest losses project is an amended version of a similar project with focus on women, the funding of which was committed by Japan prior to the IP programming mission (funding mobilized by HQs).

Funding by the Republic of Korea was also mobilized by UNIDO HQs, for the Food Safety segment UNIDO used the Danish contribution to UNIDO programmable funds. UNDP funding was mobilized by the UR, TL and the Project Manager.

Due to limited funding the technology upgrading and food safety implementation projects were curtailed by refraining from full and sufficient provision of equipment (for laboratories and demonstration companies).

## IMPLEMENTATION

### ***a) Post-harvest losses (PHL)***

A rather complex operation due to a large number of demonstration sites, large number of pieces of equipment procured, and three national management layers to execute and monitor; some features of “national execution”.

60% of UNIDO inputs consist of equipment, the remaining inputs being training, national experts and project travel. Input of international experts (4.5 w/m) was provided mainly in the planning stage, exposure to international expertise was supported also by a study tour; both inputs were appreciated.

Implementation process was influenced by locating the Pilot Demonstration and Training Sites (PDTs) at the lowest element in the institutional hierarchy of the Ministry of Agriculture - MoA (woreda agricultural office) and vast geographical spreading of the 82 PDTs in five regions. The woreda agricultural offices provide extension services, facilitate sales of equipment produced by the Rural Technology Promotion and Development Centres (RTPDC), etc. However, being part of the Ministry structure their salary scales are low and their staff are subject to frequent changes in assignment. This is detrimental both to the implementation and sustainability of the results (see below).

In terms of technological complexity the equipment consists of two distinct categories: engine driven shellers/threshers requiring professional operation and maintenance, and rather simple transport, storage and food processing equipment. Most of the equipment (in the value of USD 300,000) was procured from RTPDCs with a small segment procured from other local entrepreneurs or imported. (The RTPDC in Bahir Dar produces more than 95% of the equipment procured by the project, the remaining part being produced by local entrepreneurs, such as transporting wooden boxes or beehives produced by furniture manufacturers.)

Some delivery of equipment to the target PDTs has been handled by the MoA at their cost. Sometimes there have been considerable delays in the delivery.

Training has been rather extensive, carried out at different levels in a “cascading process”:

- 17 regional trainers,
- 207 woreda-level extension officers,
- 786 farmers (mainly female); training carried out both at RTPDCs and at the PDTs.

Besides, 10 engineers from RTPDCs were trained in designing and 9 workshop technicians were trained in manufacturing post-harvest equipment.

However, many trained staff at regional and woreda level were displaced so that there is a need to repeat the training.

### ***b) Processing technologies***

Complaints about international experts

UNIDO inputs consisted primarily of international experts and study tours. There were complaints about the two international experts (reports of poor quality and delayed) but satisfaction was expressed both for the training (conducted by the same experts) and study tours. Questionnaires on company profiles were distributed to 52 companies, 32 questionnaires were returned. Subsequently 12 companies were visited by the experts to complete the questionnaire and on

that basis 6 companies were selected as pilot companies for upgrading. However, no follow up took place by the companies.

**c) Food safety**

Implementation very participatory and efficient

UNIDO inputs consisted of expertise (both international and national), training, and some equipment for food inspectors. The inputs were of good quality, in particular the national expert has played a very significant technical and organizational role which contributed to efficiency of extensive activities involving 6 Government organizations and NGOs and 13 companies. His role was supported by intensive contacts with the UNIDO Project Manager and his professional guidance.

The process of building up the food safety system has been highly participatory so that reaching consensus among so many organizations has taken longer than anticipated. Introducing HACCP in companies proved to be a very laborious and time consuming process as well but good progress has been achieved.

**RELEVANCE**

**a) Post-harvest losses**

Reduction of post-harvest losses in general relevant, but some elements of the project doubtful

Post-harvest losses (15% of the cereals harvest on average) are an actual problem of the country, their reduction is indeed needed and became one of the policy objectives of the MoA. Supporting this policy objective makes the project relevant.

However, a more detailed analysis raises doubts about relevance of some aspects of the project. First, the project is conceived as a demonstration project but both the simple equipment and the equipment requiring demonstration (engine driven shellers, threshers, new technologies for grain storage etc.) generate little interest and replication beyond the project target group for the same reason: poor financial standing of the farmers, no collaterals, etc. In view of the price being the key constraint for wide dissemination of all the equipment the relevance of this demonstration project is subject to finding a solution to make the equipment widely accessible. It is, therefore, primarily a problem of access by cooperatives or associations of farmers to cheap credit. On the supply side the project is also closely linked to the success of RTPDCs to design and produce (or to induce other manufacturers to produce) cheap equipment (see report on Component 1D). As long as this is not achieved any distribution of such equipment is purely a direct support to the selected farmers with social impact confined to these farmers and their families.

Second, more than 40 PDTs are in zones affected by drought. In these zones the key problem is not reduction of post-harvest losses ("if there is no harvest, there are no losses", to quote one BMEIA staff), but conservation of water to have any harvest at all.

### **b) Food processing technologies**

Relevance questionable because project fragmented

The primary original plan was to strengthen R&D and other service institutions; upgrading 10 food companies in processing technologies and cleaner production was a complementary objective for demonstration purposes. Because of absence of such a R&D organization ready to participate in the programme the project worked only at company level. So far it has not managed to proceed from the survey stage to company-specific feasibility studies on technology upgrading and it is only now that experts are recruited for this purpose. It is, however, questionable to what degree the companies would be willing to go along further given the fact that they were not satisfied with the interventions so far. The original project objective of assisting the companies in implementing the investment improvements may remain uncompleted.

### **c) Food safety**

Health of consumers and competitiveness of food products – both aspects highly relevant

Food safety is a complex issue, not attended so far in the country. It has two aspects: health of the consumers and competitiveness of food products on export markets. Both aspects are highly relevant. The food companies (particularly those with potential of export) stress the need for a food safety system and HACCP certification very much.

## **OWNERSHIP**

### **a) Post-harvest losses**

Good ownership by the MoA, a visit to a representative sample of PDTs was not within the scope of the evaluation mission.

At the level of the MoA the ownership is very strong as the project represents the most significant and the only external support to the post-harvest package of the national extension programme. The woreda-level offices of the Regional Bureaus of Agriculture suffer from frequent changes of staff and low motivation which probably influences their capabilities to absorb the assistance but at the three PDTs visited by the evaluation mission both the woreda extension officers and the target beneficiaries demonstrated surprisingly high level of ownership. This applied also to the cooperatives managing and operating the more sophisticated equipment (shellers, etc.) However, this sample of 3 PDTs is not representative enough to draw general conclusions.

### **b) Processing technologies**

No industry association involved, lack of interest by companies

MoTI is the Government counterpart of the project, no industry association was involved in project formulation or implementation. Companies were reluctant to provide data and were dissatisfied with the fact that they have not received report/feedback from the experts. All these factors weakened national ownership of the project.

### **c) Food safety**

Very high degree of national ownership

The MoH is formally the Government counterpart for the project but de facto the project is managed and owned by the technical committee chaired by the MoH and involving all key stakeholders including the Ethiopian Manufacturing Industries Association (EMIA). In the pilot companies supported by the project in introducing HACCP the motivation and feeling of ownership are very strong as well.

## **SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP**

### **a) Post-harvest losses**

Cooperation resulting from normal business relations; no cooperation with Component 2

Component 1D (Agricultural machinery): there has been very intense business relations with the RTPDCs (most of the project equipment was procured from RTPDCs); some RTPDC staff were trained by the project, on the other hand the RTPDCs carried out training of woreda extension officers and farmers. However, all these contacts and cooperation would have happened irrespective of UNIDO support to RTPDCs under Component 1D.

Component 2 (MSME): Though more than 75 % of the trained farmers are women and the project was originally designed as a gender project, there was no cooperation with Component 2.

External cooperation: There are several projects aiming at food security (EU, FAO, CIDA, etc.), a few of them having a small post-harvest component, but they operate in different regions.

### **b) Processing technology**

To some extent targeting the same companies, but without planned coordination in advance (except for food safety).

Component 1B, Food safety: targeting the same group of companies, using the same expert

Component 2: One recommendation of the SME expert for the food sector taken over and its implementation pursued by the Oromiya ReMSEDA: the SME expert recommended to the farmers/milk suppliers planning to build a new dairy plant that they instead make an arrangement with an existing dairy plant (supported by Component 1B) operating well below capacity and utilize that idle capacity. This cooperation materialized upon impulse by the Project Manager of Component 2.

Component 3 (Quality): to some extent targeting the same companies, but without planned coordination in advance.

Component 5A (ECPC): to some extent targeting the same companies, but without planned coordination in advance.

Component 5B (energy): to some extent targeting the same companies, but without planned coordination in advance.

### **c) Food safety**

Extensive networking among stakeholders, but little cooperation with other Components

Within IP the project cooperated closely only with the “processing technologies” project. Efforts were made to involve WHO but the local WHO office did not feel strong enough in professional terms to participate. Some cooperation started with the French bilateral programme.

## **RESULTS**

### **a) Post-harvest losses**

Farmers trained, equipment in place, its use constrained, some direct social impact, very limited replications

- 82 PDTs were identified and established (in five regions), out of them 65 are operating.
- Over 500 pieces of equipment were dispatched to PDTs, out of which more than 30 were maize shellers or wheat threshers and more than 150 were animal-driven carts. Besides, 600 tomato transporting boxes were distributed.
- To support the operating PDTs an institutional network was created consisting of trainers at woreda and regional levels and RTPDCs and 9 training manuals were made available in local language.
- 786 farmers benefited from the provision of equipment and training. In a number of cases they were members of a service (primarily procurement and marketing) cooperative or they established an informal group of beneficiaries with every member obliged to save some small amount of money to pay back for the equipment procured by the project.

At the three PDTs visited by the evaluation mission the equipment was in place, its ownership was well identified. However, the dimensions of some demonstration structures exceeded by far the needs of the owners (grain storage, seed potato storage). The maize shellers and wheat threshers were also used much below the machines’ nominal capacity and fluctuated depending on the harvest yield. In one case in a good season (before the drought) the maize sheller processed 50 t per season, which is less than 5 % of the nominal capacity. Thus, in this particular case, given the procurement price of the sheller (22000 Birr) and the fee charged for renting it (1,6 – 3 Birr per 100 kg) the income generated by the use of the sheller at such a low level of utilization (1500 Birr at most) would not allow for recovery of operating costs and depreciation. As this machine is now owned and operated by a cooperative and rented to other farmers, it is questionable if its use can be further considerably increased.

This seems to be the key problem of the whole demonstration project: the costs of the machines are too high for the farmers to buy them. This in turn is the reason why private sector is not interested to produce such equipment. Replications are, therefore, minimal and confined to the less expensive technologies (several replications of the grain storage structures were reported).

While the demonstration effect is marginal, there is some direct impact of the investment on the part of the target beneficiaries. It is estimated that reduction of post-harvest losses can be achieved through the following types of impact:

- improved threshing (yield higher by 5%, better quality of grain),
- improved storage (higher quality, higher price when selling later),
- improved transportation (reduction of losses by 10%).

Farmers at the PDTs confirmed some positive impact on reduction of losses particularly in the case of improved storage but they could not quantify it. It appears that they value some of the new equipment particularly for its contribution to reducing the hard work of women (such as animal-driven carts used for transport of water from the river, etc.). Quantification of actual reduction of post-harvest losses would require a comprehensive and rather expensive survey.

#### **b) Processing technologies**

Training useful, reports on companies drafted but submitted only partly, company-specific recommendations not delivered to companies, no follow up (except for one recommendation)

The draft report contains:

- Analysis of common problems of the 32 food companies,
- Recommendations on establishing a Food R&D Centre,
- Assessment of TC needs in 6 companies,
- Detailed recommendations for upgrading processing in one company (Upper Awash Agro-industry).

