## **Thematic Review**

## UNIDO Agri-business/Agro-industry Development Interventions



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## **Abbreviations and Acronyms**

AGR	Agro
СВО	Community Based Organization
CSF	Country Service Framework
DAC	Development Assistance Committee
EU	European Union
FAO	Food and Agriculture Organization
FPU	Food Processing Unit
HQ	Headquarter
IP	Integrated Programme
IE	Evaluation Studies
IFAD	International Fund for Agricultural Development
LFA	Logical Framework Analysis
M&E	Monitoring & Evaluation
MSME	Micro, Small and Medium Enterprises
NGO	Non-governmental Organization
PSD	Private Sector Development
PTC	Programme Development and Technical Cooperation Division
PRSP	Poverty Reduction Strategy Plan
SKIPI	Skills for Peace and Income
SME	Small and Medium Enterprises
TC	Trade Capacity
ТСВ	Trade Capacity Building Branch
TCFC	Training and Common Facilities Center
TEXDA	Textile Development Agency
UR	United Nations Representative
UN	United Nations
UNIDO	United Nations Industrial Development Organization
UNEP	United Nations Environment Programme
UNDP	United Nations Development Programme
WDR	World Development Report

## **Glossary of terms**<sup>1</sup>

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assured
Effect	Intended or unintended change due directly or indirectly to an intervention
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results
Impacts	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor
Intervention	An external action to assist a national effort to achieve specific development goals
Lessons learned	Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact
Logframe (logical framework)	Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. Related term: results based management
Outcome	The likely or achieved short-term and medium-term effects of an intervention's outputs. Related terms: result, outputs, impacts, effect
Output	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes
Sustainability	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.

<sup>&</sup>lt;sup>1</sup> Based on a glossary prepared by OECD's DAC working party aid evaluation, May 2002.

### **Executive Summary**

### Introduction

Presently UNIDO's PTC/AGR (the Agribusiness Development Branch) is in a process of revising its intervention strategy<sup>2</sup>. The purpose of the present study is understood as having the basic objective of extracting lessons from past experience as an input into this process. In this context the present report contains the results of a thematic *review* of the AGR intervention strategy. It is not a thematic evaluation as stipulated in the Terms of Reference, attached as Annex A. The reason is that the basis for the analyses to be undertaken, primarily existing programme and project evaluation documents, did not contain sufficient information for synthesizing the evaluation documentation provided only limited information concerning impact of the interventions in terms of contributions to poverty reduction. As this has been taken as the main theme in assessing the intervention strategy, too little could be learned by summarizing this documentation only.

Hence a two-pronged approach was chosen. Firstly, to summarize the basic assessment findings in this documentation with respect to performance and results and implementation and management, respectively. Secondly, an attempt was made to establish the "typology" of AGR interventions (cf. Annex C), which seems representative of the actual present AGR strategy. Assessments of the thereby identified "typical" AGR interventions with respect to their potentials for having impact in terms of contributions to poverty reduction were then undertaken.

The present thematic review was undertaken by Mr. Poul Buch-Hansen, International Evaluation Consultant and Managing Director at Development Associates s/a.

<sup>&</sup>lt;sup>2</sup> The revision has the objective of increasing the impact of AGR programmes and projects. It consists essentially in using UNIDO Technical Cooperation (TC) activities in this field for identifying "models" of successful interventions to increase the value added to traditional agricultural products. The "models" then would be used as basis for AGR and other staff at the Organization to provide 'high-level' advisory services (agro-industrial policy) to governments and financial institutions in order that they could be scaled up (in case of pilot operations) or expanded to increase the impact of UNIDO's activities in this area of knowledge.

### **Main Findings**

Thus, findings of the present study are partly summaries of findings from evaluations of a number of selected AGR interventions in the recent past and partly analyses of the "cause-effect chains" or "theories of change" assumed to underlie the actual interventions evaluated in the documentation.

a) The DAC<sup>3</sup> criteria assessments

In terms of the five DAC criteria, project relevance is generally judged high by the evaluators and so is effectiveness in many cases, whereas efficiency is often judged low, mainly because parts of the projects were never implemented due to funding not becoming available as planned, in particular Integrated Programmes (IPs). Sustainability also has a low score in several cases, but is often judged high in cases where all main stakeholder groups have been involved throughout the planning and implementation ("project cycle") process. Impact in the above sense is, however, a main issue as findings concerning this fifth DAC criterion are limited.

b) "Cause-effect chain" analyses

In total 45 AGR interventions were identified as "typical" in one sense or another and they were categorized into a two-dimensional matrix (Annex C). A distinction between "international competitiveness" and "rural development" focus at the outcome level is one dimension of the matrix and the other is basically the existing categorization into agro-industry sub-sectors. The interventions aiming at "international competitiveness" in food processing, textile and leather sub-sectors appear well-established types, but particularly the textile and leather interventions are up against "fierce competition" on the world markets and the impact potential from the linkage to agricultural production is seldom explicitly considered.

The interventions focusing on "rural development" have substantial potential for contributing to poverty reduction, particularly if the linkages to the raw material producing sectors, agriculture, forestry and fisheries were to be much more systematically included in the value chain analyses, which should form the basis for identification, preparation and design of interventions in the future.

The assessments made find that in particular these interventions are in need of further developments towards establishing clear prototypes (or "models") that can be analyzed, reproduced and used as part of the advisory services that the new strategy foresees to do. This is the case because the potential

<sup>&</sup>lt;sup>3</sup> DAC – The Development Assistance Committee of the OECD

impact in terms of contributions to poverty reduction would appear considerably higher than what have been the results in the past interventions. This is particularly important with respect to the food processing interventions relating to domestic food value chains. The ongoing and past bamboo interventions are, however, already including the raw material producing part of the value chain and do also take the natural resource implications of the production as well as of the processing activities into consideration. The "livelihood" interventions are also in need of further development, probably into several different prototypes (or "models"), taking into consideration the issues of and likely difficulties with combining emergency and development interventions.

c) A forward looking perspective

World development trends, globalization, climate changes and "privatization" mean that poverty reduction and the interrelated adaptations to climate changes are becoming increasingly critical in the years to come. The World Bank Development Report 2008 has in this context put agricultural and agro-industry development high on the agenda, emphasized also in a recent UNIDO (with FAO and IFAD) publication on agro-industry for development. In this context the above mentioned findings concerning the need for developing the AGR intervention types into clear prototypes or "models" for the future UNIDO support to the closely inter-connected agricultural and agro-industry development becomes even more important. Focus on poverty reduction and the related natural resource management issues are essential for the overall future AGR intervention strategy.

d) Implementation and management

This implies not only better project identification, preparation and design, but also increased attention to the implementation and management problems identified in the evaluations of recently terminated projects. An important summary finding from this documentation is that project organization, management and decision-making structures and follow-up (monitoring) activities can reduce the impact of otherwise well designed projects considerably.

### **Conclusions, Recommendations and Lessons Learned**

A. Overall conclusions

There is a need to focus the AGR intervention strategy on a number of prototypes (models) along the lines suggested in this report (Ch. 4, 6 and 7) taking the identified "typology" (Annex C) as a starting point. It is necessary in

this work to focus not only on the agro-industry part of the value chain and emphasizing not only markets and demand but also the effects on the raw material producing sectors, including natural resource management implications need to be thoroughly analyzed.

Particularly the interventions characterized in this report as having a "rural development focus" are in need of improved design of well established prototypes (models). Use of the (domestic) value chain analysis tool and a clear and comprehensive application of the corresponding LFA tool could greatly improve design and increase the potential for increasing contributions to poverty reduction as well as to the closely interrelated improvements in natural resource management.

This implies that more time and resources need to be devoted to context analytical and design work. It will also require some changes in the organization and management structures of field projects and consequent changes in the HQ organization, staffing and management. Though a thorough analysis of the existing situation in these respects has not been possible, the Consultant's participation in the AGR Technical Forum in November 2009 and interviews with AGR staff has provided some insights. Needs for certain operational changes have been indicated in relation to organization (sub-division of AGR in Units and project management responsibilities), to staff composition (adding some administrative staff to management and some social, economic, institutional and environmental expertise to the existing staff) and to cooperation with other UNIDO branches (particularly TCB and PSD).

#### B. Key recommendations

Based on the overall conclusions, it is recommended that:

- The typology identified and analyzed in this report is used as basis for the needed further development of the AGR interventions, establishing major prototypes or "models" by comprehensive use of the LFA tool and increasing the potential for impact from the interventions in terms of contributions to poverty reduction by including the linkages to agriculture, forestry and fisheries in the "cause-effect" and value chain analyses.
- Two main types, the "international competitiveness" focused and the "rural development" focused major types are both maintained in the future intervention strategy, but being further developed as model interventions characterizing the UNIDO approach to supporting agro-industry development related to global as well as domestic value chains.

- Particular emphasis is given to develop the "rural development" focused interventions in relation to regional and domestic markets and value chains, based on analyses of the full value chain, including economic, social and environmental effects on the raw material producing sectors, agriculture, forestry and fisheries.
- In further development of the "Livelihood" category with "Rural Development" focus, possibly into several prototypes, attention is given to the possible conflict in and difficulties of combining emergency types of interventions with development types.
- More time and resources are devoted to context analytical work, project identification and project design, including involvement of all major stakeholder groups and consequent participatory determination of project organization and management structures for management decisions to be taken at the most appropriate levels.
- AGR considers whether, in addition to reinforcing the staff with technical skills, particularly in the areas of food industry, leather and textile, staff with social, economic, institutional and ecological/environmental expertise would be recruited to carry out activities e.g. in relation to the value chain analyses, where such expertise could supplement the existing technical expertise. Further, whether some of the present management burden on the IDO staff could be reduced by including more supporting administrative personnel in the staff.
- The cooperation modalities for AGR cooperation with other UNIDO branches (particularly the TCB and the PSD branches) and with other UN agencies are reviewed in relation to the future development of intervention prototypes (models).
- C. Major lesson learned

Country programme and project evaluations cannot be synthesized into a thematic evaluation of the interventions if these first-hand evaluations have not been undertaken with the objective of providing field-based inputs to analyses of the theme in question.

### Introduction

#### 1.1 Purpose and Scope of Study

The Terms of Reference attached as Annex A, specify the purpose of the study as to "...assess the past and potential leverage of UNIDO in agribusiness development ...to guide the future direction of the Branch's interventions ...". This is understood as an assessment of the Agro-Industry Branch intervention strategy in a forward looking perspective. The assessment is to be done "... through an analysis (synthesis) of the project portfolio and of the overall performance of recently evaluated projects with special focus on the projects of the Food Processing Unit (FPU)." Also the study will provide a "... review of the Branch's staff capacity and budgetary allocations ..." and the cooperation with other UNIDO TC Branches.