While the reports have been reformulated to reflect criticism of the counterpart, the MoTI claims they have not yet been formally submitted. The selected companies have not received any written feedback either.

#### **c) Food safety**

Good results both in food safety system and in introducing HACCP in food companies

- Technical committee of 6 organizations (plus UNIDO project) established and having regular meetings (16 so far).
- Three drafts on Sanitation Standards Operating Procedures prepared.
- Draft document for establishing a National Food Safety Council prepared.
- Six food and beverages inspectorates upgraded as model inspectorates.
- Six meat inspectorates upgraded.
- Seven companies achieved good progress in introducing HACCP.

The results are highly appreciated both by the institutional stakeholders, including EMIA, and by the pilot companies.

### **SUSTAINABILITY**

#### **a) Post-harvest losses**

Sustainability of institutional capabilities without further support not probable, engine-driven equipment facing maintenance problems, simple equipment will continue to be used

According to the MoA without further support of UNIDO the results will not be sustained. This may apply to the capabilities developed within the extension services at different levels of the administrative hierarchy. As regards the results at the farmers' level there the situation may differ depending on the type of equipment/technology. The more sophisticated equipment (engine driven machines) has been facing maintenance problems in the past and there is a risk that this equipment may turn idle within a few years. Simple equipment requiring minimal maintenance will probably be in use longer.

### **b) Processing technology**

Little results to be sustained so far

### **c) Food safety**

Outputs not completed, proposals „in draft“, further policy and technical support necessary

Sustainability of the results will be jeopardized by the fact that – due to funding constraints – the planned results will not be reached: most of the results will be in the stage of „draft“ or „proposals“ without reaching the stage of approval. Similarly some companies will adopt HACCP to a great extent but some of them will be at an early stage of HACCP implementation. (Those at a more advanced stage wish they be further helped to reach certification, which exceeds the planned objectives of this project.) While a number of professionals have been exposed to the HACCP principles through training and active participation in the pilot companies, the number is low to represent a critical mass to promote and implement the system.

## **RECOMMENDATIONS**

### **a) Post-harvest losses**

- Review possibilities of allocating responsibilities and raising interest for maintenance services for the equipment delivered by the project, using also the repayment funds for this purpose.
- Prior to continuation of such a PHL programme carry out a comprehensive survey of all PDTs focusing on
  - use of the delivered equipment,
  - replication of the technology in the area.
- In case of continuation, establish contact with FAO in order to share their experience and make use of their training materials and manuals

### **b) Processing technologies**

- Submit the reports as soon as possible.
- Reformulate the project in such a way that the remaining funds are used for fully relevant activities. The following problem areas could be considered:
  - initial planning of the R&D Food Centre (with active participation of industry),
  - supporting activities of the Food Safety project.
- If involved in initial planning of the Food Centre the IP may consider to pursue a stage-wise process starting with building up capacities for which the demand is most obvious (testing) and only later proceeding to training and advisory services.

### **c) Food safety**

- Continue supporting both the efforts to establish the food safety system and to introduce HACCP in the pilot companies.
- When preparing Phase 2 of the IP consider food safety as an important factor of trade facilitation; in this context support establishment of an independent central laboratory with primary obligation for food safety.

## **6.4 Component 1D - Agro-industries: Agricultural machinery and tools**

### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

Original IP doc		Funding		%	Expenditures 31 Dec 2002	%
	786,000	Finland	105,000	30	91,660	87
		Ireland	127,966		120,161	94
Total	786,000		232,966	30	211,821	91

### **DESIGN**

Comprehensive coverage of the subsector in the IP

The Component comprises 7 outputs covering the problems of agricultural machinery in a comprehensive way (policy, service and research institutions, education, blacksmith training, manufacturing capacity) but only two outputs were implemented (policy and programme for a National Rural Technology Centre and strengthening of the Regional Rural Technology Promotion and Development Centres). Both proposals had been identified, formulated and funded prior to the IP; they were integrated in the IP when it was launched.

### **FUNDING**

No funding mobilized after the IP was formulated.

Funding of the two outputs (by Finland and Ireland) was mobilized prior to the IP programming mission. It was logical to start implementation of the Component with the two policy-related outputs but it was regrettable that no additional funding was mobilized for this important sector.

### **IMPLEMENTATION**

Inputs of good quality, straightforward activities

UNIDO inputs consisting of international and national experts, study tours and some office equipment were of good quality, implementation proceeded smoothly.

### **RELEVANCE**

Relevance of support to agro-machinery is obvious, relevance of the two projects is questioned by absence of any actual follow up

Agricultural machinery is of critical importance for economic and social development in agriculture and very low level of agricultural machinery in the country underlines the relevance of assistance in this field. However, the extent of relevance of the two projects that have not led to follow up might be questioned.

## OWNERSHIP

Ownership diluted among several organizations

The initial counterpart of the project was the MoA which was administering the regional Rural Technology Promotion and Development Centres (RTPDC). Later the RTPDCs were transferred under the Regional Agricultural Bureaus of the provinces (and renamed as Rural Technology Research Centres). This situation called for a strong coordinating body and BMEIA acting as de facto counterpart of the project hoped that it would be entrusted with this task. In fact the follow up projects regarding restructuring of the RTPDCs envisaged such a role for BMEIA and this was agreed upon at a workshop with all stakeholders. However, as BMEIA is under the MoTI and RTPDCs under the regional Agriculture Bureaus, BMEIA could be very supportive in conducting the studies but it could not influence the decision-making as regards implementation of recommendations.

## SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP

Strong business relations with the PHL project but no synergy benefits due to IP

Component 1B: The post-harvest losses (PHL) project procured most of the equipment from RTPDCs as – with some exceptions - there are currently no private manufacturers interested in producing the equipment procured by the project. The PHL project also trained some staff (19 in total) from RTPDCs in designing and manufacturing the equipment. However, strong linkages between the PHL project and the RTPDCs resulted from the nature of their business relations and they were not influenced by implementation of the two Outputs under Component 1D as these outputs represented conceptual studies without real impact on the capabilities of the RTPDCs.

On the other hand there seems to be a problem between the two IP Components in terms of utilization of the post-drought emergency funds (USD 250,000) earmarked by UNIDO in December 2002. While this issue is not subject of this evaluation, the evaluation mission learned from the farmers and population in the areas affected by drought that their most urgent and most important needs relate to water (water pumps, drilling, conservation of moisture, etc.) and not to reduction of post-harvest losses. This should be duly reflected in designing the emergency project.

## RESULTS

Reports of good quality but recommendations not implemented

Conceptual studies and proposals were prepared both for a coordinating national mechanism and for restructuring each of the 9 RTPDCs. Studies on restructuring RTPDCs were of good quality and contained proposals deserving serious consideration. An executive summary of the nine reports was prepared and a number of meetings have been held with the Embassies in Addis Ababa to mobilize funds to implement the follow up program. Unfortunately no funds have been mobilized and the evaluation mission could not trace implementation of any recommendation on RTPDC restructuring either. In fact it seems that actual decisions on future orientation of the RTPDCs (strengthening of research) run counter to the recommendations of the reports (to commercialized production of mature technology). Thus the only use of the 9 studies was for the preparation of project documents for the post-drought emergency assistance.

Some RTPDCs were equipped with computers to facilitate networking among the Centers. The computers are used but not for networking which continues to function on ad hoc basis.

## **SUSTAINABILITY**

No results to be sustained

## **RECOMMENDATIONS**

- In view of policy decisions taken on the RTPDCs it is not probable that the restructuring proposals will be followed up. However, agro-machinery remains a highly relevant area for UNIDO support. Two specific fields should be considered:
  - building up demand-oriented capabilities for maintenance of equipment procured by the PHL project as well as other equipment operated by the farmers,
  - building up demand-oriented capabilities to produce, maintain and service equipment for water pumping and conservation.
- Some RTPDCs may be qualified for strengthening to perform such services but the capacity building need not be confined to these organizations.

## **Component: 2-Promotion and development of MSMEs**

### **BUDGET(EXCL. SUPPORT COST) AND EXPENDITURES (USD)**

<b>Original IP doc</b>	<b>Funding</b>		<b>%</b>	<b>Expenditures 31 Dec 2002</b>	<b>%</b>
852,500	Austria	686,400	80	349,911	51
Total	686,400		80	349,911	51

#### **DESIGN**

Strong Government involvement in defining component strategy and determination of complementarities with GTZ were of priority

This component was designed on the basis of a Government strategy for SME development; the initial TOR were drafted by the Government and finalized by the component manager during and after the formulation mission of the Integrated Programme. The main challenge during the formulation phase was to coordinate the component with the German Development Cooperation (GTZ) that had a similar programme running in the country. A needs assessment was not part of the design phase and was undertaken as the first implementation activity. An in-depth analysis of the counterpart institution FeMSEDA at the design phase would have been a more suitable approach in order to better face the shortcomings of the counterpart institution that actually came up during implementation.

#### **FUNDING**

80% of funding identified immediately; very long approval process at Government end

Funding in the amount of US \$ 686,400, representing 80% of the original project budget was allocated by Austria almost immediately after launch of the IP. Major delays took place in the internal Government approval process through MEDAC that took almost one year.

#### **IMPLEMENTATION**

Support in capacity building successful; focus on regions and private sector important for achieving expected results

Implementation started with a need assessment focused mainly on identifying synergies with GTZ and avoiding overlapping. A stakeholders' workshop was held at the beginning of the project in order for all parties to reach a common understanding of the project.

The first phase focused on capacity building for FeMSEDA and ReMSEDA's. This included training of trainers, transfer of training methodologies and manuals, organizing entrepreneurship development programmes, including one focusing on women entrepreneurship development and the preparation of a manual prepared by a gender specialist, provision of paperless training courses aimed also at upgrading the IT capacities of institutions and trainers. The project furthermore provided upgrading of the physical facilities of FeMSEDA (equipment for the mobile training units) and of ReMSEDA's (two vehicles). In addition to the institutional capacity building, the project provided enterprise level assistance through business and financial management courses. The same target group from enterprises was given sector-specific training (metal-working; leather and food processing). Assistance was provided through international experts and a study tour.

At a Tripartite Review Meeting held in 2002, the decision was taken to focus increasingly on regions with ReMSEDAs as the main counterparts and to strengthen enterprise level interventions by selecting the core of trainers from enterprises.

Concerning counterpart performance, it must be stressed that continuous restructuring and changes in FeMSEDA led to a loss of built capacities. FeMSEDA also showed a lack of flexibility and has been reluctant to accept changes in implementation timeframes and workplans. While FeMSEDAs understanding and acceptance of technical cooperation is reportedly improving, the decision to decentralize more sharply and focus on the private sector was good as it was taken in order to ensure higher efficiency and more continuity of project activities. The evaluators could verify that the Government and FeMSEDA itself were fully aware of this Institution's weaknesses, in particular as concerns the strong turnover of trained personnel because, among others, lack of incentives and low salaries. The Government is still keen to ensure that UNIDO continues working through FeMSEDA and intends to face the challenges of improving the Organization's performance within the framework of the public sector reform that is being developed at present. Based on the evaluators' direct findings regarding FeMSEDA, the information received and the general critical views provided as well as in light of the findings of a recent GTZ workshop and report on the restructuring needs of FeMSEDA, it should be stressed that a great deal of efforts and time will be needed in order for FeMSEDA to become an effective player in MSME development.

Concerning ReMSEDAs, the evaluators had the opportunity to meet representatives of the Oromia ReMSEDA who also organized for the evaluators a number of site visits. The quality and commitment of staff and the level of the services provided appeared to be excellent.

Considering the magnitude of the problems being faced by FeMSEDA and the complex restructuring ahead and also considering that the "younger" ReMSEDAs are more effective and close to the clients, the decentralization line pursued by the project should be continued. This would lead to the expected results within a shorter period of time.