Actual work has been focused on assessments of the intervention strategy through analyses of performance and results of recently evaluated projects, of the underlying "theories of change" and of the design and implementation "lessons", which can be extracted from the evaluation and other project documentation available for a number of selected projects. Work includes analyses of the implications of these assessments for the future AGR intervention strategy and operations taking into consideration also some basic contextual changes resulting in new opportunities and challenges. As the evaluation reports do not contain sufficient information for undertaking a full-fledged thematic evaluation on that basis, this report is rather a thematic review of the AGR intervention strategy.

Presently UNIDO's PTC/AGR (the Agribusiness Development Branch) is in a process of revising its intervention strategy4. The purpose of the present study is

<sup>&</sup>lt;sup>4</sup> The revision has the objective of increasing the impact of AGR programmes and projects. It consists essentially in using UNIDO Technical Cooperation (TC) activities in this field for identifying "models" of successful interventions to increase the value added to traditional agricultural products. The "models" then would be used as basis for AGR and other staff at the Organization to provide 'high-level' advisory services (agro-industrial policy) to governments and

understood as having the basic objective of extracting lessons from past experience as an input into this process.

### 1.2 Approach, methodology and report structure

The approach chosen has been to establish a "Review Sample", i.e. a portfolio of "typical" AGR interventions as the basis for the analyses undertaken. The final "Review Sample" is listed in Annex B. The list has been constructed through a somewhat cumbersome process in face of a major challenge: Ongoing projects, which could be included as typical, are not necessarily evaluated yet, whereas evaluated (past) projects are not necessarily typical of the intervention strategy today. Another major challenge turned out to be that evaluated projects have mostly been evaluated as part of an Integrated Programme Evaluation (IP), which includes all UNIDO projects of the programme in the country concerned, not only AGR projects. The difficulty has been that it was often not clear from the evaluation documents, which projects were or were not AGR projects. There are a number of similarities (overlapping mandate-, "grey zone-" or cooperationprojects), particularly with projects implemented by the Trade Capacity Building (TCB) Branch and the Private Sector Development (PSD) Branch. This, on the other hand, has provided some insights, which are useful for assessing future possibilities for cooperation as well as for reducing possible "grey zone" operation difficulties between AGR and other UNIDO Branches.

In the process of identifying the Review Sample, a starting point was a list of all ongoing AGR projects as of September 1, 2009. This comprises about one hundred project numbers, but many of them are very small projects. Focusing on projects above USD 1 million reduced the number to around 30 ongoing interventions. The final sample includes 21 of these. The next step was to identify IP and stand-alone evaluation reports for countries in which AGR, according to the list of ongoing projects, were actually working as of September 1, 2009. This is to ensure that the sample is as representative of the present strategy as possible. The IPs, in which AGR projects could be identified and which were undertaken recently (i.e. from 2004 onwards) were used for selecting further projects to be included in the final sample. Some 24 (evaluated) projects were identified in this way in 13 IP reports. Further, the Consultant was invited to participate in the AGR Technical Forum event in November, which together with further discussions with the AGR staff gave additional information concerning typical AGR interventions. Through this process some additional projects, both evaluated and - mostly - non-evaluated were also included. Finally, the preliminary work indicated that there are several different types in the overall portfolio and that the "typology" was changing. Thus, efforts were made to include

financial institutions in order that they could be scaled up (in case of pilot operations) or expanded to increase the impact of UNIDO's activities in this area of knowledge.

in the sample both those interventions, which are maybe on the "way out" and those, which appeared relatively new. The typology selected is presented as a matrix in Annex C.

In Annex B, the same final Review Sample is listed with project number, with title and with a short identification name. The list in Annex B also indicates the documentation available for each project. The analyses undertaken in Chapters 3-6 below are based primarily on the evaluation documentation, comprising in addition to the IP evaluation documents also a few individual project evaluation studies, (IE). However, some analyses of the ongoing, but not evaluated projects have also been made to assess whether the findings from the evaluated projects seem to hold true for the new projects as well. Further, these new projects are important in the forward looking perspective, discussed in Chapter 6.

In Chapter 3 an assessment of performance and results is made of the selected interventions. This chapter synthesizes the findings and conclusions in these respects as these are presented in relation to the five DAC evaluation criteria in the evaluation documents. This assessment of performance and results is thus a summary of the assessments made by the various evaluators, who have undertaken the IP evaluations in which the AGR projects in the Review Sample are evaluated.

Chapter 4 extends this analysis, focusing on the fifth of the DAC criteria, impact. As Chapter 3 shows, too little attention to impact is given in the design as well as in the evaluation work and Chapter 4 attempts to go somewhat deeper in analyzing the typical AGR interventions. The chapter focuses on the "theories of change", assumed to lie behind the design and tries to assess whether key assumptions, needed for the assumed "theories" to be correct and hence for the projects to have impact in terms of the overarching goal of contributing to poverty reduction, were judged valid in the evaluation documentation. This chapter is thus not summarizing the evaluation documentation as the case is with Chapter 3. Chapter 4 is rather extracting, to the extent possible, information concerning validity or non-validity of key assumptions for impact to be achieved, from this documentation.

Chapter 5 is again a synthesizing chapter, primarily. It uses the evaluation documentation to assess important elements of "project cycle management", i.e. it focuses on the process of how the design came about (rather than on its content, which is dealt with in Chapters 3 and 4) and on how the project was actually implemented. Thus, the Chapter synthesizes the evaluation documentation in these respects, but as the IP studies comprise also non-AGR projects, the information given on project cycle management is often not given

separately for AGR projects only. The findings and lessons in this respect thus generally cover also projects designed and implemented by other branches. Chapter 5 therefore also includes some analysis of the non-evaluated projects, primarily based on project documents, to ensure that the assessments in this chapter is as relevant as possible for the AGR interventions being assessed in the present study.

Chapter 6 builds on the assessments in Chapters 3-5 of the Review Sample interventions to indicate ways forward towards further developing the AGR strategy, the design and the implementation of relevant future "typical" interventions taking into consideration also some key contextual changes. Operational implications, which can be derived from the assessments in Chapters 3-5, are also included.

Chapter 7 contains conclusions and recommendations and Chapter 8 contains some lessons learned of wider applicability from undertaking the present thematic review.

# || Background

### 2.1 UNIDO Agri-business Development Branch

According to the Director-General's Bulletin (February 2008) the UNIDO Agribusiness Development Branch (PTC/AGR), is one of the seven branches of the Programme Development and Technical Cooperation Division of UNIDO. It is the only one of the seven branches having a sector-based mandate for its support to Member States. The AGR Branch provides specialized services for agroindustrial development towards reducing world poverty. AGR Branch is in this respect cooperating with the other branches of UNIDO as well as with other UN agencies, in particular FAO and IFAD.

Improvement of food processing industries, development of textile, leather and rural tools and equipment producing industrial sectors and undertaking global forum activities are the main functions of the branch. Advice to governments on policies and development strategies, provision of support to (pilot-) enterprises and contributing to establishing and strengthening associations, professional training institutions and technical information centers are among the key services provided.

The PTC/AGR portfolio of completed, ongoing and expected projects is:

Projects	Allotment (USD)	Expenditure (USD)	No. of projects	Average project size
Completed projects (between 1996-2008)	51,451,393	50,067,505	320	160,786
Ongoing projects (starting from 2003)	81,856,289	51,114,317	119	687,868
Pipeline projects (expected to start from 2002 onwards)	173,735,544		55	3,158,828
TOTAL	307,043,226	101,181,822	494	621,545

### Table 1. UNIDO Agribusiness development projects

Source: Infobase as of July 2009.

UNIDO PTC/AGR consists formally of three Units, the Food Processing Unit, the Textile and Leather Unit and the Agro-Industry Support Unit. The Food Processing Unit's role is to support and advice Governments, on the adoption of improved technologies and to build capacities in areas of food hygiene and safety. The Textile and Leather is similarly to support adoption of advanced production technologies, optimize processes and minimize waste (including polluting waste) as well as to assist in marketing. The Agro-Industry Support Unit is responsible for promoting industries as a means of generating economic development through establishment and strengthening rural technology centers as a means of technology transfer, innovation and training.

The PTC/AGR portfolio by unit is as follows:

Unit	Allotment (USD)	Expenditure (USD)	No. of projects	Average project size
Actual (Completed and Ongoing projects)				
Food Processing Unit	40,717,841	32,633,807	188	216,584
Textile and Leather Unit	37,436,974	33,520,631	145	258,186
Agro-industry Support Unit	55,152,867	35,027,384	106	520,310
Expected (Pipeline projects)				
Food Processing Unit	31,093,965	-	17	1,829,057
Textile and Leather Unit*	83,488,928	-	16	5,218,058
Agro-industry Support Unit	59,152,651	-	22	2,688,757

Table 2. UNIDO Agribusiness development projects by unit

Source: Infobase as of July 2009.

Note: \*) One project alone has an estimated budget of USD 56 million.

AGR is presently operating interventions in five specific technical areas, i.e. in supporting food processing, textile, leather, wood and agro-equipment industries in developing countries with particular focus on the least developed countries.

### 2.2 The PTC/AGR intervention typology

The preliminary work on establishing the Review Sample showed that there were several "typical" AGR interventions and further that there seems to be changing trends in the overall portfolio, as mentioned above. The typology presented in Annex C is chosen as representing the present AGR strategy, with both "traditional" and new types and with 50 interventions in total, comprising seven categories or main types of interventions.

One dimension in the typology matrix is a distinction between a "rural development focus" on the one hand and an "international competitiveness focus" on the other. This is, in the judgment of the Consultant a distinction, which could be useful in future efforts towards selecting, designing and implementing

interventions with increased focus on achieving impact in terms of contributions to poverty reduction. Providing productivity increasing technology upgrading services for these two major types would appear sufficiently different to imply different inputs and hence staff resources with somewhat different competence background for each of these two major types. The distinction corresponds to whether the upgrading and linkages to markets are focusing on global value chains or on regional, national or even more local value chains.

The other dimension in the matrix is basically a sub-sector distinction and corresponds to the existing distinction between food processing, textile, leather, wood and agro machinery categories. Not guite, however; the agro machinery interventions seem to be disappearing or maybe developing into the new "livelihood" type(s). The food processing interventions do similarly seem to be concentrated on global value chain upgrading or maybe to become or to increasingly include "livelihood" type(s) of interventions as well. This second dimension relates also to differences with respect to types of inputs and competences required. For the more traditional sub-sectors, like textile and leather, the differences are basically technical expertise differences, but the "livelihood" type(s), categorized as having a rural development focus appear much less tied to advanced technology expertise than e.g. the textile and leather interventions and have main elements on private sector development. The livelihood interventions require broader, less specialized and more handicraft type of expertise to be provided basically through training (of trainers) inputs. The "traditional" sub-sector approach needs to be able to provide the most advanced technical expertise within each of the specific sub-sectors.