Counterparts evaluated UNIDO support in terms of experts, training manuals and methodologies, study tours and technical support by HQs as being of good quality.

In general, it should be noted that this component is a good example of flexibility during implementation, e.g. increased private sector orientation, addressing of new requests coming up, timely and effective coordination with other actors such as GTZ and the Dutch cooperation etc.

The extent of innovation and adaptation to country needs in the preparation of TOT Manuals and methodologies need also to be highlighted.

## RELEVANCE

Direct relevance to poverty alleviation
---

The project has a direct relevance to poverty alleviation, supports the rural development and regional approach that is now being emphasized as Government policy and is relevant in terms of support to gender issues. In this context it is worth noting that the chapter on private sector development of the final SDPRP stresses, among others, the need for strengthening activities relating to the start up of businesses and entrepreneurship development in the regions, all issues that are at the core of this project.

## OWNERSHIP

Ownership strong in particular in view of dynamism, closeness to clients and strategic thinking of ReMSEDAs

As mentioned above, due to its internal problems, FeMSEDA was, particularly during the first phase of the project, rather bureaucratic and was considering UNIDO as a mere provider of inputs rather than as a partner. After a number of awareness building activities, the situation seems now to be changing and FeMSEDA is becoming more receptive to the technical cooperation approach. However, the problems of the Organization seem still to be major and the impression received by the evaluators is one of a still bureaucratic organization requiring changes and restructuring. The evaluators also noted a striking difference with the approach and dynamism shown by the ReMSEDAs, which are more flexible and close to the clients in the private sector. To the extent that could be verified by the evaluation mission, the degree of ReMSEDAs ownership, willingness and capability to be a modern service Organization is commendable. Oromia ReMSEDA informed the evaluators that they would have liked to be more involved in strategic decisions. It should however be noted that they had been established after definition and initiation of the project activities. Since Oromia ReMSEDA have an excellent vision and strategy for the future, they should be strongly involved in the definition of future project strategies and main activities.

## SYNERGY

Strong synergies ensured in particular with bilateral and multilateral programmes of relevance to MSMEs

Internal synergy: this component established useful linkages with the leather component. Trainees were identified from the beneficiaries of the two components ensuring value added of the training provided. Despite attempts by the MSME component manager, there was less cooperation with the components relating to post harvest losses, a lost opportunity as complementary training on entrepreneurship development would have made sense also from the point of view of the food/post harvest sub-components. Apparently the main problem behind this lack of the cooperation is one of sharing project allotment document (PAD).

### External synergies:

The project manager was right, and successful, in ensuring complementarities with other actors, which include in particular GTZ, the Dutch Development Cooperation and UNCTAD.

Cooperation with GTZ: initially there was a real danger of overlapping which was however successfully addressed and turned into a useful division of work by region, joint preparation of programmes and the use by UNIDO of GTZ experts. UNIDO/GTZ also promoted an informal donor network to identify areas of cooperation such as sharing of work plans, joint organization of workshops, sharing of international experts, information exchange etc. According to the counterpart institutions and based on information received from the donor, there is a good synergy with GTZ and the respective activities reinforce each other. For instance, in addition to the distribution of regions it has been useful to link the networking activities promoted by GTZ with the establishment of information, data and monitoring systems by UNIDO.

### Cooperation with the Dutch Craft Programme Group

The Minister for Trade and Industry requested UNIDO to expand activities by covering the craft industry, a sector that was already assisted by the Dutch cooperation. Now the distribution of work has been identified with the Dutch craft programme group looking into export orientation, and UNIDO focusing on production issues and entrepreneurship development. Some trainees have been benefiting of training by both sides. Some synergy was also ensured with SIDA in the context of a leather crafts training programme.

Cooperation with the EU: in view of the forthcoming 6 million Euros –MSME programme, contacts have been established to avoid duplication and ensure exchange of information.

Cooperation with UNCTAD/EMPRETEC: cooperation in entrepreneurship training in leather and metalworking; UNIDO provided financing from a budget separate and over and above the IP (US\$90.000+ US\$45.000); UNCTAD provided contributions in kind.

UNDP/UNDAF: a lack of cooperation with UNDP and UNDAF was noted despite the priority being awarded by both Organizations to entrepreneurship development, support to MSMEs and gender issues. This is apparently mainly due to a lack of response by UNDP.

## RESULTS

Good results in institutional strengthening and training; outcomes start being produced; good prospects of impact

### Outputs:

- Institutional capacities built in ReMSEDAs and FeMSEDAs (Trainers trained; transfer of know how; preparation of manuals and methodologies; upgrading of physical facilities; information system and data base established).
- Enterprise level assistance provided in terms of training and training of trainers in business, financial and sector specific fields. Business consultancies provided to the final beneficiary enterprises (according to the final JPO report services were provided so far to 417 enterprises).
- Type of training provided: women entrepreneurship development, entrepreneurship development, business development services, business extension services, business consultancy services and training of trainers. Training was provided to staff from the Chambers of commerce, Ministry of Trade and Industry, Enterprise Ethiopia, Oromia ReMSEDA, Federal Micro, Small, Medium Enterprise Development Agency, Southern National People Regional Trade and Industry Bureau. A total of 93 staff from the above institutions was given training in the above fields in the first stage of the programme and training of 693 people in the second stage out of which 221 were from enterprises.
- A monitoring system of results achieved by the project is in place and a database is being established.

### Outcomes:

While there is no complete quantitative and qualitative picture of the outcomes of the produced outputs outlined above, the evaluators had the opportunity to carry out on the spot visits to selected micro enterprises. Such visits helped verify that through the business consultancies by Oromia ReMSEDA the respective micro enterprises were able to achieve improvements in terms of better products, record keeping, market assessment, customer handling. Some created new employment.

Oromia ReMSEDA reports the following major achievements through the UNIDO support:

- More than 300 MSMEs, most of them at the micro level in 6 zones of the region, got access to business extension and consultancy services, out of which some 10% are already showing improvements in their business.
- About 35 enterprises engaged in small scale edible oil production in two zonal towns are, through the business services provided, in the process of improving their access to raw material through cooperatives for bulk purchases, improving market access through networking with medium and large manufacturers which are underutilizing their capacities

- and improving their productivity through technical machinery improvements. Oromia ReMSEDA is now promoting a proposal for the upgrading of the edible oil sector to the EU. The proposal is also based on the expertise and advice provided by UNIDO.
- One dairy producers' cooperative of ~100 small dairy farmers is in the process of improving market access through networking with a large scale dairy processing firm which is at present using less than half of its capacity.

## SUSTAINABILITY

Need for continued support in view of magnitude of demand and of the problem addressed

Sustainability is not yet given in view of the shortcomings of FeMSEDA, the need for ReMSEDAs to acquire more experience and the tremendous demand for services that, in view of the financial limitations of the MSME sector, cannot be provided on commercial basis. Also, the issue of micro financing and the provision of financial services in tandem with the technical and managerial ones need to be addressed. While financing is not within UNIDO's mandate, the project should identify suitable partner institutions.

Oromia ReMSEDA has developed a clear and high quality strategic plan (2003-2006/7). The provision of "bridging assistance" is needed and highly advisable until the Organization will be in a position to provide services on commercial basis. Furthermore, many more enterprises need to be reached with awareness building in order to create a critical mass of demand for services and a change of mentality. More successes have to be achieved as model cases motivating others to apply for services. The reputation of ReMSEDAs still needs to be built up.

## RECOMMENDATIONS

### **To the component management and the field representation:**

- Continue and strengthen coordination with other Agencies, in particular UNDP, UNCTAD and the EU.
- Coordinate more strongly with component 1, post harvest losses;
- Identify synergies with Organizations providing financial services

### **To component management and Government central counterpart (MoTI):**

- Continue regional and private sector orientation; work closely and directly through ReMSEDAs and use FeMSEDA mainly for coordination functions.
- Support the Oromia ReMSEDA in their matchmaking activities and expose their staff to methodologies, practices and experience of UNIDO Subcontracting Exchange.
- Continue assistance to bridge the period required for ensuring sustainability of the regional institutions. Look into the opportunities of additional funding by Austria and/or other donors in view of good results so far.
- Consider expanding the project to other regions in close dialogue with GTZ and other partners
- Prepare a joint study/publication with GTZ on the experiences acquired perhaps through a workshop; involve Austria and other interested partners/ donors.

## **6.6 Component 3 - Quality, standardization and certification for industrial competitiveness**

### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

<b>Original IP doc</b>	<b>Funded</b>		<b>%</b>	<b>Expenditures 31 Dec 2002</b>	<b>%</b>
852,500	UNIDO	307,198	36	301,995	98

### **DESIGN**

Very broad coverage, with lack of focus, inputs not commensurate to objectives

The Component consists of 6 outputs dealing with capacity building in the Quality and Standards Authority of Ethiopia (QSAE), and enhancing competitiveness in 20 pilot enterprises. Besides, the Component should also specify areas for intervention in the coffee sub-sector.

The coverage is very broad. Strengthening of QSAE covers capacity in standards preparation, metrology (usually a very expensive affair in itself) and testing laboratories for leather and textile products. Enhancing competitiveness in 20 enterprises in the leather and textile sector goes beyond quality management and addresses also problems of production management and industrial operations. On the other hand the Component does not deal with building local capacity to promote and apply quality management systems in industry.

### **FUNDING**

UNIDO seed money only; fund mobilization not successful

To launch the Component UNIDO funded three outputs with the expectation that the remaining three ones would be funded by other sources. However, funds mobilization for this component failed. During the scale-down exercise the Component was reduced to USD 352,000 (= to less than 40% of the original budget).

### **IMPLEMENTATION**

Primarily international expertise; preparation of the Business Plan rather expensive

Inputs consisted of advisory services provided by a large number of short-term experts (primarily international) and a study tour. Experts working with laboratories were of good quality. However, preparation of the Business Plan consumed a lot of resources (approx. USD 90,000) so that efficiency of production of this output seems low. The study tour was also rather costly but through UNIDO intervention in the planning of the study tour (selection of appropriate laboratories to be visited, timing to coincide with international auditing of the visited laboratories) UNIDO enhanced considerably its effectiveness.

Advisory services to pilot enterprises were carried out by teams of two experts (quality management, cleaner production and energy efficiency) accompanied by QSAE staff. Arrival of the experts was announced only three days before their landing in the country so that QSAE could assign only one staff to accompany the team. Most of the target companies were selected from the group of companies supported by the IP Food Industry component. The team visited each company for 3-4 days. Deliberate combination of multidisciplinary expertise at every company visit was viewed by the Project Manager as a factor enhancing effectiveness of the interventions but feedback from one company suggests that this modality may not be preferred by

everybody. (“We prefer them to come individually to exhaustively interact with expert and learn from each expert ...experience“ and benefit from on-the-job training.)

Because of funding from the UNIDO regular budget implementation had to cope with the pressure of “December deadlines”.

## RELEVANCE

Support to capacity building at QSAE relevant, relevance of stand-alone interventions in companies doubtful

In view of the importance of QSAE functions for upgrading competitiveness of industry the support to QSAE is very relevant. However, relevance of stand/alone services of experts to companies is doubtful. Selection of companies to be visited by the team faced problems of low interest of companies.

## OWNERSHIP

QSAE has capability to absorb technical assistance; due to implementation modality ownership of this support weakened

QSAE is a competent organization, well aware of its important role in trade facilitation. In general, it has the required capability to absorb technical assistance. In the particular case of the Business Plan the QSAE ownership of the support provided by UNIDO was weakened by the modality of implementation (subcontract to a consulting company with limited participation of the QSAE staff in the process).

Ownership of company interventions by beneficiaries was rather low; only two companies (out of five) responded to a feedback questionnaire.

## SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP

Cooperation with other Components was rather limited and detrimentally affected by UNIDO internal competition between branches

Component 1B: Pilot enterprises (Output 3.3.1) were selected jointly with Component 1B (25 companies in the Food sector). However, actual work in the (5) pilot enterprises was carried out without coordination with the assistance provided to the same companies by Component 1B. As a result, some companies were visited and advised on the same issues by experts provided by different Components. This to some extent reflects existence of a gray zone between service modules implemented by different UNIDO Branches.

Furthermore, the advisory services to these 5 companies were carried out by teams of three experts (quality, cleaner production and energy efficiency) but the other IP Components providing support in these fields (Component 5A and 5B) were only informed about these activities, they themselves did not take an active part in them.

## RESULTS

Modest results both in QSAE capacity building and company interventions

A Business Plan for QSAE was fully developed but its use in actual business operations was limited. Metrology department was upgraded but the planned Output was produced only partly (metrology strategy was formulated and is used as guidance, local training was conducted, but certification of personnel was not achieved). On the other hand a gap analysis and a manual

were prepared for four testing laboratories (more than planned). QSAE considers UNIDO support in upgrading the laboratories as an important contribution on the way to certification of the laboratories.

Professional relations were established with a metrology laboratory in South Africa. Output 3.3.1 (Pilot enterprises) was also produced only partly (only 5 companies instead of 20) and in a modified way (in the food sector and not in the leather and textile sector as originally planned). In spite of the fact that the expert reports on companies were of good quality, with numerous recommendations, effectiveness of the company visits is questionable. In one case (Termo Plastic) some follow up is reported in quality control, in two cases the report was either not received (Meta Abo Brewery) or not known to the staff visited by the evaluation mission (Fafa Food).

Gaps in the production of outputs were caused partly by funding constraints and partly by high costs of preparing the Business Plan.

## **SUSTAINABILITY**

QSAE has the capability to continue upgrading its competence

QSAE is a well-established organization with a lasting mandate and motivation to upgrade its functions. Capacity upgrading resulting from UNIDO support will sustain. Results at company level are apparently too modest to deserve sustainability analysis.

## **RECOMMENDATIONS**

- Consider QSAE as one of the key organizations supporting competitiveness of industry and facilitating trade and provide support to these functions in the new phase of the Integrated Programme.
- Provide support particularly in the following areas:
  - establishing quality management systems (ISO, EMS, HACCP),
  - establishing/strengthening testing laboratories (microbiological; textile; coffee),
  - upgrading the metrology laboratory.
- When designing future support to QSAE in the above areas adhere to the following principles:
  - participation of industry associations from the very beginning of the planning stage,
  - avoidance of duplication with testing services carried out satisfactorily by existing laboratories,
  - maximal use of available national expertise and networking with potential partners (laboratories in Ethiopia, quality and standardization bodies abroad).

## **6.7 Component 4 – Investment and technology promotion**

### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

Original IP doc		Funded		%	Expenditures 31 Dec 2002	%
944,000		Austria Italy UNIDO	313,128	33	160,437	51
Total	944,000		313,128	33	160,437	51

### **DESIGN**

Comprehensive and tailor-made

The Component was designed in a comprehensive way, with 7 Outputs addressing key investment and technology related problem areas such as strengthening of the Ethiopian Investment Authority, strengthening and networking the Regional Investment Bureaus and other related organizations; strengthening industrial zones as a solution to land acquisition problems; reviewing policy, legal and regulatory frameworks for private financing etc. The component also aimed at an investment promotion campaign with 25 projects promoted and 10 concluded and was to be implemented within the context of the general promotion strategy developed by FIAS/MIGA.

### **FUNDING**

Considerable downsizing due to lack of funds

Prior to launching of the IP, a project document in the amount of USD 1 million was approved for funding in 1997 by bilateral Italian funds. However, due to lengthy procedures at MEDAC's end as well as other priorities concerning the use of Italian bilateral contributions by the Ethiopian Government, funds were never released.

In the original programme document of the IP, the funds foreseen for this component were US\$ 944,000. However, no donor was identified and only a small portion of the original budget was initially provided by UNIDO (US\$ 110,000). In 2002, Austria allocated US\$ 100,000 for investment promotion with Austrian partners and US\$ 97,000 was transferred to this project from the Italian sponsored component for the promotion of leather products (Component 1 A Leather).

Due to the funding situation the component had to be drastically downsized and partly reoriented to suit the specificity of the Austrian sponsored project. Two objectives were pursued, first the strengthening of EIA, and second investment promotion activities with focus on promoting partnerships with Austria.

### **IMPLEMENTATION**

Successful capacity building; promotional activities created expectations but produced no results so far

The fact that UNIDO had worked with the Ethiopian Investment Agency (EIA) prior to the IP turned out to be a trust-building advantage for implementation of the funded outputs. EIA was strengthened through training and provision of computers and COMFAR software. 22 experts of EIA, the Regional Promotion Offices, MoTI, the Development Bank and the industrial manufacturing association were trained in investment project preparation and 47 professionals

received training in COMFAR. The 10 trained staff members from EIA are still with the Agency; 2 of them are working with COMFAR on permanent basis.

The Industrial Investment Project Profiles (IIPPs) were promoted through the ITPO network (primarily in UK and France) but due to lack of funds no intensive promotional campaign could be implemented. This raised expectations and EIA laments a loss of credibility with respect to the Ethiopian interested companies.

Under the Austrian sponsored project, the investment climate and business opportunities in Ethiopia were presented to the business community in Austria. At the time of the evaluation mission, a visit of Austrian businessmen in Ethiopia was planned to follow. The implementation so far faced some communication and coordination difficulties due to the complex counterpart set up in Austria (Ministry of Foreign Affairs, local Embassy, Chamber of Commerce). The quality of experts has not always been up to the mark. Furthermore, the project identified so far relate to trade promotion rather than to direct investment in the productive sector. This is the reason why some Austrian partners have questioned the value added of UNIDO's involvement.

## RELEVANCE

Low levels of foreign investments, changes in legislation and EIA's role justify the component's relevance

The country faces the challenge of having to revert a trend of persistently low levels of foreign investments in the productive sectors.

The project was relevant in this context since it provided support to Government efforts to streamline the investment policy framework, make the institutions (particularly EIA) more proactive and client-oriented and improve the investors' perception of the country's investment climate.

EIA definitely required capacity building in order to become a facilitation and promotion oriented organization.

In view of the slow changes from a regulatory attitude and approaches to foreign investment, both the Government efforts and the UNIDO project have been and remain highly relevant.

## OWNERSHIP

Mixed perceptions; high degree of ownership regarding capacity building

The evaluators could verify a good ownership with respect to the capacity building activities provided by the project. The promotional "generic" type of activities placing projects on UNIDO web site and promoting them through the ITPO network is seen rather critically as it has created expectations and no results so far. EIA reiterated its request for support particularly in view of the introduction of a new more liberal investment code. However, considering that several partners are involved in this support function (UNCTAD, FIAS/MIGA etc) and in view of the very limited funds that could be mobilized for the project, the question arises whether EIA considers UNIDO a priority partner.

## SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP

Actual cost saving from cooperation with the leather Component; good coordination with other external agencies

- Sectoral studies carried out under the leather and partly under the food components were used in the preparation of the IIPPs. Furthermore, an international consultant in the leather sector (Comp 1A) provided some inputs to the preparation of IIPPs (cost saving)
- Good coordination with FIAS/MIGA projects supporting EIA.

## RESULTS

Good results in capacity building; promotion of projects without outcome so far

1. EIA's and other organizations' staff upgraded their knowledge of investment promotion techniques and formulation and appraisal of investment projects. Furthermore, the information system of EIA was considerably enhanced. As a result, EIA is more frequently used by clients and has more intense networking with the Chambers of Commerce, Industry and other associations.
2. A portfolio of IIPPs was prepared and placed on the ITPO's website, no results are likely to be achieved through this approach.
3. Other project profiles were prepared and potential partners identified under the Austrian sponsored project. No concrete results have been achieved as yet considering that the project is still ongoing.
4. UNIDO has also provided some inputs for the preparation of the new investment code, a result that, while not to be attributed solely to UNIDO, represents an important change in legislation. Inputs were provided to EIA by UNIDO based on the experience acquired when implementing the same activities within the IP in Tanzania.

## SUSTAINABILITY

Staff able to sustain the upgraded level and qualifications

Trained staff is still on board and seems to be in a position and having sufficient qualifications to sustain the upgraded level. The likelihood of success in terms of investment promotion can be increased by linking the identification process with the IP's sectoral components, particularly the leather and food sectors and by better tailoring the promotional activities to a specific sector or sub-sector.

## RECOMMENDATIONS

- When completing the Austria funded project, promotional support should be given primarily to projects having a potential to be developed into partnerships with investment in manufacturing.
- EIA seems now to have the core capabilities of preparing profiles and the necessary support information network and system. The future role of UNIDO should be primarily in networking for investment promotion. The approach followed should however go beyond generic promotional activities and should be tailored to specific countries and sectors. In order to make use of synergy advantages within the IP, it is strongly recommended that project profiles be identified and promoted within the context of the sectoral activities of the IP (Leather and Food).

## **6.8 Component 5A - Cleaner production**

### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURES (USD)**

Original IP doc		Funding		%	Expenditures 31 Dec 2002	%
ECPC	708,000	Italy	708,000	100	374,498	53
ESID	1,327,000	Netherlands	1,413,546	107	1,029,640	73
Municipal Waste Mgmt	375,000		0	0	n.a.	n.a.
Total	2,410,000		2,121,546	88	1,404,138	66

### **DESIGN**

Clustering originally stand-alone projects, inter-linkages not envisaged in the design

The title of the Component is a misnomer as it represents only one of the three environment-related objectives of the Component (cleaner production in industry; policy and institutional framework; municipal waste management). While having environment as common denominator each of the objectives was addressed by an independent project before the IP programming mission started. It was only in the course of IP formulation that the three projects were clustered in one Component. This was not necessarily the only possible arrangement. Alternatively, the cluster could have been extended to include also energy conservation (part of Component 5B) which in fact stands for cleaner production applied to energy. A methodologically justified solution would structure the Environment Component in four Sub-components: ESID, Cleaner Production cum Energy Conservation, Renewable Energy, and Municipal Waste Management. However, for historical reasons and with consideration of the counterparts' mandates the current structure is a reality that need not be changed.

As regards individual project documents, the project document for ECPC followed standard UNIDO design, but it did not include outputs and activities linking CP with the introduction of EMS and ISO 14000 in companies. Neither did it include a provision for procurement of mobile sampling equipment.

The ESID project document was rather innovative and quite ambitious in its objective to strengthen both the policy and regulatory framework and the institutional capacity for inspection, including considerable support to building up the EPA laboratory through provision of equipment (almost USD 500,000).

The Municipal Waste Management project was rather comprehensive by targeting at policy and institutional framework, aiming at the application of optimal solutions in two pilot cities, and at the identification of investment opportunities in waste recycling.

Though the project documents did not envisage activities that would support their complementary nature, actual implementation of the two funded projects respected this aspect (see below under Synergy).

### **FUNDING**

Full funding mobilized for two projects

The ESID project was interesting for the donor (the Netherlands) because it aimed at policy and institutional capacity building whereas – in the Dutch concept – the bilateral agencies and the private sector should be involved in technology transfer and upgrading at enterprise level.

Italian funding of ECPC was mobilized by UNIDO HQs with little involvement of the donor office in Addis. This fact may have influenced rather loose contacts between the project and the donor office in the field.

## **IMPLEMENTATION**

### **a) ECPC**

Slow start, currently satisfactory implementation, Business Plan an asset

UNIDO inputs were of good quality. However, implementation had two distinct phases. The initial phase was marked by a very slow start: The Ethiopian Commission for Science and Technology (ECST) as the host organization faced problems in providing Government inputs as specified in the project document. Also it took long time to select and approve the Director. After some changes in the host organization and nomination of the Director the activities unfolded satisfactorily but due to accumulated delays implementation in financial terms exceeded 50% of the budget only at the end of 2002.