# III Performance and results

The assessments below of the performance and results of the typical AGR interventions are summaries of evaluation findings and conclusions from evaluations undertaken over the period 2004-2009 of interventions in the Review Sample. The evaluations are mostly Integrated Program evaluations but also individual evaluations from this period are included. This documentation covers 35 of the 50 interventions in the intervention sample (Annex C).

Findings and conclusions from the evaluation reports are related to the five DAC criteria, i.e. to relevance, effectiveness, sustainability, efficiency and impact of the interventions. Relevance means that the intervention is relevant for achieving objectives in accordance with needs and priorities of the target population and aligned with government policies. Effectiveness and efficiency relates to whether objects are achieved and in a cost-effective manner. Sustainability is basically whether benefits continue after project termination and whether stakeholders take ownership. Impact is defined as positive/negative, direct/indirect and intended/ unintended long-term effects. Below impact is understood as "net positive" effects in terms of contributions to poverty reduction.

### 3.1 Relevance

Relevance is assessed relatively high or very high in most of the projects or components. The interventions are typically well aligned with government policies, programs and priorities and they are addressing poverty issues in their respective contexts. They intend to contribute to poverty reduction in various ways through supporting upgrading of either backward linkage industries to agricultural production (agricultural machinery and tools) or forward linkages (processing and marketing).

Poor quality of existing agricultural machinery and tools or lack of adequate processing facilities constitute main reasons why the interventions evaluated are considered relevant. Though better equipment may be available, it is often too expensive for poor farmers. The assumption is that if better and cheaper machinery, tools and processing facilities could be made available, poor farmers could increase production and income.

All textile and leather subsector interventions are deemed very relevant because of the importance of these subsectors for the economies of the countries concerned. Potential for job creation through value addition and increased competitiveness is highlighted, as is the potential for increased foreign exchange earnings. The relevance of the textile projects is also underlined by the potential for rural development because of backwards links to cotton producers.

In cases where the textile and leather projects have been deemed less relevant, the main reason relates to the services offered under the project, rather than to the relevance of the subsector. For example, the comparative advantages of the services offered by UNIDO in Ghana and Egypt are not clear, since similar training centers were already set up here.

Only in one of the interventions involved is the export focus of the project not considered relevant. The evaluation of the Integrated Programme in Kenya finds that the leather industry is not sufficiently developed to be internationally competitive, and aiming at export is therefore too ambitious here.

The technologies that contribute to increased food safety, quality and increase in the international competitiveness of food production and/or contribute to decreasing the post-harvest losses score highest on the relevance scale. Inappropriateness of the technology promoted has on the other hand made some interventions less relevant than warranted.

The bamboo subsector interventions are all praised for focusing on the great (and somewhat unexplored) potential of the bamboo industry in the countries concerned. In addition, the relevance of the projects is enhanced by the contribution that the projects make to combating deforestation and promoting sustainable forest use.

Special characteristics apply to the livelihood interventions. Though alignment (with government rehabilitation, re-integration and economic recovery policies) is also a key relevance factor in these interventions, some interventions point towards issues of particular relevance (or lack thereof) for this type of intervention. Firstly, a question is raised about the relevance in relation to the UNIDO competences, experience and comparative advantages for these interventions. Secondly, post-crisis situations can be emergency situations requiring immediate and short-term activities, whereas the UNIDO approach is more a long-term development approach. Interventions that include activities at all the three levels - micro, meso and macro - are generally seen as more relevant than interventions that focus only at e.g. either the meso or the micro level. Alignment with PRSP policies and programs is an important relevance factor at the macro level.

### 3.2 Effectiveness

Effectiveness of the interventions ranges from above to below average. Only few interventions have achieved very poor results, and in these cases lack of adequate funding was the main explanation.

Activities that do receive funding are generally implemented as planned. Training activities (both training of staff of enterprises and training of trainers) are usually implemented effectively and competently. Installation of equipment is also carried out as planned, however sometimes with delays.

Careful selection of trainees and the inclusion of adult literacy and entrepreneurship training courses contribute substantially to effectiveness as do timely disbursement of funds. Well-designed and implemented activities and outputs are similarly key elements in securing effectiveness – especially in cases where design and implementation leads to realized outputs at all the three levels, mentioned above. Designs that include activities and outputs towards reducing post-harvest losses are judged of particular importance for food sub-sector interventions to be effective.

In a few cases leadership or management issues have hampered the effectiveness of the interventions, for example in Uganda's TEXDA project, where a change of leadership prevented the implementation of a new business plan.

In some cases, the limited effectiveness relates to the quality of inputs. The following examples can be given: the right type of experts has not been available (as in the leather project in Ethiopia, where the efficiency of the training was reduced by the consultants' poor language skills), maintenance and repair of equipment has been unavailable (as in the leather project in Egypt, where design activities could not continue because the equipment broke down),or the presence of international experts has been too brief to ensure a proper transfer of knowledge (as in Eritrea's leather intervention). From this it can be concluded that appropriateness of the services and technologies provided is an important factor to consider in relation to effectiveness.

In cases where the effectiveness of a project is limited, the successful activities are often on micro level, e.g. training activities or direct support to enterprises. In these cases, planned activities at the Training Center management level or at the

government level (e.g. development of management and business plans or national policies) tend to be neglected. Also, replication, up-scaling and planned outreach activities are in some cases limited, but this can be due to limited results from the initial pilot activities, as is e.g. the case in the textile intervention in Burkina Faso.

### 3.3 Sustainability

The sustainability of Training and Service Centers (e.g. established under textile, leather and food safety interventions) is a key concern in most projects. Even though activities aimed at enhancing the sustainability of the centers are often included in the project designs, particularly in second phases, sustainability is often deemed unlikely to be achieved. A major factor limiting the sustainability is that activities do not involve all stakeholder groups and when they do, it is in many cases not done effectively enough. In many cases the involvement also needs to start from the design phase in order for the design to effectively take the key stakeholder groups into consideration. The centers supported tend to be pilot oriented with limited outreach to the ultimate beneficiaries.

In cases where local institutions would appear natural cooperation partners, these are not necessarily included. Linking up to national institutions, like e.g. vocational training institutions is also lacking in some of the cases studied. Though national government institutions in many cases appear to consider the projects relevant (cf. above) and hence do take ownership, this does not appear to be enough to secure sustainability. Also at the micro-level is sustainability an issue. The project-established centers (processing groups, producer associations) are only sustainable if the local communities are sufficiently involved, interested and committed. Lack of management and financial resources are key factors at all three levels.

However, some positive examples can be highlighted. The Training and Common Facilities Center established under the leather subsector intervention in Uganda is a well-established service organization with a good reputation, and it covers 87 % of operating costs, mainly from production activities. The Center is well-used, which might be explained by the high level of satisfaction among trained business staff. The businesses are sustainable and have emphasized that the Center has been instrumental in enhancing the quality of their products. Also The Cane & Bamboo project in India is described as an exceptionally good case of sustainable intervention. The Cane and Bamboo Technology Center is a highly recognized, well-known resource center, even internationally, and its services are in high demand two years after project completion. The success of the center is attributed to its creativity and innovation and to its ability to transform India's bamboo sector from a traditional handicraft sector to a more industrial approach.

Other interventions have similarly contributed to putting the targeted subsector on the national agenda, but lack clear exit strategies or business plans.

### 3.4 Efficiency

Many of the evaluations do not assess the efficiency of the projects. In some cases, specific reasons for the lack of this assessment are given (e.g. the current status of funds could not be obtained by the evaluation team). In cases where the efficiency of a programme has been positive, counterpart ownership and synergy between components are mentioned. High standards of consultants, use of competent national consultants and trainers, whenever available, and good management are also among the key factors that contribute to efficiency. Outsourcing to local institutions (universities, CBOs, local NGOs, etc.) of e.g. promotion and mobilization activities should also be mentioned in this connection. Developing the intervention to a "model" that can be replicated increases the "result" for a given input and hence increases the efficiency.

Where the efficiency has been poor, weak internal management or large amounts being spent on international experts are given as reasons. Also, high administrative costs, unclear division of management responsibilities and lack of follow-up and monitoring activities are mentioned as reasons for low efficiency as is the too late availability of "bridging funds".

### 3.5 Impact

Impact in the sense of clear contributions to poverty reduction is notoriously difficult to capture. There is often a long cause-effect chain from the intervention inputs and activities to this ultimate goal. Often it also takes time for the impact to become realized and if evaluations are undertaken towards the end or right after termination of a project, it can be difficult to assess impact. In the present case many of the evaluations have in fact been undertaken so soon after the inputs have been provided and activities undertaken that clear assessments cannot be made.

This means that information available in the evaluation reports is limited and in some cases commented upon with "no information available" or in others referred to as "results", which are understood as outputs and/or outcomes in the LFA terminology. In cases where an assessment of impact is attempted, it is usually only assessed as potential impact (or lack of potential impact). In cases where relevance, effectiveness and sustainability are all judged low for the same intervention, there is probably little doubt that the impact has been small.

The question is, however, what can be learned from this. It does appear useful to supplement the evaluation assessments by trying to outline the assumed "cause-effect chain", i.e. to identify the assumed logics – or "theories of change" – behind the different types of interventions. By doing this and by attempting to identify the key assumptions for the intervention to lead from each "cause-" to the next "effect"-level in the chain, it is in principle possible to analyze the extent to which the assumed assumptions are valid or not valid in the given project context.

# IV The Intervention Logistics

Annex C indicates seven project types. The sections below describe each of these types in terms of the (assumed) intended cause-effect chain. Details of the evaluation studies are then scrutinized for information, which can be utilized to assess which assumptions are key assumptions at each step in the chain and (where possible) also to assess the extent to which these assumptions were judged valid or not valid by the evaluators. The assumed steps in the cause-effect chain for which the intervention logics are analyzed are for each type from activities to outputs, from outputs to outcomes and from outcomes to impact.

### 4.1 Rural development focus – Food

This intervention type intends to contribute to poverty reduction by giving poor farmers in poor areas an opportunity to increase production and supposedly hence income. This is assumed to be achieved by transferring improved processing technology for an important agricultural raw material, the production of which was the economic livelihood basis for a substantial number of poor farmers in the respective countries. The intervention sample contains five interventions of this type, with interventions in apiculture, sorghum production, fruit processing and dairy sub-sectors. In most cases the intention was far from being realized at the time of the evaluation.

Inputs in these interventions were technical assistance and equipment provided to research institutes or trial- and demonstration centers for undertaking pilot-, trial- and demonstration and training activities. These activities would promote the improved technology among MSMEs, farmer groups or individual processors and/or farmers, who would adopt the improved technology and thereby provide a marketing outlet for farmers producing the agricultural raw material.