Preparation of the business plan (end of 2002) was a significant milestone in re-orienting ECPC activities to become fully demand-oriented, to build on the previous CP project and to network closely with related national organizations, in particular QSAE. It also includes procurement of some mobile sampling equipment, a measure supported by the evaluation mission.

### **b) ESID**

Inputs of good quality, formulation of policy and standards highly participatory and therefore duration longer than planned

Structure of project expenditures is marked by high share of personnel costs (international and national experts, administrative support) and equipment (more than one third of UNIDO inputs). Training accounted for 20% of inputs. All inputs were of good quality.

Project implementation was guided by a Steering Committee. Continuous improvement of the draft proposals (particularly effluent standards) through repeated feedback from industry and other stakeholders extended the project duration.

## **RELEVANCE**

Both funded projects were and continue to be relevant

Environmental problems of the country are acute particularly in the Addis Ababa region, with the worst situation relating to water and soil pollution. Significance of environment issues was acknowledged by the Environmental Pollution Control Proclamation issued by the Parliament (December 2002).

Problem analysis, on the basis of which projects forming Component 5A were prepared, was carried out under the CLT/95/295/STAS project. All three projects were and continue to be relevant.

## **OWNERSHIP**

Originally the intention was to locate both projects in the EPA but EPA suggested that the ECPC be hosted by the Ethiopian Commission for Science and Technology (ECST). Experience from other countries shows that it is better for a national cleaner production center not to be hosted by a regulatory and inspection body so that the recommendation was well substantiated.

### **a) ECPC**

Currently strong backing of ECPC by the host organization and Advisory Board

ECST being a Government body was constrained in granting the Centre legal and financial autonomy. The salary level of the staff on UNIDO project payroll had to be scaled down to the (highest brackets of) Government salary levels. While this process of adjustment was causing delays and some tension between the Commissioner, ECPC staff and UNIDO, it can be viewed as execution of the ownership by the Government authorities. This perception is supported by the fact that currently six staff (including three professionals) are paid from the ESCT budget. The Advisory Board (11 members, meetings 4 times a year) is active and engaged in management decisions.

### **b) ESID**

Strong feeling of ownership due to project benefits for the host organization and active Steering Committee

The project is hosted by the Environmental Protection Agency (EPA). EPA benefited greatly from the project, without the project it would not have acquired the recognition it possesses now. Hence, the strong feeling of project ownership by EPA, national ownership of the project was further strengthened by the work of the Steering Committee.

## **SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP**

Cooperation between ECPC and EPA/ESID very intense; good cooperation also with other Components

- EPA inspectors were trained on the CP concept by the ECPC so that they understand better the position and possibilities of industry; ECPC provides technical information about CP.
- ECPC was involved in policy dialogue within ESID.
- EPA carried out some lab analysis for ECPC free of charge.
- Participation of ECPC at ESID workshops generated requests for ECPC services (for example, 5 requests coming from participants at the 2003 ESID workshop on standards).

Close cooperation between EPA and ECPC is supported through participation of an EPA representative on the Advisory Board of the ECPC and vice versa.

ECPC and Component 1A: targeting the same company (Wallia tannery).

ECPC and Component 5B: borrowing some measuring equipment, exchanging info on companies.

ESID and Component 1A, 1B, 5B: participation at ESID workshops.

## RESULTS

### **a) ECPC**

Good results in standard NCPC activities but a critical mass of CP experts not yet available

The Centre is well established, with four technically qualified professionals, methodologies in place, good networking and a system to record activities and their impact. So far the following outputs have been reported:

- awareness raising (557 participants at various workshops with CP issues),
- training (366 trainees, most of them in the Textile and Food sectors),
- in-depth CP audits in six companies, with a total 113 CP options identified (out of which 40% housekeeping, 17% recycling).

Out of 113 CP options identified in the companies 53 were implemented or are under implementation with estimated annual saving in the amount of approx. USD 1.2 million annually and reduction of effluent discharges.

These are good results but some of them were achieved with significant support of international experts. This applies in particular to CP audits at plant level. In spite of the training workshops carried out under this project as well as under previous technical cooperation projects implemented by other agencies the number of professionals capable of carrying out CP audits in industry is limited. In addition to those currently working in the ECPC (1 director and 3 sectoral experts) there are some other professionals trained in CP (in the companies, EPA and one in ECST) but unless they quit their current jobs they can hardly be released on ad hoc basis to work as consultants. Some experts trained under the previous projects are members of the Society of Chemical Engineers or the Cleaner Production Society but the ECPC does not keep contractual arrangements with them. Thus a core of qualified professionals large enough to unfold CP advisory services in the country has not been created yet.

Recently ECPC started cooperation with QSAE to support application of the EMS and ISO 14000 in the country as well as other new activities suggested in the Business Plan but it is too early to record results in these new fields.

### **b) ESID**

Advanced stage of policy formulation and capacity building at EPA but process not yet completed

4 volumes of draft documents on environmental policy, regulations and effluent standards were prepared and translated in Amharic. Their finalization has taken long time but now, once the Proclamation was issued by the Parliament, they are expected to be submitted to the Government in July-August.

Effluent standards elaborated with the support of the project were adjusted to local ecosystems; the final draft is being completed.

Inspection capacity of EPA was enhanced by training and procurement of laboratory equipment. The equipment was delivered but needs to be installed or re-installed after physical move of EPA to new premises. Database is designed, data on the first 100 industrial companies are being entered.

## **SUSTAINABILITY**

### **a) ECPC**

Good chances if Business Plan implemented

While the staffs of the ECPC are technically competent to carry out training and CP audits at enterprise level, marketing of the services and creation of demand for ECPC services still need upgrading. The Advisory Board recommended that this managerial aspect be strengthened so that some changes at management level are under consideration.

The new Business Plan with detailed ideas how to use CP as an element of trade facilitation provides a useful guidance how to make ECPC fully demand-oriented. If implemented at least partly the sustainability would be enhanced greatly.

### **b) ESID**

Critical factor: adoption of the draft policy by the Government

There are good chances that the results produced by the project will be sustained if the draft policy documents are actually adopted. This would endow EPA with authority to perform the enforcement function and, thus, to use and further upgrade the capabilities already developed.

## **RECOMMENDATIONS**

### **a) ECPC**

- Proceed with implementation of the Action Plan as outlined in the Business Plan.
- The Business Plan – due to its innovative features – should be used by the UNIDO NCPC Programme as a source of inspiration for other NCPCs.
- A modus operandi in backstopping EMS and ISO 14000 projects should be agreed upon at UNIDO HQs between the Environment and QSM Branches.

### **b) ESID**

- Extend – without any additional funding requirement - the ESID project by additional 6 months to carry out awareness raising campaign in the regions and to elaborate ambient environmental standards.
- Install the EPA laboratory equipment in the new premises and commission it as soon as possible in order to be ready to perform inspection functions once the policy and regulations are adopted
- Check mutual compatibility of the draft Environmental Policy and the newly drafted National Industrial Policy and try to introduce cross-references.

## **6.9 Component 5B - Industrial energy efficiency and renewable energy development**

### **BUDGET (EXCLUDING SUPPORT COST) AND EXPENDITURES (USD)**

<b>Original IP doc</b>	<b>Funding</b>		<b>%</b>	<b>Expenditures 31 Dec 2002</b>	<b>%</b>
497,000	Austria	487,000	98	183,085	38

### **DESIGN**

Accent on energy conservation; lengthy process when designing support to renewable energy

The Component as designed in the IP document pursued two objectives: energy conservation in industry (four outputs) and renewable energy (one output: a national framework as a basis for selection of appropriate technology for renewable energy development). However, upon initiative of the Project Manager (who did not participate in the programming mission) and partly due to the consultation with the donor the design as reflected in the implementation project US/ETH/99/149 and its extension was subject to some changes. First, the output targeting energy conservation in two steel mills was dropped as steel mills were not considered desirable target beneficiaries by the UNIDO Business Plan. Secondly, a new output (an Energy Conservation Data Bank) was added to support capacity building at the Basic Metals and Engineering Industries Agency (BMEIA). Finally, the elaboration of the national framework for renewable energy was left for the counterpart organization alone and the project included instead a substitute output "Creating Capability on the Maintenance and Management of Micro- and Mini-hydropower plants at BMEIA".

Introduction of changes in the design is not a negative phenomenon per se but the lengthy process of reaching an agreement signals a lack of clarity of objectives and slows down implementation. As a consequence, the project duration was extended by 18 months.

### **FUNDING**

Fully funded, active role of the donor in project monitoring

Funded by the Government of Austria. The donor has been in close contact with the project during implementation, including active participation at the review meeting.

### **IMPLEMENTATION**

Inputs of good quality but limited know how of modern measuring equipment; two rounds of services for companies supported by international experts

UNIDO delivered mainly short-term expert services for the purpose of awareness raising, initial audits of companies and training of auditors, a limited number of study tours to support capacity building at BMEIA, and measuring and some office equipment (approx. USD 46,000). Delivered expertise was qualified as "adequate" with the exception of insufficient acquaintance of the international expert with the modern measuring equipment delivered by the project. The same weakness was observed in the case of the national expert. Study tour was appreciated but it could contain more practical demonstrations. Equipment is adequate and complete.

A standard set of services carried out for companies consisted of the following activities:

- Awareness raising (one day),
- Training: Energy Management Training (two days) and Energy Audit Training (10 days),

- Walk-through audits (approximately two hours) to sensitize and motivate the companies,
- Full energy audit (or Model case energy audit) to train participants of the training course on the job in selected companies (six days).

The above set was carried out in two rounds, always with support of an international expert. First round was used primarily by public companies, in the second round approx. 80% were private companies. A third round is under preparation for the service sector, including housing.

Expert services in the micro-hydropower sector started recently. The expert is in delay in delivering the report.

## RELEVANCE

Large potential to reduce energy consumption but currently low effective demand for advisory services

Relevance of the project is to some extent based on the assumption that experience in promoting rational use of energy gained in other countries can be applied also in Ethiopia. Some conditions are indeed identical or similar: in technical terms, there is considerable potential for reducing energy consumption.

However, some socio-economic conditions differ. Changing ownership in companies (privatization) was accompanied by instability of management which influenced their interest in project activities. Furthermore, most SMEs consider as their main problem low capacity utilization. However, new Government regulations increasing price of electrical energy and introducing effluent standards may increase effective demand for advisory services reducing energy consumption.

## OWNERSHIP

Energy conservation not the main mandate of the host organization

Host organization of the project is the Basic Metals and Engineering Industries Agency (BMEIA). Conservation of energy is one of its programme areas mandated by MoTI. There is no other agency or organization aiming at energy conservation, one research institute deals with renewable energy. Ownership of the project by BMEIA has been strengthened when one of the project trainees became director of the Agency.

## SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP

Cooperation primarily with ECPC

Component 5A ECPC: four ECPC staff participated at training on energy conservation

Component 1A, 1B, 3: targeting the same group of companies but without planned coordination in advance

External cooperation: Austrian bilateral programme supporting construction of large hydropower stations - using an expert from that programme also for the project output on micro hydropower.

## RESULTS

Service unit is understaffed and still not capable of carrying initial walk-through audits without assistance of an international expert; considerable number of companies sensitized, some recommendations implemented

Capability of BMEIA to provide training and advisory services in energy conservation was enhanced through training of two staff (on the job training and a study tour), elaboration of a very comprehensive training manual and provision of the measuring and office equipment. While the manual is indeed an excellent contribution to institutional capacity building in BMEIA, the number of staff exposed to intense training is below the original target. Furthermore, one of them was promoted to a higher position so that the unit is understaffed in spite of the fact that two technicians were additionally assigned to it to operate the measuring equipment. The unit is still not capable of carrying initial walk-through audits without assistance of an international expert. Capacity developed through training in a number of companies will hardly be used in other companies.

The equipment is used primarily at the time of technology audits, otherwise it is used sporadically or is rented to companies.

In total 49 companies and institutions were exposed to issues of energy conservation through various project activities (some of them participating at more than one):

Project activity	Number of companies
Class-room awareness raising and training	29 (+ 5 Government agencies)
Walk-through audits	38
Full (model case) energy audits	40

Both the walk-through and particularly the full energy audits resulted in a number of recommendations on how to reduce energy consumption and save costs. Information about implementation of these recommendations is sketchy and in most cases without quantification of the impact. Some energy saving has been achieved through improved housekeeping, some other non-investment measures and in a few cases through investment measures (considerable financial savings was achieved by some companies through reduction of the power factor penalty paid to the utility; however, application of the capacitor banks correcting the power factor reduces physical consumption of power to a limited extent only).

Some elements of a network were established: BMEIA supports the Faculty of Technology in their energy audits in companies conducted as training for students.

No results can be reported in the renewable energy field so far. It is anticipated that at least one of the micro-hydropower plants (up to 130 kW) currently standing idle will be rehabilitated and put into operation and local production of the generators promoted.

## SUSTAINABILITY

A subsidy for an interim period needed

Up to now BMEIA has not developed the capacity to provide all services without support of an international expert. Even if this is achieved through additional training and staff increase, BMEIA will have a problem to sustain and further develop the developed capability. Given low demand for the services the plans to recover costs through selling of the services are too optimistic. (Up to now services were provided to companies free of charge, only in some cases a small fee was charged for lending equipment.) Government ownership of BMEIA will be also a constraint in

going commercial. Thus the only option for further delivery of the services, once completely developed, will be a subsidy by BMEIA at least for an interim period of a couple of years.

### **RECOMMENDATIONS**

Carry out the missing training to complete staffing of the service unit

- So far training and capacity building has been carried mainly in technical fields. There is also a need for economic training (how to calculate the savings in economic terms) and management training (how to start, promote and manage the consultancy job).
- Prepare a business plan along the lines of the one prepared for ECPC (with identification of services for which demand can be created).

## **6.10 Component 6 – Strengthening the MoTI and related institutions**

### **Component 6. Strengthening the MOTI and related Institutions**

#### **BUDGET (EXCL. SUPPORT COSTS) AND EXPENDITURE (USD)**

<b>Original IP doc</b>	<b>Funding</b>		<b>%</b>	<b>Expenditures 31 Dec 2002</b>	<b>%</b>
737,500	UNIDO	310,500	42	256,370	82

#### **DESIGN**

Comprehensive and timely package envisaged; only two sub-components were chosen due to lack of funding

The original programme document aimed at strengthening governance by establishing an industrial information network among Government bodies and related institutions, a public private partnership platform, upgrading of MOTI staff skills in policy formulation and implementation and carrying out an industrial sector survey highlighting growth potentials and investment opportunities. This set of interrelated activities constituted a comprehensive and timely package aimed at strengthening the Ministry of Trade and Industry and related institutions in their new role as facilitators of private sector development. This was a new challenge and a critical issue for the Government. The component was envisaged to play an important role in support to the rest of the IP. Considering the limitation of funds, the component as originally envisaged was downsized based on priorities set by the Government, i.e. sub-component 6.1 (Information Network) and component 6.4 (Industrial sector survey/competitiveness analysis). A separate project document was prepared for sub-component 6.4.

#### **FUNDING**

No donor identified; funding from UNIDO seed money only

Since no donor could be identified and considering the relevance of this component as well as its centrality within the Integrated Programme, funding was provided from UNIDO Regular Budget. The Public Private Partnership sub-component was submitted to UNDP for funding. UNDP decided to go ahead with implementation of this sub-component on its own.

#### **IMPLEMENTATION**

##### **A) SUBCOMPONENT 6.1 : UPGRADING THE MINISTRY OF TRADE AND INDUSTRY WITH THE CAPABILITIES AND CAPACITY FOR POLICY ANALYSIS AND COMPETITIVENESS ANALYSIS.**

Training successful only partially; policy review prepared but not circulated yet; draft competitiveness analysis being finalized

Under this sub-component three sets of activities were carried out as follows.

##### **1. Training**

A core team of MOTI staff was trained in policy analysis, understanding and analyzing competitiveness, using computer for economic analysis, dynamics and implications of public private partnership for economic development and industrial competitiveness.

The training took place in two rounds in South Africa.

The counterpart stated that the first training, which was a joint training programme for two country policy teams of Ethiopia and Ghana, did not meet fully their requirements (although the overall

assessment of the training programme was good). Some topics previously planned were not covered as the training institution did not embark on the full analytical work of the competitiveness analysis during the first training programme which was considered to be too premature.

The second training was better tailored to requirements and was well received. Two officers were also trained at Oxford University with focus on conducting enterprise survey and firm level analysis.

Selected experts also participated in drafting the competitiveness analysis thus receiving additional on the job training and experience.

A national workshop on industrial development and competitiveness was held in August 2001 with the participation of the core MOTI policy team and 100 participants from the public and private sector. The workshop was considered extremely useful in terms of knowledge imparted as well as awareness building and visibility. It is to be noted that all of the trained staff are still with MOTI.

## **2. Policy review**

A team of international experts from IDC South Africa, the UNIDO component manager and the core policy team of MOTI prepared a first issue of the review of industrial and trade performance. MoTI stated that communication with IDC did not work smoothly, that important information such as the electronic data on companies was not provided and that background industrial data and information materials provided by MOTI to the South Africa Institute were not returned. The counterparts also expressed some dissatisfaction about the fact that "working together" with IDC was not sufficient and that on the job skills enhancement could not materialize as expected. On the other side the component manager stresses that the MoTI team was involved in a number of joint activities going beyond the limited resources available. Such activities were the joint production of the questionnaire for the survey, 28 days spent in South Africa for training and for working collectively on the competitiveness analysis, and working with 3 consultants from IDC on a split assignment basis. While the evaluators are not in a position to assess the quality of the services provided by IDC, the fact remains that the objective of enhancing the skills of the MoTI policy team was achieved only partially.

It is also worth noting that the Review was published in Vienna and subsequently shipped to Addis Ababa, an approach that is questionable from the cost-effectiveness point of view. The costs for printing in Addis Ababa would have been one fifth of costs in Vienna with perhaps some loss in quality; printing in a neighboring country such as Kenya would also have been much cheaper and of the same quality of printing in Vienna. The shipment costs must also be added to underline the cost effectiveness problem.

Finally, a mailing list for the report was prepared with the support of UNIDO but the Ministry has not yet circulated the report with the risk that data will soon become outdated and the whole exercise obsolete.

## **3. Competitiveness analysis**

The first draft of the analysis was prepared after completion of the second training round thereby enabling MOTI staff to apply and upgrade their skills. While MOTI's ambition was to cover the whole country and each industrial sub-sector, 6 Regional States were covered and a sample of 138 factories selected. The focus of the survey was the 6 regions with meaningful industrial activities. The core national team carried out the field survey of the regions after UNIDO and the international consultants had conducted a sample survey in the Addis Ababa region as a training activity for the national team.

Delays occurred during implementation. While the work plan in the project document included a period of 8 months, more than 2 years have passed by now since the start of project activities. The delays are due to the pattern of allocation of UNIDO seed money (approval of UNIDO funds possible only under an ongoing budget biennium and based on the decision of the UNIDO Executive Board), lengthy procedures by the Ministry and some changes in high level counterparts within the Ministry and, according to the counterparts, also due to shortcomings at IDC's end.

The draft competitiveness report was the subject of detailed, although somewhat unstructured comments prepared by MOTI in cooperation with 11 institutions. The comments relate inter alia to the need to include in the study policy recommendations on issues such as the most competitive industries in the short and long run, investment incentives and export guarantee scheme. The need for benchmarking and information on other countries is strongly underlined.

At the time of report writing, the comments are being reviewed in Vienna and by IDC with a view of finalizing the document.

## **RELEVANCE**

High relevance in view of new Governance issues to be faced by MOTI

The relevance of this sub-component was indeed extremely high when the programme was launched in view of the challenges faced by MOTI in meeting new governance issues. Today, and as made amply clear by the stakeholders themselves, the relevance is even higher considering the following:

- Factual data and assessed information are required for the new industrial policy that is being launched by MOTI and as a basis for industrial policy decisions, including planning of bilateral projects (at present several donors are launching private sector support programmes).
- As an important input to the sub-sectoral export and investment promotion strategies by the Government.
- As an input in support to the Government's contribution to the ongoing WB study on competitiveness.

## **OWNERSHIP**

Very high in light of relevance to export and investment promotion strategies

Ownership by MOTI as well as by a large number of institutions concerned with the promotion of investments and exports is strong in view of the high relevance accorded to the study, as outlined above. The ownership is testified, among others, by the thorough comments collected and provided by MOTI and other counterparts as well as by the statements in this respect made by the State Minister. The need for further strengthening policy skills in MOTI is also strongly felt in view of the daunting tasks ahead.

## **SYNERGY EFFECTS RESULTING FROM COOPERATION WITHIN AND OUTSIDE THE IP**

Limited cooperation; some with the World Bank

So far no links have been established either within the IP or with outside actors. While the linkage with the information technology component was envisaged from the beginning, this could not materialize in view of the fact that the information network is not operational yet (see below).

UNIDO component manager held consultations with the World Bank. On the basis of such consultations and in order to avoid duplication with a parallel firm survey carried out by the World Bank, MoTI decided that UNIDO would concentrate on preparing a competitiveness platform and that the World Bank should concentrate on firm level analysis and benchmarking of industrial performance. The questionnaire for the competitiveness analysis was prepared in consultation with the World Bank.

## RESULTS

Partial results achieved so far; some further action can lead to important outcomes and impact

Results so far have been partial and may be summarized as follows:

- Upgraded skills of the policy team in MOTI; however the capabilities established so far are not strong enough to unfold.
- First issue of the Review on Industrial and Trade performance prepared and published. However the Government has not yet circulated the review and its impact so far has thus been limited to MoTI.
- The competitiveness analysis was produced in draft form. Once completed and subject to meeting the required standards, the paper has the potential of being of high value and use and to impact on major policy decisions relating to exports, private sector development, investments etc.

## SUSTAINABILITY

Available policy related capabilities in MoTI not strong enough to ensure sustainability

All trained staff is still with MOTI, a positive aspect for sustainability. However, the available capabilities are not strong enough and additional training and support will be necessary to enable the Ministry to carry on with policy studies. The same applies for the preparation of annual reviews of trade and industrial performance. Unless prepared and distributed in a timely manner, such reviews will not have any impact. Once finalized the competitiveness study should be strongly publicized in order to constitute a useful input to future policy decisions.

## RECOMMENDATIONS

- Immediate finalization by UNIDO of the competitiveness analysis and holding of a workshop to ensure that the study is accepted and broadly publicized. Funding for the workshop to be ensured.
- Additional training of MOTI staff to be organized and funded by the Ministry.
- Link with information network once established and training to be provided. UNIDO should ensure that this activity is supported and funded as it constitutes integral part of the original proposal and project concept/approach
- Government to ensure that the Policy Review is circulated immediately. Capacities and capabilities for the continuation of this activity to be ensured by MOTI.
- UNIDO with the support of MOTI to constitute an integral part of the Private Public Dialogue fora promoted by UNDP on the basis of the concept that was originally conceived by UNIDO under the IP.

## **B) SUBCOMPONENT 6.1: INFORMATION TECHNOLOGY**

### **IMPLEMENTATION**

Major problems being faced due to the approach followed as well as weaknesses and delays in delivery

The Information Resource Management System (IRMS) was presented and introduced to MOTI and to the following seven identified nodes: Science and Technology Commission, Investment Authority, Addis Ababa Chamber of Commerce, Ethiopia Chamber of Commerce, FeMSEDA, Central Statistics Authority and Addis Ababa City Gov. Trade, Industry & tourism Bureau. A user requirement document (URD) was prepared. Networking equipment was purchased and installed and the IRMS software was installed in PCs in MoTI and 2 institutions. However there was no testing of the equipment and software provided and no training; the system is not operational.