An important assumption for such activities to lead to increased income for the raw material producing farmers is that the improved processing technology, if applied, produces a processed product for which there is a market. Whether this assumption was in fact valid or not valid was, however, never really tested in some of the cases, though it does seem reasonable to have assumed that such markets might well have been there. Especially the dairy sector interventions have had the potential to exploit increasing prices for imported milk powder, whereby locally produced milk could be offered as a more affordable alternative. In Mali, marketing and promotion activities have proven successful supplements to the technical advancements.

The ultimate effects on poor farmers are rarely analyzed. However, it does seem clear that proper agreements must be in place in order for both raw material producers and processing industries to benefit. This has not always been the case. For example in Cameroon, lack of a proper partnership agreement between milk producers and the UNIDO supported dairy plant resulted in outstanding payments and conflict between the two parts. Also in Burkina Faso, legal, financial and commercial issues prevented a dairy plant from being opened as promised to milk producers, who then had to find alternative buyers. In such cases poor farmers can hardly be said to benefit in terms of increased income. On the other hand, processing units may not be able to exploit full production capacity if regular, high quality supply cannot be obtained. In some of the evaluated cases the administration and/or production capacities of farmer groups chosen to deliver raw material have been overestimated. Some conclusions can be drawn from these examples. The success of such interventions seems to require that much more attention is being paid to organizational, financial and structural issues rather than merely technical ones. Interventions must be based on solid assessments of the capacities of involved parties and analyses of which business model is most economically and socially viable.

A further argument for including the linkages to raw material producers is that a qualitatively improved final product is in some cases not only related to processing but also to production, storage and transportation. Hence, aiming technical assistance at several links in the value chain contributes to an improved final product, as in the dairy sector interventions where hygiene training has been provided to both milk producers and dairy plant employees.

Other assumptions, which turned out to be invalid in some cases, reduced the effects earlier in the cause-effect chain. For the project activities to lead to an increased and improved (better quality processed product) processing capacity, additional investments were needed, but these were not forthcoming in all cases. Another important assumption was that processing by using the improved technology was profitable. Otherwise, the processing capacity would not be installed. This assumption is not always analyzed. Even in cases where the technology is highly appreciated by the target group (for example the introduction of aluminium milk churns in Cameroon), issues of viability and replicability are rarely addressed.

Finally, even if markets and demand existed and even if the processing capacity was actually improved, there are still many assumptions, which need to be valid for the farmers to achieve increased income. They need to increase production and hence need to have land, access to water, fertilizer, etc. and they probably need to have access also to credit and maybe to advice from an extension system, which may not be there for poor farmers. Also environmental concerns must be taken into consideration if sustainable impact is to be expected.

Though a project can, of course, not remove all constraints, an important lesson might still be learned from the past experience with this type of intervention. Pilottrial- and demonstration activities can be very well justified in a long-term perspective. However, impact in the shorter run cannot be expected unless such activities are undertaken as part of larger interventions, building on key assumptions that can reasonably be expected to be valid in the given contexts. There might be scope for focusing this type of interventions on supporting value addition in food processing industries linked up to domestic food value chains.

### 4.2 Rural development focus – Non-food processing

Processing of bamboo is the only non-food processing sub-sector in the Review Sample categorized as having a rural development focus. This type is focused on a domestic agro-processing value chain. This type of intervention aims at developing the bamboo processing industry. The expected impact is income and employment generation among producers of raw material as well as among craftsmen and small and medium sized entrepreneurs in the processing industry. The aim is to add value to bamboo raw material through improved production and processing skills, higher value added products, and increased awareness on bamboo and its industrial utilization.

Hence, activities target different sections of the bamboo value chain; bamboo farmers are assisted through training and other services from a Pilot and Demonstration Unit, and bamboo seedling nurseries are established. Craftsmen and entrepreneurs (existing as well as potential) in the bamboo processing industry are equally assisted through training and advisory services. Capacities building of the demonstration institution and regional market strategies are examples of meso and macro level activities.

In order for the expected outputs to materialize, the benefits of the new designs need to be understood, and long-term commitment to adopt the new technologies, if successfully piloted, is required. The demonstration activities specifically address this assumption. Further up the cause-effect chain, market penetration needs to be possible in order for the participants to benefit from the project. Promotion activities seem to be an effective way to ensure this.

An assumption for the micro level achievement to lead to a sustained impact is that the Pilot and Demonstration Unit is financially viable. This presupposes that the services offered are in demand. The Cane and Bamboo Technology Center in India is highlighted as a model case in this regard. Its services are still in high demand two years after project completion, even internationally. Dozens of product prototypes have been developed that can be taken up commercially by local entrepreneurs, and the creativity and innovation of the center is praised. This experience is for example reflected in the project document for the East Timor bamboo intervention, which is included in the Review Sample but has not yet undergone evaluation. It is hence an example of south-south technology transfer.

Also, government support must be mentioned as an assumption for sustained subsector development. In both Ethiopia and India, macro level activities have been carried out, and the governments of both countries are now actively supporting the bamboo subsector.

Another assumption for continued farmer and entrepreneur interest relates to the value chain. Farmers rely on a market outlet for their produced raw material, and entrepreneurs rely on a regular supply of raw material. Often the intervention addresses rural communities where bamboo is traditionally an integrated part of everyday life and has a range of domestic usages. By promoting urban processing activities, the established demonstration unit makes it possible for rural poor to turn the bamboo into a cash crop. Further up the value chain, entrepreneurs benefit from a reliable supply of high quality raw material because of the training provided to rural producers and the development of bamboo species.

The integrated value chain approach appears to be an efficient way to address rural as well as urban poverty simultaneously in a given subsector. This subsector further demonstrates how AGR contributes to strengthening south-south technology transfer (e.g. from India to East Timor).

### 4.3 Rural development focus – Agro machinery

The agro machinery intervention type intends to increase farmer's income by promotion of productivity enhancing agricultural machinery and tools. Improved designs are expected to be both better and cheaper than the existing (imported) supply of tools and machinery (threshers, decorticators, cultivators, etc,). By adopting the new technology the farmers should then be able to cultivate more and at lower unit costs and in this way increase their income from their existing farming activities.

Technical assistance and some equipment were provided to research institutions to assist with the development of "prototypes" of new tools and machinery. In relation to description of the new designs also manuals for use and for training were part of the intended activities as were training of staff. Outputs were thus different benchmarks towards establishing the research centre as a "centre of excellence" in (improved) agro-technologies, which were able to assist and train producers (suppliers) and farmers (users) and thereby promote the adoption of the new improved technologies. Outcomes are thus understood to be suppliers, producers and workshops able to provide the new tools, to advice on their use and to repair and maintain them. Further, farmers are expected to adopt and hence demand the improved tools and machines for increasing their agricultural production.

A key assumption, which turned out to be invalid in both of the two cases in the Review Sample is that the new tools and machines were actually better and cheaper than existing agricultural equipment. In both cases did the new designs end up being either inappropriate for the intended use and/or too expensive for the intended farmers to actually adopt these products. For such reasons alone, there could be no impact in terms of increasing agricultural production and income. Had the technologies being promoted been more appropriate, a number of other assumptions would still need also to be valid for impact in this sense to have materialized. They include, among others, that demand for increased production exists, that the additional factors of production (seed, fertilizers, etc.) are available and that the new technology as a whole is economically viable. Also, the supply side needs to be able to undertake production, repair and maintenance in an economically viable way. The continued existence (sustainability) of the technology research centre and training institution would also need to be secured.

The main lesson from the two examples of this intervention type is similar to that of the above mentioned type. It takes more than a relatively small, research type intervention to secure impact in the ultimate sense of reducing poverty, even potentially. This should not, however, necessarily be taken to imply that such interventions should not be undertaken. But it should at least be clear from the outset what can realistically be expected or not expected. It would in any case, though, be necessary to assess carefully the potential for contributing to poverty in the longer run by assessing the appropriateness of the technology for the longterm agricultural development in the given contexts of the individual countries. Though the two evaluated projects of this type, included in the Review Sample, were not successful, the Malawi project, which is also included suggests, (cf. Final Report) that this type is a type with the needed scope for impact in terms of contributing to poverty reduction.

### 4.4 Rural development focus – Livelihood

The basic purpose of this type of intervention is to restore "normal life" in rural and urban areas, where a crisis situation has occurred (created by wars, natural disasters or human conflicts of one type or another). Though both the post-crisis situation and the before contexts are typically very different, the interventions have the common perspective of "restoring livelihoods" in the affected areas. This is to be achieved by re-establishing basic economic (and related social) activities and through this to abolish the poverty situation created by the crisis.

Inputs are technical assistance focusing on training and the provision of basic tools and equipments to re-build the basic craftsman skills sector. Organizing the training facilities, providing training to trainers (sometimes outside the area or even the country) and to selected direct beneficiaries and developing training materials are key activities. Renovation of buildings is also often necessary to get started as is institutional support to some of the existing institutions, such as vocational training centers, which are (in some cases) being involved in the projects. Selection of trainees and distributing basic toolkits are also important activities as are support to (re-) establishing producer groups, small enterprises, self-employment businesses and to associations of various types, including service and training providers. The core of these activities is micro-, in the sense that they are undertaken physically very close to the ultimate beneficiaries and their own institutions (CBOs, local NGOs and local government institutions). Though such institutions are not necessarily involved in the project, they are typically there and could (should) be used for "anchoring" the project in the local communities.

Outputs are basically seen as training facilities functioning, numbers of trainers and direct beneficiaries trained, producer groups and associations established and toolkits distributed to a number of the trainees. Outcomes are correspondingly a number of MSME enterprises (including self-employed persons) operating profitably and income and food security re-established for all the ultimate beneficiaries. In this perspective impact understood as contributions to poverty reduction in a national perspective can be seen as livelihood restoration in all similar post-crisis areas of the country. This requires that the project is developing into a "model" (as the case is, e.g. with the SKIPI project in Uganda according to the impact evaluation), which could be replicated in other areas. This would imply activities also at the meso- level (strengthening national institutions responsible for implementing national post-crisis policies) and at the macro-level (assisting the government with establishing national post-crisis policies).

The actual cases in the Review Sample do not go this far. Thus the impact is clearly to be understood as potential impact, if the above perspective is accepted. If not, it should be made clear that expected impact is a local, not a national impact.

If the national perspective is accepted, it is, of course, first of all to be assumed that the project is developed as a "model", i.e. recorded, analyzed and described, that this description is promoted as a useful model towards national authorities and that these are willing and able to take the needed steps for replication. These assumptions are not analyzed as the actual interventions are generally not taken to that level, i.e. they are generally not designed with the required meso- and macro-level activities.