According to the views expressed by the counterparts, the implementation of this project had a number of flaws as follows:

- The original project document envisaged the establishment of an information network in the form of a Government INTRANET with a centralized database system and restricted access to selected users. This would have constituted a platform for dissemination and exchange on governance related information. Subsequently UNIDO offered the IRMS software to MOTI with the understanding that this software would constitute a tool for networking information with 5 other countries in the region. In fact MoTI took interest in the IRMS exactly because of the networking aspects at the local level and with other 5 countries in the region. MOTI thus concludes that the information technology was basically a UNIDO choice even though they accepted it believing at that time that the software was of workable quality and ripe for connecting and networking with other countries. However, when the component manager demonstrated some of the functions of the IRMS to MOTI, IRMS failed at networking and it was agreed that some corrections and modifications were required for IRMS to properly function. UNIDO, furthermore, took the decision not to promote IRMS in other countries. Ethiopia was not informed accordingly. In fact it was the evaluation mission that informed MOTI of this.
- UNIDO decided to go ahead with purchasing and installing the equipment and installing the software in some of the selected nodes. An expert who, according to MOTI, was “very knowledgeable, useful and practical” did the equipment specifications. Considering the weaknesses of IRMS and the fact that other countries were not included in the networking as originally envisaged, the decision to go ahead with purchasing of the equipment is questionable.
- Only MOTI was involved in the project from the beginning. Two nodes were visited and the expert who did the equipment specifications identified their networking needs with MOTI. The other nodes were identified subsequently and informed of the project in a 1 day meeting, a time which, according to the counterparts, was not sufficient to make them sufficiently acquainted with the system and to share their views and requirements.
- The project started in July 2001 and was planned for completion by December of the same year. Major delays occurred mainly due to the fact that the backstopping officer was transferred to another Branch and that a managerial decision was taken for her not to continue with implementation activities; no replacement was decided upon. The Team Leader considered not suitable to hand over the activities to another IT professional who would have followed a different technical approach.
- There was also a problem with the installation of the software. According to the counterparts, the performance of the international consultant who installed the software in MOTI and in the nodes was poor. MOTI staff is of the opinion that the expert was not sufficiently qualified for the job and aware of the software. He did not complete the

installation of ORACLE and left abruptly the country without finishing his assignment, i.e. without carrying out testing, demonstration and training. Up to May 2003 neither the NIIN operational manual nor the implementation document were sent to the Ministry. Despite the explicit dissatisfaction of MOTI and written indication that the assignment had not been completed, UNIDO paid the consultant fully.

The component manager informed the evaluators that she effected final payment on the basis of five reports prepared by the consultant regarding the work that he had completed in the field. The backstopping officer did not provide evidence that the reports had been sent to the field. The evaluators concur with the counterpart that payment should have been effected only subject to explicit counterpart clearance and satisfactory completion of the assignment.

While a number of activities have been carried out as listed above, the project implementation ceased also because the backstopping officer was transferred to another branch where she was not responsible any longer for project implementation. This is a management flaw on side of UNIDO considering that activities should have been completed either by the sub-component manager or by an appointed successor.

Having reviewed the system and questionnaires, the evaluators consider that the IRMS is far too ambitious and would require a high degree of willingness to share and provide information as well as a strong ownership and drive by the counterparts. These preconditions were not given due to the way the project had been developed.

#### **RELEVANCE**

Potentially highly relevant; need for corrective action to restore relevance

Information technology is no doubt of high relevance. A well functioning system established hand in hand with the other activities relating to strengthening of MOTI would have been highly relevant. However, the project has not been relevant so far considering the way it has been implemented. Relevance can be restored only subject to immediate corrective action.

#### **OWNERSHIP**

Low ownership of the software proposed by UNIDO

MOTI and all identified nodes stressed their interest in a well functioning information system. Ownership of IRMS is low due to the limited understanding and the technical weaknesses of the system.

#### **SYNERGY**

Some internal linkages with other components

The nodes were selected among the counterparts of other IP components. Some link was established with Component 5 A in order to incorporate environment related information in the IRMS questionnaires.

#### **RESULTS AND SUSTAINABILITY**

Corrective action is required to make use of valuable hardware and some useful software

Results have been achieved in terms of milestones; no outputs have been produced so far. The milestones are: identification of focal point and nodes, computers and IRMS software installed. There is no sustainability because the system is not operational and staff has not been trained in

order to be able to use it. Corrective action is required to enable MOTI to make use of valuable hardware and some useful soft wares installed.

## **RECOMMENDATIONS**

- Immediate action is required in order to address the problematic situation outlined above. A three-step approach is recommended and listed below in order of priority.

Priority 1: immediate completion of installation of equipment by UNIDO staff; training to at least allow for the use of the web server, the database server and the firewall.

Priority 2: subject to funding availability and backstopping capabilities, advise and decide with the nodes on the configuration of the database.

Priority 3: subject to availability of funding, design, programme and install the network.

- Industrial information appears to be a field where a personalized approach is followed. The findings under this evaluation confirm previous ones that there is no common and corporate methodology. This lack of corporate approach is not of help to counterparts and wasteful in terms of resources. It is thus strongly recommended that this issue be taken up by UNIDO management with a view to introduce continuity and consistency in UNIDO's information technology approach.

## 5. LESSONS LEARNED

### *The Integrated Programme Approach*

Most of the lessons learned about the IP modality of technical cooperation from evaluation of other IPs apply to the IP Ethiopia as well. These are the advantages of the IP approach when compared to stand alone projects in spite of the fact that the programme is a structured collection of project rather than an integrated response to a limited number of critical issues; the importance of the coordination mechanisms at the field level and hence importance of having a UNIDO office and a national coordinator in the country.

### *Experience from the IP Ethiopia brings additional lessons*

- Cooperation among team members at HQs is important for coordinating inputs and activities at the early stages of implementation planning. Meetings of the whole team is not the only mechanism for executing such a cooperation, informal groupings of the team members directly involved in a specific problem area or working with the same counterpart or target beneficiaries seem to be more effective.
- The UNIDO office in the field participated at UNDAF meetings but actual coordination of the IP with other programmes results primarily from working contacts at project level. Apparently it is easier at this level to identify and agree on possibilities to coordinate activities as at this level they are defined in sufficient detail to allow for practical solutions.

### *Factors of success*

- Capacity building is a long-lasting process requiring adequate resources to ensure continuity of support for several years at least. Outcomes and impact in economic and environmental terms can be measured only after a medium to long period of time.
- Programmes and their components need to be designed with commensurate resources and realistic timeframes and their implementation should not start based on partial funding ("seed money") unless there is a high probability of ensuring full funding.
- Particularly good results in the leather sector in Ethiopia were achieved thanks to a long lasting presence of UNIDO technical cooperation in the country. The reason is not only the total volume of resources but also the gradually consolidated mechanisms of interaction and trust building among the development partners.
- A particularly difficult problem area for technical cooperation seems to be capacity building in information services and information networks. As information services for industry as well as information networking among government bodies can hardly sustain on sales of services (due to low effective demand), there is a need for heavy budgetary support in building and operating such services and networks. Unless the local organizations are strong and competent enough to become the driving force of the long-term process, any short-term interventions of external partners are bound to fail.
- The participation of the private sector in cooperation for industrial development is a prerequisite for actual and sustainable change. It, however, does not imply that any involvement of private sector is a factor of success. The most effective mechanism is involvement of industry associations in programme planning and implementation. Working directly with companies for demonstration purposes requires cautious selection of companies with good general management and willingness to act as active partners ready to share the results with the whole sector. Needless to say that industry associations themselves may be instrumental in selecting such companies.

**Summary Terms of Reference**  
**IN-DEPTH EVALUATION of**  
**INTEGRATED PROGRAMME in ETHIOPIA**

**The In-depth evaluation**

In-depth programme evaluation is an activity carried out during and/or at the end of the programme cycle, which attempts to determine as systematically and objectively as possible the relevance, efficiency, achievements (outputs, outcomes and impact) and sustainability of the programme. The evaluation assesses the achievements of the programme against its key objectives, as set in the Programme document, including re-examination of the relevance of the objectives and of the Programme design. It also identifies factors that have facilitated or impeded the achievement of the objectives.

**Purpose**

The purpose of the integrated programme (IP) in-depth evaluation is to enable the Government, UNIDO and donors:

- To assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities.
- To assess the effects of outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact.
- To provide an analytical basis and recommendations for the focus and (re)design for the continuation of the programme.
- To learn lessons on the integrated approach and for improving the synergy effects of UNIDO's integrated programmes.

The evaluation is conducted in compliance with UNIDO policy regarding the evaluation of its integrated programmes.

**Method**

1. The evaluation will be conducted at two levels: evaluation of selected integrated programme components and evaluation of the programme as a whole. The latter programme-wide evaluation will be based on the evaluation findings of the components and will address cross-programmatic issues such as integration, synergy, programme management and overall impact, if any.
2. The component level evaluation will identify outputs, outcomes and prospects for developmental impact that can be attributed to the individual components and assess to what extent component results have contributed alone and collectively to the programme-wide objective.
3. The evaluation will be carried out through analyses of various sources of information including desk analysis, survey data, interviews with counterparts, beneficiaries, partner agencies, donor representatives, programme managers and through the cross-validation of data. While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties.
4. In principle the whole programme will be subject of evaluation. However, in view of the broad coverage of UNIDO assistance (as reflected in the number of programme components) and different levels of funding and stages of implementation the intensity or depth of analysis of programme activity set out in the programme document will vary. The following components will be subject to in-depth evaluation:
  - Component 1, sub-components 1.A, Leather Industry; sub-component 1.B, Food Industry; sub-component 1.C Agro Machinery and Tools.
  - Component 2, Promotion and development of the Micro, Small and Medium Enterprises (MSME).
  - Component 3, Quality, Standardization and Certification of Industrial Competitiveness.
  - Component 4, Investment and Technology Promotion.

- Component 5, sub-components 5.A.1 National Cleaner Production; 5.A.2 Ecologically Sustainable Industrial Development and 5.B Industrial Energy Efficiency.
- Component 6, Upgrading the Ministry of Trade and Industry.

The remaining components will be reviewed only in the context of Programme-wide evaluation issues.

#### **A. Programme-wide evaluation**

The programme-wide (IP) evaluation will address the following issues:

##### *1. Relevance, ownership and participation*

The extent to which:

- The IP was jointly identified and formulated with the central coordinating authority, as well as with the involvement of programme counterparts and their target beneficiary groups.
- A participatory programme identification process was instrumental in selecting problem areas, as well as during the selection of counterparts requiring technical cooperation support.
- Industry representatives, where appropriate, were actively involved in the formulation of the programme.
- The IP has a clear thematically focused development objective and goals, which will contribute to goals established by the country, the attainment of which can be determined by a set of verifiable indicators.
- The central national authority has been in a position to effectively lead in the coordination of the programme stakeholders during the preparation, implementation and monitoring of the Programme.
- There is continuing agreement among the stakeholders that the objectives of the IP are still valid; the programme supports the country industrial strategy. What adjustments and focussing if any are required?

##### *2. Programme management*

- The efficiency and effectiveness of the central national management and overall field coordination mechanisms of the Programme. Are the national capacities adequate to coordinate and monitor the results of the IP?
- The efficiency and effectiveness of UNIDO HQ based management, coordination, monitoring of its services.
- Have external factors (rules and regulations, procedures, administrative mechanisms, etc.) impeded the discharge of management responsibilities?

##### *3. Funds mobilization*

- The role and ability of the central national management and willingness of counterparts, to contribute (in kind and/or cash) to IP implementation and in their taking an active part in funds mobilization.
- Problems encountered in balancing UNIDO IP policy and programme objectives with donor priorities.
- Where applicable the effect of incorporating donor priorities into the IP, such as on the programme original focus, rationale and on the maintenance of an integrated approach.
- The adequacy and effectiveness of funds mobilization efforts.
- What are the lessons learned for successful funds mobilization.

##### *4. Integration of components and coordination*

The extent to which:

- The IP addresses sustainable development and the 3 E's- economic, environmental and social (employment) goals, as well as objectives of UNDAF and PRSPs.

- The design and implementation of the Programme has promoted coordination and synergy of (at least some) components. If so, amongst which components has there been coordination of activities and synergy effects.
- The IP promotes improved national inter-institutional cooperation arrangements, including public-private sector cooperation and partnerships.
- *The IP approach is able to promote coordination with other development cooperation programmes, both bilateral and multilateral ones (in particular with UNDAF).*

#### 5. Synergy effects derived from integration and coordination

- What are the realized benefits of coordination amongst and within components, and with other programmes in the country? (Such as cost saving in implementing UNIDO services; increased effectiveness resulting from providing different services to the same target group; increased effectiveness resulting from interventions aiming at strengthening linkages within a system; improved effectiveness due to services provided simultaneously at the level of policies, support institutions and enterprises).
- What other benefits have been realized from packaging UNIDO support in the form of IP can be identified? For example, is the larger size and/or scope of the IP a positive factor in its own right in increasing the leverage of the Programme to get issues agreed upon, approved and implemented, including Government policy measures?
- If applicable, what programme effects and outcomes has the increased opportunity for dialogue and cooperation among Ministries, industrial support institutions, and other stakeholders in the public and private sector had for the country?
- How has the UNIDO seed money been allocated and managed? To what extent were the IP teams and its stakeholders in a position to participate and influence the process?
- Are the transaction costs of the IP (management and coordination of many stakeholders, complexity in funds mobilization, etc.) commensurate to the benefits of integration?

#### 6. Impact at the programme-wide level (contribution to industrial objectives of the country)

Assessment of:

- The results achieved so far and whether they reflect discernible progress in economic, environmental and social areas, including gender related issues.
- If the IP has or is likely to significantly contribute to the achievement of the Millennium Development Goals.
- The result indicators, which have been developed, and whether they facilitate the assessment of progress towards national and international development targets.

### **B. Evaluation of selected components**

*In-depth evaluation of each of the selected components will address the following issues:*

#### 1. Ownership and relevance:

The extent to which:

- The component was formulated with full and active participation of the national counterpart and/or target beneficiaries, in particular the industrial stakeholders.
- The counterpart(s) has (have) been appropriately involved and were participating in the identification of their critical problem areas and in the development of technical cooperation strategies, and are actively supporting the implementation of the component.
- A logically valid means-end relationship has been established between the component objective(s) and the higher-level programme-wide objective

- The outputs as formulated in the IP document are still necessary and sufficient to achieve the component objectives. Have some outputs been amended? Should some outputs be further amended or discontinued?
- Coordination envisaged with other components within the IP or with any other development cooperation programmes in the country. Was this coordination realized and did it lead to any benefits?

## *2. Efficiency of implementation*

The extent to which:

- UNIDO and Government/counterpart inputs have been provided as planned and were adequate to meet requirements.
- The quality of UNIDO services (expertise, training, equipment, methodologies, etc.) were as planned and meet expectations.
- They led to the production of outputs as planned.

## *3. Effectiveness of the component*

*Assessment of:*

- The relevance of the outputs produced and how they are being used by the target beneficiaries.
- The outcomes, which have been or are likely to be realized through utilization of outputs.

## *4. Impact*

- What developmental changes (economic, environmental, social) at the target beneficiary level (industry) have occurred or are likely to occur?

## **Composition of the evaluation team**

The evaluation team will be composed of the following:

- Representative of UNIDO (experience in evaluation methodology, Integrated Programme, UNIDO Policies and Procedures).
- Government nominated representative, well acquainted with industry-relevant institutional framework of the country.
- One Expert with background in evaluation.

Members of the evaluation team should not have been directly involved in the design and/or implementation of the programme/projects.

All members of the evaluation team will be contracted by UNIDO.

UNIDO field representative and local office will support the evaluation team.

Donor representatives from the bilateral donor Embassies will be briefed and debriefed; and will be offered to participate during the evaluation of the components and/or projects they have funded.

Although the members of the evaluation team should feel free to discuss with the authorities concerned all matters relevant to their assignment, they are not authorized to make any commitment on behalf of UNIDO or a donor.

## Annex II: List of Persons Met

### United Nations Industrial Organization (UNIDO) IP Programme In-depth Evaluation Organizations Visited & List of People Met by the Evaluation Team

Organization	Name of Participants	Position
<b>EMBASSIES</b>		
Austrian Development Cooperation Programme	Dr. Joaquim Oppinger Ms. Haimanot Mirtneh Ms. Helen Bekele	Counsellor Programme Officer Expert
Italian Embassy	HE. Mr. Guido La Tella Mr. Roberto Schuller Mr. Francesco Corbia  Mr. Giorgio Sparaci	Ambassador International Consultant Expert, Italian Cooperation Programme Aid in Support of Industrial Development Head of Evaluation, Italian Development Cooperation
Japanese Embassy	H.E. Mr. Hiroyoshi Ihara	Ambassador
Swiss Embassy	H.E. Mr. Rene Schaetti Mr. Ernst Steinmann	Ambassador First Secretary
<b>GOVERNMENT</b>		
Amhara Regional Agricultural Research Institute (ARARI, Bahir Dar)	Dr. Enyew Adeg0	Director, Natural Resource Research
Amhara Bureau of Agriculture (BoA)	Mr. Bamlaku Asres Mr. Aynalem Gezahegn	D/ Head of Agricultural Bureau Head, Extension Dept.
Environmental Protection Authority (EPA)	Mr. Zeru Girmay Mr. Tequam T. Mariam	Head, Pollution Control Dept. On behalf of EPA
Ethiopian Investment Authority (EIA)	Mr. Mohammed Seyed Mr. Tibebu Asfaw	Head, Investment Policy, Research, Planning Service Planning Team Leader
Ministry of Agriculture	Dr. Alemayehu Mekonnen	Senior Expert
Ministry of Industry (MOTI)	HE Tadesse Haile Mr. Tilahun Bekele Mr. Tamirat Bekele Mr. Kinfe Hagos Mr. Wogayehu G/Hanna	State Minister Team Leader Expert A/Dept Head Head, Stat

	Ms. Hariya Woldegebriel Mr. Kapital Kombata Mr. Petros Kasahun Mr. Ali Mohammed Mr. Worku Tedla Mr. Wondimu Deginetu	Head, Data Processing Project Economist Service Head Team Leader Department Head Tech. Service Director
Quality & Standards Authority of Ethiopia (QSAE)	Mr. Deressa Fufa  Ms. Almaz Kahsay  Mr. Mesfin Teklehaimanot  Mr. Eshetu Jifar  Mr. Yitbarek Fantahun	Director, Quality Certification Directorate Director, Inspection & Verification Directorate Head, Metrology Laboratories Group Head, Quality Promotion Group Team Leader
<b>UNITED NATIONS ORGANIZATIONS</b>		
Ethiopia Cleaner Production Centre	Mr. Alemu Bezabeh Mr. Melaku Mengistu	Director
UNIDO Field Office	Mr. Hassan Alli Dr. Nebiyeleul Gessesse Dr. Alberto Parenti Mr. Tequam T/Mariam Dr. Mulat Abegaz Ms. Netseha Mr. Alemu Bezabih Dr. Ing. Desta Mebratu	UNIDO Representative Programme Officer Associate Expert Project Expert Project Expert Project Expert Project Expert Technical Advisor
UNDP	Ms. Nileema Noble Mr. Getachew Asamenew Ms. Kristin Seljeflot Jamshed Kazi	Dep. Res. Rep. Assist. Res. Rep. Economist Assist. Res. Rep
UN Country Team Ethiopia	Ms. Sussane Dam-Hansen	UN Coordination Specialist
<b>INSTITUTIONS</b>		
Basic Metals and Engineering Industries Agency (BMEIA)	Mr. Wondimu Deginet Gualew	Technical Service Director
Elfora	Mr. Getachew Hagos, Mr. Teshome Teferi, Dr. Zeleke Dagnachew	G/Manager

FeMSEDA	Mr. Abebe Negash Mr. Alemu Muleta Mr. Negussie Sulieman (Southern ReMSEDA)	General Manager
Genuine Leather Garment Co. Oromia ReMSEDA	Mr. Teshome Kebede, EMIA  Mr. Esmael Yasin Mr. Tujar Qasim, Mr. Kumsa Legesse Mr. Mudesir Abdela Ms. Haimanot, ADC	President  General Manager  Expert
Visit to Sebeta, MSMs	Mr. Kumsa Legesse	
RRTRC (Bahir Dar)	Mr. Asmamaw Endebilhatu Mr. Abu Tefera	G/Manager Prototype design & Study
Dangla Woreda, Dimsana Service Cooperative	Mr. Agumasse Tamene	Woreda BoA, Extension
Bacha + Gumdree Kebeles Beneficiary Teams	Mr. Aynalem Gobeze	Bacha Kebele (DA)
AAU	Dr. Nurelegn Tefera	Dept. .Head
Ethiopian Science and Technology Commission	Mr. Gzachew Woldeyes Mr. Shumu Tefera	A/C Dept. Head
ESCPE CSE	Mr. Berhane Seyoum Mr. YalemBerhan	President President
Ethiopian Manufacturing Industries	Mr. Teshome Kebede Mr. Belete Beyene Dr. Muluneh Tessema	President Board Member Senior Expert , Livestock marketing Authority Inspection
Sebeta Agro Industry (Mama Milk Factory)	Mr. Melaku Berihun, Mr. Teklehaimanot Yohannis Mr. Tesfaye Mebratu Mr. Kakanja Wananina	G/Manager Plant Manager Quality Control Section Chief Dairy Technologist
Assela RTRC & Sagure Kebele (Team of beneficiaries)	Mr. Deribew Shanko	

Round up meeting: Presentation of preliminary findings of the evaluation mission

Ministry of Trade & Industry (MOTI)	H.E Mr. Tadesse Haile Mr. Kinfe Hagos Mr. Tamirat Bekele Mr. Tilahun Bekele Mr. Petros Kassahun Mr. Kapital Kembata	State Minister A/ Industry Dept. Head Expert Expert ITC Service Head Expert
Min. of Health (MoH)	Mr. Mulu Araya Mr. Wondafrash Abera	Team Leader
MoA ESTC UNIDO	Mr. Yonas Metaferia Mr. Gizachew Woldeyes Mr. Alemu Bezabih	A/C Project Expert
UNDP UNIDO	Mr. Jamshed Kazi Dr. Desta Mebratu Mr. Mulat Abegaz Mr. Tequam Mariam	Asst Res Rep Technical Advisor Project Expert Project Expert
BMEIA Swiss Embassy EMEIA ADCP Oromia ReMSEDA EMEIA Italian Aid Programme EPA ECPC	Mr. Wondimu Deginetu Mr. Ernest Steinmann Mr. Teshome Kebede Ms. Haimanot Mirtneh Mr. Esmail Yassin Mr. Belete Beyene Mr. Francesco Corbia Mr. Zeru Ghirmay Mr. Melaku Mengistu	Technical Service Director First Secretary President Programme Officer General Manager Board Member Expert Head, Pollution Control
ETA FeMSEDA	Mr. Abdissa Adugna Mr. Abebe Negash	General Manager
LMA	Dr. Muluneh Tessema Mr. Ghirotti Alzuro	Senior Expert
LLPTI	Mr. Teklemariam G/Hiwot	