The actual cases do, on the other hand, point out a number of key assumptions for this intervention type to realize the above specified outcomes. These are firstly that beneficiaries are willing and able to operate producer organizations and to establish small enterprises (including self-employed businesses). Secondly, that such MSMEs have access to service providers (for maintenance and spare parts), to needed raw materials and to finance. Thirdly, that there is a market for the services and products these enterprises can supply and fourthly that the MSMEs have the needed links and access (such as transportation) to such markets. Finally, it is also an assumption that the technology provided is appropriate and can be operated profitably. Not all of these assumptions have been valid in all of the four examples in the Review Sample, but the experience suggests that they are key assumptions, which need to be analyzed in relation to new projects.

There are similarly a number of assumptions required to be valid for the projects inputs and activities to lead to the output types indicated above. Firstly, it is necessary that some institutions or persons are able and willing to "host" the project. This assumption is mostly valid in the actual cases, though the SKIPI project is mentioned as having "started from scratch" (quote from impact evaluation). In one case there were local institutions, but they were not invited to participate (the Aceh tsunami project). An important assumptions at this level is also that the intended beneficiaries are able and willing to receive training and that they are able and willing to apply their training for operating businesses and that they have access to the equipment needed for them to apply their training. Assumptions of these types were typically valid for the four successful

interventions in the Review Sample (the Iraq Cottage, the Uganda SKIPI and the Indonesia Maluku projects) and similarly invalid in the less successful case (the Aceh tsunami project).

Of the three non-evaluated interventions in the Review Sample, the Sudan intervention is similar to the Iraq cottage industry intervention. The Lao- and the Morocco-interventions are somewhat different. They indicate use of agro-industry interventions to affect the backward linkage to agriculture, focusing not only on raw material production but also on promoting sustainable utilization of natural resources.

### 4.5 International competitiveness focus - Food

Contribution to poverty reduction can for this type of interventions be through increased (or sustained) employment in the processing and marketing sector, through increased (or sustained) farmer income in the agricultural raw material producing sector or both. The focus of these interventions is on a technological upgrading of food processing industries to comply with international standards. This focus implies that effects in terms of poverty reduction are to be achieved through increased (sustained) exports or reduced (not increased) imports of food products and that impact is not only (and in some cases not even primarily) the employment effect in the processing sector itself, but the income effect in the agricultural production sector to be realized through increased demand for raw materials from the food processing sector. This latter part of the income creating effect is important, because the processing sector itself may not employ that many and often is located in urban areas, whereas poverty tends to be worst among small farmers and unemployed people in rural areas.

The success criteria used in the evaluation studies of these interventions relate basically to exports (and to the effects on domestic consumers in terms of increased food safety and quality) and focus is on outcomes in terms of food safety and quality systems established, regulatory, control and support institutions (such as laboratories) strengthened (including accreditation) and enterprises supported with training and advice to become certified processors. The three interventions of this type in the intervention sample are judged to have relatively high scores on four out of five of the DAC criteria, but with little or no information given on the fifth criterion, impact. Where the expected outputs are delivered but impact is nevertheless estimated to be low, the reason is high costs of the technology applied and therefore poor prospects for replication and upscaling.

Impact in this respect is, however, not analyzed in the evaluation documentation, though different sub-sectors of the food industry, i.e. different value chains, may

have quite different effects on the rural economies, where poverty is often concentrated, as mentioned above. One other observation concerning this type is important in this connection. The interventions seem typically to have activities (and hence outputs/outcomes) at all the three different levels, micro-, meso- and macro-levels of the economy, but with most focus on the meso-level. Basing the design of the interventions on a full value chain analysis (including the agricultural production of the raw material as well as post-harvest storage, handling and transport) with pilot-, trial- and demonstration activities at the micro-level and activities in supporting sub-sector policies at the macro-level would appear a way forward towards increasing the impact of this type of food industries support.

Of the six interventions in this category in the Review Sample, only three are so far evaluated. Three of the other four are designed very much like those two, i.e. Mozambique on food quality and safety (like Uganda) and Bangladesh and Sudan on fisheries (like Kenya). The Morocco intervention is similar to the Uganda intervention as well, including with limited attention to the backward linkage to agriculture, but demonstrating how ecological certification can achieve linkage up to a global value chain (for olive oil) rather than using the raw material, the olive production for lamp oil.

### 4.6 International competitiveness focus – Non-food processing

This type of interventions aims at increasing income for entrepreneurs and employment in the textile/leather subsectors. The focus is on international export, why an increase in foreign exchange earnings is also an expected result. The intervention sample contains six textile and six leather interventions.

The impacts described above are to be achieved by improving the international competitiveness in the textile and leather subsectors, usually through improved technical skills and services offered by a national Training and Service Center. All textile interventions but one focus on processing of cotton, either from raw material for weaved fabric, from fabric to readymade garments, or both (The exception is the silk intervention in Madagascar). Hence, value addition is a key focus area. The leather interventions equally focus on one or more segments of the value chain, i.e. either on hides & skins treatment, tanning or finished leather product manufacturing.

These interventions generally expect outputs at different levels. At the micro level, individual enterprises or entrepreneurs receive training and other services. A great deal of activities focus on the national Training and Service Center, where training capacity is increased through training of trainers and development of curricula, or center management is improved. A typical macro level output is the development of a national sector strategy.

The micro level activities aim at increasing the quantitative and/or qualitative productivity of enterprises and entrepreneurs, but in order for this to lead to increased income or employment, the provided technology and training need to make the supported enterprises more competitive. This assumption has in some cases proven valid, in other cases not. Users of a Training and Common Facilities Center (TCFC) established in Uganda express high satisfaction with the services and attribute much of their success to the Center. In contrast, beneficiaries of a textile intervention in Burkina Faso have not been able to sustain themselves by using the technology provided by the project. Lessons can be learned from the assumptions that relate to the success of the trained enterprises. Market penetration needs to be possible, and this can be addressed by promotion and marketing activities (which partly explain the success of the TCFC in Uganda). Obviously, demand for the end product needs to exist (which was not the case in Burkina Faso). Surveys and assessments can help in clarifying this.

An important assumption for the intervention to lead to results beyond the directly supported enterprises and individuals is that the established training center is sustainable and financially viable. This again presupposes that enterprises are interested in – and willing to pay for – its services, which tends to be a general problem in most interventions. But also a strong government commitment to the subsector and to the training center seems to be a precondition for sustainable impact (often government level activities constitute a separate component in an integrated programme, and therefore the validity of this assumption is difficult to assess at component level).

Several of the textile subsector interventions mention the strong links to cotton farmers. Implicitly, income and employment generation among producers of raw material is therefore also an expected impact. Assumptions for this to be realized are that the interventions lead to an increased demand for raw material and that the producers hold the potential to increase their production. These backward linkages in the value chain do not seem to be explored and no attempts are made to assess the impact among agricultural producers.

### 4.7 International competitiveness focus – Livelihood

Only one of the interventions in the Review Sample, which fall in this last category, has been evaluated (IP Lebanon 08 and 09).

The midterm evaluation (2008) states that the ultimate (poverty reduction) goal is in this case formulated as "livelihood restored" and "food supply and food safety re-established". These formulations indicate that the interventions are postconflict interventions, rehabilitating agro-industries, which were there before the war and which used to provide basis for the livelihood of the population in the war affected areas.

Provision of technical assistance for establishment of a rehabilitation plan, selection of relevant food sub-sectors and enterprises and for following detailed physical and institutional assessments of each of the selected enterprises is one part of inputs, activities and outputs. Provision of machinery and equipment is the second part and training of workers, business managers and marketing people and (re-) establishing market linkages is the third.

A key assumption, which has turned out to be valid in the case concerned, is that the security situation has improved and remains stable. Other (also valid) assumptions include that people, the beneficiaries, are motivated for engaging in the activities, including in training activities, that they are available for these different activities and that they are interested and able to take advantage of the project inputs and services.

The project scores high in the evaluation on the first four of the DAC criteria: It is considered a highly relevant project, in line with the UNIDO corporate vision and the counterpart institution (Ministry of Industry) considers UNIDO a relevant partner for its rehabilitation program. The equipment has had considerable impact on production, the technologies have been "eye openers" and the training and study tours have achieved results "beyond scope and expectations". Thus, there seems little doubt from the evaluation that the project has been successful, but assessment of impact in terms of jobs and income restored has not been made. The evaluation also states that further support is needed for the rehabilitated industries to become internationally competitive.

The final independent evaluation (2009) confirms the midterm conclusions and considers the project to be highly successful. In terms of job and income creation the final evaluation concludes that the project has shown to have a substantial impact, which can be expected to be sustainable and to further increase in the future.

In relation to the recommendation from the midterm evaluation on further support to the rehabilitated industries to become internationally competitive, the final evaluation does not follow up on this. However the project recommends continued support for a phase II, which include support to companies to develop own business plans in order to ensure ownership and long term sustainability. Further it is recommended that the project should shift from a short-term postconflict to a long-term development approach. Among other things, this includes a concentration on fewer sectors in terms of "employment generation and export prospects, etc." Likewise it is recommended to do an analysis of market structures and potentials.

The final evaluation states some main lessons learnt for future similar postconflict projects. These include the speed of assistance delivery as essential for the function and effectiveness of the market. Distribution of equipment for free is also considered to be an effective tool in post-conflict situations as it was related to damaged property. And finally it is stated that in projects where equipment supply is a core element, the quality of both the technical expertise and equipment itself is crucial for the sustainability of the impact.

Another project within this category is 'Re-establishing the food safety and food industry capacity in Iraq' (2009). As it is ongoing, there are no evaluations on this project yet. However, according to the project document the project aims to rehabilitate agricultural infrastructure, promote food safety and revitalize technical support structures. Based on the project document it is difficult to place the project in the typology. It is also for this project unclear whether international competitiveness is expected to be achieved. Similar reflections concern the projects within the dairy sector and the date palm sector in Iraq, though they have a more specific focus on equipment and technical support within the food processing category. They do not reflect an explicit focus on international competiveness, in which case it would fall in the rural development focus category (section 4.4).

# Project Cycle Management

This chapter summarizes findings related to the project cycle. The evaluation reports assess programme cycle management in general, i.e. findings are not specified separately for the individual components. Thus, findings summarized may or may not relate specifically to AGR projects.

### 5.1 Identification and formulation of interventions

Concerning inclusion of lessons learned from previous interventions, it is important to note that several of the programmes in the Review Sample are Phase II programmes with the potential to consolidate already initiated activities. Reasons for continued support to existing activities can vary, from building on to something that has already proven successful to correcting problems or ensuring sustainability of less functioning activities. In either case, the experience gained from the first phase of a programme should naturally be a point of departure for formulating a second phase. This obvious opportunity is not always exploited. For example, the second phases of the Country Service Framework of Indonesia and the Integrated Programme of Mali have been formulated without the first phases having undergone an independent evaluation. The CSF Indonesia (2008) had not undergone prior self-evaluation, while the final report of the IP Mali only provided very basic information that did not give any directions for the second phase.

However, also positive examples in this regard can be highlighted. In the design phase of the Integrated Programme II of Uganda efforts have been made to integrate lessons learned from Phase I, such as including views from beneficiaries, donors and government in the preparatory work.

Another way to draw on previous experience is to find inspiration in similar interventions elsewhere. Thus, the programme in Lebanon has benefited from experiences with similar UNIDO interventions, i.e. rehabilitation of war-effected agro-industries and recovery of people's livelihoods in post-conflict countries as Iraq, Sudan, Afghanistan and Indonesia.

Such inclusion of previous experiences requires that sufficient attention is being paid to follow-up and evaluation; an issue that will be discussed below.

Obviously, meaningful programme identification and choice of priority areas rests on a convergence of UNIDO competence areas and government development priorities. As an example, the evaluation of the Integrated Programme in Eritrea thus highlights that the chosen activities reflect both highly relevant priority areas and areas where UNIDO has comparative advantage. However, other programmes demonstrate a lack of such a convergence. For example, in the Country Service Frameworks of Indonesia and India activities reflect UNIDO service areas, existing UNIDO approaches and UNIDO staff interests rather than government development objectives or donor policies. On the other hand, the evaluation of the Integrated Programme of Madagascar concludes that UNIDO had to move beyond its area of competence (and engage in silk work breeding) in order to deliver results in the silk subsector; a national development priority.

The evaluation reports clearly demonstrate that even when a common ground does exists, a clear and well-defined focus is also a prerequisite for a successful intervention. Hence, the Integrated Programme of Ghana is described as spreading over too many sectors, and the Country Service Framework of India is equally claimed to lack a clear regional or thematic focus. The Integrated Programme of Uganda can be pointed to as an example of a programme with a clear focus, and the integration of components was given attention in the design phase. Such an intervention focus is expressed not only in the kind of activities that are undertaken, but also in clearly formulated and well-defined objectives in the programme documents. Such objectives are in several cases claimed to be inadequately described.

Concerning stakeholder involvement and preparation, consultations with relevant stakeholders form part of the planning of all programmes in the Review Sample; however some are more successful than others in this regard. Inspiration can be drawn from Lebanon, where good links were established with private sector counterparts, e.g. industry associations, which were included in the programme planning. This participatory process has resulted in objectives that very much reflect beneficiaries' needs.

Besides establishing stakeholder engagement, the planning phase must ensure that the programme rests on solid knowledge of local conditions and circumstances. Some interventions point to weaknesses in such preparations. For example, in Burkina Faso a closed-down dairy previously supported by the European Union was reopened by UNIDO, but without investigating why it was closed down by The European Union in the first place. The evaluation of the Integrated Programme of Ghana equally points to poor knowledge of local conditions, e.g. of the industrial sector in the areas of intervention.

In relation to funds mobilization experience from the evaluated programmes clearly underlines the importance of joint UNIDO and government efforts to mobilize funds. Several evaluation documents point to the lack of such joint efforts and to the lack of a systematic fundraising strategy in general (included here are the programmes in Kenya, Ghana, India, Egypt, Eritrea and Madagascar) All programmes with a poor counterpart involvement in funds

mobilization demonstrate serious problems with raising the planned funds (The Integrated Programme of Burkina Faso is an exception, since joint efforts were undertaken, but funding level remained low.) Of course several other reasons may also contribute to low funding levels (such as political instability). However, donors may doubt the commitment of the government if the latter is not involved in funds mobilization, which for example is stated to be a reason for low funding of the Kenyan Integrated Programme.

Donor involvement in the design process is also a way to improve funding levels. Uganda can be pointed to as a positive example in this regard. Here, a donor conference was held, and Norway provided inputs for the design. As a consequence, only components with a very high likelihood of funding were retained in the final programme document. These efforts resulted in an exceptional high funding rate at 91 %.

These experiences demonstrate that funds mobilization cannot be detached from the design of a programme, but needs to be an integrated part of this process.

### 5.2 Design

The main conclusion to draw from the evaluation of the programme designs is that programmes often rest on a very poor logical framework analysis. Often designs lack well-established indicators and objectives, or objectives are not sufficiently specific to serve as a planning tool. In addition to this, Monitoring and Evaluation mechanisms are often insufficiently defined in the programme documents. Without baselines against which to assess progress, results cannot be documented later in the project cycle. Taken together this means that the programme designs do not ensure that the programmes are evaluable and that Results Based Management is not practiced.

Lebanon is an example of a programme where a Monitoring and Evaluation framework is actually included in the programme document. In addition to this, on own initiative the Monitoring Unit of the programme developed training evaluation sheets to be filled out by all participants, and baseline data were collected on enterprises (however the data were not of sufficient quality to facilitate the development of indicators).

Also other programmes are described as having high quality designs and good use of log-frames, though with some (minor) weaknesses, such as in identifying indicators or a poor distinction between outputs and outcomes

Despite these positive examples, a majority of the programmes are designed in a way that does not provide a proper foundation for monitoring and evaluation.

This, of course, has serious implications for the ability to demonstrate aid effectiveness.

Other flaws in programme documents (however less common) include poor formulation of exit strategies or lack of consideration for replication and sustainability issues. For example, in Burkina Faso the Shea industry was supported and equipment bought, but without a clear plan for the functioning of the supported centre. The programmes in Ghana and Kenya are also described as having weaknesses in this regard. In some cases also management issues are insufficiently described, leading to confusion concerning division of roles and responsibilities during implementation. These issues will be discussed in further detail below.

### 5.3 Implementation

Most evaluation documents from the Review Sample point out some kind of implementation problems. Political instability and lack of funds are main factors hindering a smooth implementation. Iraq, Lebanon and Madagascar are examples of countries where the political situation has had a negative effect on programme implementation. However, the most frequently quoted reason for limited implementation is low funding levels, which has occurred in a majority of programmes. Often planned components are not funded at all, or delays occur because of irregular access to funds.

Funded components generally do produce the planned outputs (whether these actually lead to the expected outcomes and impacts are discussed above in Chapter 4). However, seeing that lack of funds is a frequently occurring issue, there is a need for a continuous reassessment of the relevance of planned activities. In this regard implementation and follow-up seems to be rather weak. Programmes are often designed in a way that addresses micro, macro and meso levels. When some components cannot be implemented, it seems that remaining components are generally implemented without considering whether they are still relevant.

As described above, a well-coordinated funds mobilization and design process involving both counterparts and donors is a way to diminish programmes with unor underfunded components. However, follow-up and monitoring are also crucial in ensuring continuous relevance of activities. As already mentioned, many programmes are designed in a way that does not allow proper follow-up. Though, in some cases poor follow-up is also a result of weak implementation, and not merely poor programme design. Several programme evaluations state that progress reports have not been produced as planned, mid-term evaluations have not been carried out lessons from pilot activities have not been analyzed and utilized in further implementation, etc. This indicates that monitoring, follow-up and evaluation in general are given low priority, and practically all programmes in the Review Sample have flaws in this regard.

Besides availability of the necessary resources for follow-up work, proper management structures are also key in ensuring that programmes are able to adapt to changes throughout implementation and that results can be demonstrated after programme completion. These issues will be discussed below.

### 5.4 Management and backstopping

A recurrent issue is the establishment and effective functioning of programme steering committees. In several programmes (including Burkina Faso, Ghana, Egypt and Eritrea) an overall programme steering committee was never set up as planned. In addition to this are several other programmes where committees have been established, but have not met regularly or the steering committee has met, but has not really carried out its review function, i.e. assessment of progress and initiation of corrective action.

Some positive examples do exists, such as in Iraq, where the involvement of high level representatives from counterpart ministries made it possible to make timely decisions for adapting the project to changing, and often very challenging, circumstances. Nevertheless, a majority of the programmes have lacked efficient and well-functioning steering committees despite the important roles that these play in stakeholder involvement and follow-up on activities.

Some issues are relevant to point out concerning HQ and field office coordination. In general the UNIDO Representative is estimated as having a very positive function in programmes. In countries where there has been no UNIDO representative negative implications are pointed to. These implications include delays in disbursement of funds, poor UN inter-agency coordination, and time, effort and transaction costs wasted on HQ administrative and financial authorization. On the contrary, where a UNIDO representative has been present, he/she is deemed pivotal in ensuring that the field office plays a valuable role throughout preparation and implementation. Hence, the UNIDO Representative seems to ensure delegation of project management to field level, which again is pointed to as a reason for high donor, counterpart and stakeholder involvement (an exception is Ghana, where all major decisions were made at HQ levels despite the presence of a UNIDO representative).

Whatever the arrangement, the evaluation reports emphasize the importance of a clear distribution of roles and responsibilities. In a majority of the evaluated

programmes, confusion of roles has been identified as a problem. This has implication for programme implementation, since it results in inefficient and weak leadership, tensions and delays in e.g. project approval. Obviously, communication throughout the programme period could ease such tensions, but confusion could also be diminished by paying more attention to management issues and distribution of roles in programme documents.

Another management issue that affects implementation negatively is changes occurring during programme implementation in e.g. staffing or management structures. Replacement of team leaders or other staff seems to be rather frequent and causes delays when hand-over arrangements and briefings are not optimal (this has been the case with programmes in e.g. Indonesia and Ghana). Some programme evaluations also point to heavy workloads as reasons for key programme staff not being able to dedicate sufficient time to carry out the tasks expected of them.

Synergy effects and coherent programme management are important elements in programme aid effectiveness. In some cases programmes are designed in a way that renders synergies very unlikely. An example of this is described in the evaluation of the Integrated Programme of Ethiopia. This programme has two coherent programme pillars; one focusing on competitiveness of manufactures goods, the other on poverty reduction through efficient use of agro-based resources. Since these two pillars had different beneficiaries, objectives and counterparts, they were from the start hard to integrate. So obviously, the potential for synergies is established already in programme design.

However, efficient field level management is another way to enhance integration of individual components. For example, in Uganda managers of individual projects have proactively cooperated and communicated with each other to exploit potentials for synergies, whereas in Indonesia, project managers implemented projects as if they were stand-alone projects, and not part of a programme (despite UNIDO Representative efforts to bring together project managers).

Hence, a combination of well-designed programme documents and efficient field level management contribute to the achievement of synergy effects; an opportunity that remain unexploited in many of the evaluated programmes.

# VI A Forward Looking Perspective

The purpose of extracting findings from the evaluation and other documentation on recently terminated and ongoing typical AGR interventions is to learn from the experience of the past. The lessons are to be fed into the ongoing AGR considerations concerning a revision of the present intervention strategy. The "lessons" are discussed in Chapters 3-5 above and the present strategy is characterized by the typology identified in Chapter 4. A possible further development of this typology is taken up in section 6.2 below on the basis on these lessons as well as on the basis of the present and likely future contextual background, briefly outlined in section 6.1. In section 6.3 some operational implications for the AGR Branch are discussed.

### 6.1 Contextual background

Global inequalities and resulting world poverty has recently increased rather than decreased due to the global general financial and economic crisis as well as the food crisis. Climate changes are likely to add further to increased poverty in the future, as the consequences will be felt most strongly by the poorest countries and the poorest sections of the societies. Combating poverty will thus remain the overarching goal for both multilateral and bilateral development assistance in the years to come.

Agricultural development has again come on the agenda in this connection. The World Bank has brought this to the forefront with the World Development Report 2008 (WDR). This has been followed up with a publication by FAO, UNIDO and IFAD (Agro-industries for Development, 2009) on the role of agro-industries for promoting economic growth based on agricultural development.

Growth in agricultural production is a key driver in overall economic growth in the poorest countries and a large part of the world's poor live in rural areas and sustains their livelihoods from farming. Also non-farm rural employment in e.g. MSMEe, which are typically processing agricultural products and located in rural areas, are important in this connection. It should be emphasized that the WDR finds it important to distinguish different geographical areas with respect to main

characteristics and hence with different contexts for poverty reducing interventions. Three main areas are distinguished: The agricultural based economies (largely sub-Saharan African countries, though also India), transforming countries (Middle East, Northern Africa and e.g. Indonesia and China) and urbanized countries (Latin America with countries like Mexico and Brazil). Though these categories are still rather broad categories with many contextual differences within each category, the report argues well for operating with this basic context typology, when considering the scope for and ways out of poverty through agricultural and hence agro-industry developments. This context typology is also applied by Alain de Janvry in the annex of the abovementioned agro-industry publication.

Increased agricultural (including forestry- and fisheries-) production, the climate change and the increased general environmental concerns will put increasing pressure on natural resources; land, water and forestry. Both agricultural and the related agro-industrial technology transfers will therefore need to take natural resource effects of production and hence natural resources management issues into consideration in the future. Also, energy saving and cleaner production technologies for agro-industries will get increasing importance as will e.g. technologies for renewable energy sources. As the climate changes will hit the poorest most, productive capacity enhancements towards poverty reduction will in future need to be seen in relation to future climate adaptation investments.

Consequences of climate changes like e.g. increasing intensity of both droughts and flooding will imply reduced food production and increased food insecurity that needs to be taken into account in relation to food processing interventions. Changing consumption patterns (increased demand for more processed and readymade products) will in the other end of the income bracket also have implications for the food processing industries. The same is the case with changing marketing systems (e.g. the "supermarket revolution") and more generally with the need to link processing interventions up to markets and marketing chains.

Finally, the trend towards developing the private sectors in the developing countries should be mentioned. Generally, private sector development is necessary for economic growth, but is it possible to ensure economic equality, socially balanced and poverty reducing, "pro-poor" growth by supporting the private sector? Also, private sector support is subsidization in one form or another and can lead to market distortions. In the context of private sector support, the above mentioned WDR emphasizes the need to secure competitiveness in the various parts of the value chains. This points towards a

need for institutional changes in addition to and maybe as an integral part of technology transfers?

### 6.2 A Future AGR intervention typology

The pilot-, trial- and demonstration intervention type, analyzed in section 4.1 above, is essentially a research intervention type, i.e. an intervention, which undertakes applied, action-related research in cooperation with existing or by the project established (research/demonstration/training) institutions in the respective countries. Such interventions might give important results and hence impact in the longer run, but they should be formulated as research projects with research results reported and analyzed and, if successful, used in new interventions, which can take into consideration more of the factors (assumptions) needed for poverty reducing impact to actually be achieved. Equally important is it to note, however, that this category of interventions ought to be much larger and rather to comprise intervention types, which upgrade domestic (staple) food value chains in the perspective not only of income creation, but also of food security, particularly in rural areas and for the poorest parts of societies. Domestic value chain upgrading for certain food industries would appear a natural AGR intervention area. The backward linkage effects to agriculture are important for farm and other rural income generation. This type could further be seen also in a food security perspective for the poor and marginalized people living in remote areas cut off from and highly vulnerable to the volatile character of world food markets.

Support to non-food processing, analyzed in section 4.2, is limited to the bamboo sub-sector. In this type of interventions the backward linkage from processing and marketing activities to the production activities, growing and harvesting of bamboo, is well established. Past interventions also indicate that this is a subsector with a good potential for generating income in rural areas, both for farmers, the bamboo growers and for rural processing industries. Development of prototype products, which can create a demand and hence be sold in local and national market places, is part of the interventions. Past experience from this non-food sub-sector suggests that domestic value chains may be developed to the benefit of primarily rural sections of societies. Expansion of this intervention type into other non-food sub-sectors, e.g. wood processing, is a possible future development. The combination of the raw material production with the processing and marketing activities does also imply an improved natural resource, i.e. forestry, management and would thus directly address the issue of (potentially harmful) indirect effects on the natural resource base of increased agricultural production. If rural people can benefit economically from managing local resources there are better chances of the resources being utilized and managed in a sustainable way. Maybe the past experiences from this type can be utilized also for the above food-processing type.

Also the agro machinery interventions analyzed above in section 4.3. have potentials for contributing to employment and income generation among the poorest in rural areas and go hand in hand with the interventions supporting increases in value addition in domestic value chains for food processing subsectors. The agro machinery interventions included in the Review Sample are somewhat similar to the research type of interventions, analyzed in section 4.1, in that they develop prototypes of new machines, equipments and tools for agricultural production. The two evaluated projects in this category are not very successful and this raises the question also of the possible future for this part of the AGR portfolio. Given that increased agricultural production is today often seen as a pre-requisite for increased economic growth in the poorest developing countries, one should think that support to increased agricultural productivity through transfer of improved technology for agricultural machines and tools would have a good potential. The Malawi project, also included in the Review Sample in this category, does also indicate that this is the case. In this perspective the basic lesson to be learned from past experience seems to be that more careful and detailed analyses and consultations concerning the potentials as well as the requirements (assumptions) for increasing agricultural production in the given contexts are highly needed. The natural resource implications (e.g. ecological) also need to be taken particularly into account in this type of interventions

In section 4.4 the livelihood interventions, focusing on rural development through "restoration of livelihoods" in post-crisis situations are analyzed. This type differs from the above types in that it is an agro-industry sector-wide rather than a sub-sector approach. Assistance is provision of training and equipment for re-establishing basic handicraft skills and small agro-industry enterprises. The actual interventions are, however, somewhat different, reflecting both different pre-crisis contexts and (e.g. Northern Uganda and urban areas of Lebanon) and different causes of the crisis situation (e.g. war affected versus natural disaster affected countries and areas). This type is a relatively new type for which funding sources have recently become available and continue to be there in the nearest future. The non-evaluated projects in Lao and Morocco are also different, pointing towards possibilities for including attention to natural resource management in this category. However, given the difference between the interventions in this category, it does seem necessary to try to develop one or more prototypes.

Section 4.5 above considers the food processing interventions, which intend to upgrade the supported food industries to become internationally competitive by enabling enterprises to comply with food import requirements in western world markets, like the EU standards requirements. These interventions focus on upgrading food industries to become parts of the global value chains for food

products. Though this, of course, in principle has positive effects, also on the domestic food supply, including on food safety and quality, the intended effects are increased or sustained exports and through this employment generation and increased foreign exchange earnings. Both can contribute directly as well as indirectly to poverty reduction and do also provide basis e.g. for importing needed food items through the foreign exchange earnings. The food insecurity in rural areas, to be expected on an increasing scale in the future from consequences of e.g. climate changes, large scale foreign land leasing and use of agricultural production resources for bio-fuel production, is not specifically addressed through this type of interventions. Addressing food insecurity would appear more promising by focusing on the domestic food value chains, as mentioned above. Further gains could, however, also be made from the global food value chain intervention type by analyzing the whole value chain, including the agricultural raw material production aspects, by paying more attention to marketing related and the post-harvest loss activities (technologies and institutional aspects) and by building on possible synergies between the three levels of support, the micro-, meso- and macro-levels.

The non-food processing industry interventions, textile and leather in section 4.6, all basically address international competitiveness of the sub-sector as their main result. Thus, impact in terms of poverty reduction is to be achieved through employment generated in the sub-sector and through the backward linkage effects on farmer incomes from agricultural production of cotton and hides and skins. These interventions do thus attempt to link up farmers to the global value chains for these traditional agricultural raw materials. This type of interventions raises two essential issues. Firstly, whether they include the smallholder farmers or rather marginalize them in relation to the general agricultural development trend. The second issue is whether these sub-sectors can maintain their importance in the future in light of increasing competition on world markets. Evaluations of past interventions analyzed in section 4.6 confirms the second issue, i.e. that fierce international competition is an increasing problem for expansion and maybe even for maintaining production and employment in these sub-sectors. An option would be to identify and analyze also other possible subsectors in addition to the food sub-sectors, where there is still scope for adding value to agriculturally produced raw materials. The alternative to this would be a growth and development process building on driving forces other than agricultural development, which might be seen as a possible industrialization policy in some countries. The first of the issues, mentioned above, also implies a difficult dilemma. Inclusion of smallholder farmers in the global value chains is not easy to ensure, as a number of assumptions need to be valid. Unfortunately, there is little evidence from past AGR experience in this respect as well as the backward linkages to agricultural production is typically not being sufficiently considered either at the planning or at the evaluation work on these interventions.

The intervention category in section 4.7 is analyzed on the basis of one evaluated intervention (the Lebanon livelihood intervention) and on project documentation from three ongoing interventions in Iraq. The category is on this basis very similar to the livelihood interventions in section 4.4, and also to the food processing interventions in category 4.6. In comparison with 4.6 the question is whether international competiveness is aimed at. Concerning 4.4 the question is whether it is a "livelihood restoration" approach. A key point in both cases could be whether the intervention has the character of an emergency intervention or a development intervention and/or maybe whether the pre-crisis context is one or the other of the three WDR suggested types of economies, i.e. agricultural based, transforming or urbanized countries. More work is needed to develop this type e.g. as an "emergency-cum-development" type? There is an international literature on post crisis interventions related to the question of what is relief, rehabilitation or development.

### 6.3 Some AGR operational implications

A key finding from the above analyses of the AGR interventions is that more attention could be given to impact of the interventions in terms of contributions to poverty reduction. The analyses further suggest that the existing typology could be rationalized, the identification and preparation work be strengthened and the designs improved through more coherent use of the LFA tool. Two major intervention types are identified in the typology applied in Chapter 4, where interventions, which focus on linking agro-industry production capacity enhancements up to domestic value chains is one type and those linking up to global value chains, is the other. This distinction cuts across the different agroindustry sub-sectors, food and non-food as well as across agro-processing and agro machinery sub-sectors. The two major types appear to be sufficiently different to warrant this distinction as one dimension of a rationalized typology. The other dimension is the traditional and existing distinction, i.e. that between different sub-sectors, but supplemented with a new category, which is focused on an agro-industry sector-wide production capacity building approach. This last category appears to have "grown out" of the agro machinery type of interventions as a consequence of funds having become available for livelihood interventions to revitalize and rehabilitate the agro-industrial sectors in war-, conflict- or disaster-affected areas in developing countries and through this to "restore livelihoods" in the affected areas.

The food and agro machinery sub-sector intervention categories, analyzed in Chapter 4, section 4.1 and 4.3, respectively are however, presently comprising

interventions, which are essentially research projects. Such interventions should, as mentioned earlier, be treated as a separate category of "scientific cooperation". Instead of these types one could imagine productivity enhancing technology transfer interventions, which link up to domestic markets as key interventions in the 4.1 category. The agro machinery category, 4.3, seems likely to continue as an important category fitting well into the domestic value chains (as well as into global value chains). There are, of course, differences across the various agro-industry sub-sectors with respect to the technical expertise required for AGR to operate the various sub-sector types and these requirements may not be so different with respect to whether the linking up is to domestic or to international markets. Expertise on the value chain structures, the institutional aspects related to marketing and the general country context expertise and experience could on the other hand be rather different. A sort of matrixorganization of the expertise and work responsibilities could thus be imagined: Technical expertise would provide technical inputs to both domestic and global value chain interventions, whereas value chain institutional, marketing and other context-related expertise would work across sub-sectors within each of the two main types of interventions, relating to domestic and global value chains, respectively.

There is in any case a need for considering possible rationalizations also of the division of work and operational responsibilities among the professional staff of AGR. The AGR staff seems extremely overworked as the situation is today. The increased role of and challenges for agricultural and hence agro-industrial development in the future will imply more, not less, work for the AGR staff and possibilities to increase the staff above the present number of positions seem very small. A major improvement in this situation would be achieved, if the administrative parts of project management, presently undertaken by each of the technical staff members as project managers, could either be left to others or be undertaken across the subsectors within the two major types of interventions by personnel, specialized in project management and supported by administrative staff. Also, the value chain analyses to be undertaken in the future will require some specialized economic, social and institutional expertise, which could also meaningfully be attached to the main types with responsibilities across the various sub-sectors. In relation to such organizational considerations it should also be mentioned that project identification (and search for donor funding), preparatory dialogue and overall follow-up are somewhat general activities, which can be undertaken by the same person(s) across the sub-sector intervention types.

Increased workload for the AGR staff would also follow, if identification (dialogues with partner countries), preparation and design of interventions were to be intensified. Use of the "seed money" system for this is insufficient and donors,

financing the interventions are reluctant to spend money for the preparatory consultancy work. As the above analyses show, there is clearly a need for doing more in these areas, particularly towards strengthening the scope for poverty reducing impact of the interventions. It is therefore necessary to try to establish a dialogue with the potentially financing donors on this issue. It is not meaningful to be willing to spend funds on implementation of interventions, which are not sufficiently well prepared to have reasonable chances of leading to results and impact. It is, in this perspective also necessary that the AGR staff is prepared for and qualified to organize and manage this type of preparatory consultancy work.

Finally, the typology suggested for the future could provide a basis for reducing the "grey areas" of overlapping activities between AGR and other UNIDO Branches. The evaluation documentation analyzed in Chapter 5, often implies a need for clear lines of cooperation between AGR and other branches. Such cooperation does, of course, exist already but there are "grey areas", which should be reduced, where possible. For the international competitiveness interventions cooperation with the Trade Capacity Building Branch and the Environment and Energy Branch is natural (and is taking place already). It could be possible in the process of strengthening the profile of this general intervention type to establish a more clear division of work and responsibilities with these two branches (e.g. leaving projects in urbanized countries to TCB?). Similarly, the domestic value chain interventions are closely related to the interventions of the Private Sector Development Branch and it would seem possible to establish more clear relations also between this branch and AGR (e.g. with closer cooperation on the approaches and issues related to the private sector development aspects of agro-industry interventions). Also, cooperation with other UN agencies could be reviewed in the process. This will be particularly important, if the agro machinery or other intervention types will in the future include focus on the implications of agro-processing on the natural resources used for the primary production, agricultural, forestry and fisheries.

# VII

### **Conclusions and Recommendations**

### 7.1 Summary of findings

The AGR intervention strategy, as expressed by the actual interventions in the Review Sample has basically performed well in the past though impact i.e. the extent to which the interventions have contributed to poverty reduction, are not clearly revealed in the evaluation documentation. This can be concluded from the analyses in Chapters 3 to 5 above of the evaluated interventions in the Review Sample, constituting a representative sub-set of the "present" (i.e. ongoing or recently terminated) AGR intervention portfolio. The analyses point towards possibilities for improvements, particularly with respect to impact, also in the light of changing opportunities and challenges for agro-industrial development in the developing countries, discussed in Chapter 6.

In terms of the five DAC criteria, analyzed in Chapter 3, performance is particularly high in relation to the relevance of the interventions. The evaluation documentation generally judges the interventions to be very relevant in relation to government plans, policies and programs, to the needs of the country and for contributing to poverty reduction. Also, effectiveness is rated relatively high, but efficiency is generally mentioned as difficult to assess. High quality of the inputs (including from national as well as international consultants) is the major reason for high scores on effectiveness, whereas low scores on efficiency, when assessed, are due to lack of funding for parts of the planned project, weak management and not fully qualified, but expensive international consultants. Sustainability scores somewhat better than efficiency. A main factor in this is involvement of all the key stakeholder groups. Sustainability is clearly judged much better in cases, where all key stakeholder groups are committed to the project, involved in implementation and take ownership and have been involved also at the preparation, planning and formulation phases of the project.

A major concern relates to impact in terms of poverty reduction of the interventions. There is in many cases in the evaluation documentation little information and assessment of this fifth DAC evaluation criterion. Impact is also

notoriously difficult to assess, particularly if the evaluations are undertaken too early, e.g. right at the end of the project. A special ex-post impact evaluation of the project is most often needed to really capture impact in the ultimate sense of poverty reduction.

As shown in Chapter 4, some improvements could, however, be made in this connection. A more clear and detailed perception of the assumed "theory of change", which lies behind the project and a close follow-up during implementation could contribute to sharpen the focus on the ultimate goal as well as improving the basis for the evaluative assessments of the extent to which impact is actually achieved. By using of the LFA tool more comprehensively, indicators at the different steps of the assumed "cause-effect chain" can be identified and so can key assumptions along the chain. In Chapter 4, seven "typical" AGR interventions are identified and performance of the interventions in the Review Sample is assessed in terms of the validity or non-validity of key assumptions for each of these types. These analyses of the interventions logics assess the scope for each type to achieve impact in terms of poverty reduction and point towards possible improvements of the designs in this respect, see further below

The summary analyses in Chapter 5 of findings from past experience in relation to the design and implementation processes, i.e. project cycle management, reveal further scope for improvements. It should in this connection, however, be emphasized that these findings in most cases refer to all the components of a programme, i.e. not specifically to AGR components. It is clearly very important that sufficient time and resources are allocated for the context analyses, identification and formulation phases of the process. Careful context analysis is essential for designing objectives of the interventions. Involvement of all key stakeholder groups (including not only beneficiary groups, but also decentralized government structures and the potentially financing donors) already from this phase is also of utmost importance. This involvement increases scope for realizing synergy effects and for securing adequate funding. This preparatory work should include all the three stakeholder levels, i.e. micro-, meso- and macro-levels and the resulting design should reflect this involvement. More comprehensive use of the LFA tool, as discussed above in Chapter 4 could also contribute to improve the process and hence results in terms of comprehensive project documents. Lack of M&E systems and follow-up procedures in the design documents are also in many cases judged as main issues for effective implementation and management. Follow-up and use of past experience is particularly emphasized with respect to pilot-activities, the results of which are often not recorded, analyzed and replicated and also adjustments of design during implementation to adapt to changing contexts are emphasized.

Decentralized decision-making, effective use of Steering Committees and effective involvement of the UNIDO UR in the overall management structure are revealed as key areas for management improvements, which could lead to more and better results.

Chapter 6 focuses on utilizing lessons from past experience in a forward looking perspective. In assessing the scope for increasing impact through a revised AGR intervention strategy the chapter is taking into account some key contextual changes and is outlining also some of the AGR operational implications for achieving this. With agricultural development high on the agenda there is need also for increasing support to agro-industrial development, in accordance the mandate of the UNIDO Agro-business Development Branch, AGR. This is an opportunity for AGR, but also major challenges are to be faced. The expected climate changes, increased general environmental concern and increasing pressure on available natural resources will increase world poverty, putting increased emphasis on measures towards reducing world poverty. Revision of the AGR in this context needs to focus on scope for increasing the contribution to poverty reduction by strengthening design and implementation of its interventions. This is a process (rather than a once and for all decision) for which the past experience can be a useful input.

### Recommendation:

It is thus recommended that PTC/AGR Branch in the ongoing revision of the intervention strategy in that process considers the recommendations below concerning the intervention typology, further development of key intervention types, improved project cycle management as well as organization and financing

### 7.2 The intervention typology

In the *typology* applied in Chapter 4 and shown in Annex C one dimension concerns what is expected achieved in terms of technology transfer and of the resulting improved technology in the cooperating country. For the "international competitiveness focus", the interventions are intended to ensure that the resulting productive capacity has a standard, which makes the concerned industry competitive at the international level, i.e. makes the industry able to export the produced goods, living up to e.g. EU standards and be able also to compete with imports of same or similar products. For the "rural development focus" interventions the technology up-grading is not intended to reach that level and markets perceived are therefore domestic national markets or even local markets. The other dimension is basically a (sub-) sector dimension distinguishing the different technical expertise types required.

### Recommendation:

It is recommended that PTC/AGR Branch:

- Adopts the typology identified above and develops generic LFA structures for each type of intervention with specific attention to developing indicators, means of verification and assumptions related particularly to the steps from outputs to outcome and from outcome (to impact, i.e. to contributions to poverty reduction.
- Collects information and undertakes analyses, which makes it possible to assess and compare direct and indirect employment creation and direct and indirect farm income creation in the different agro-industry subsectors.
- Include in the above analyses the raw material linkages and the related natural resource management implications of increased raw material production.

### 7.3 Development of intervention types

The international competitiveness focus is clearly very relevant for food as well as for non-food processing interventions. Both types of processing sub-sectors are important for direct as well as indirect employment and income generation and the food processing interventions are in addition also important for national food security. These categories should therefore be maintained, but taking scope for improvements into consideration:

Recommendation:

It is recommended that:

- The food processing as well as the non-food processing interventions are maintained but that attention is given to the possibilities for developing other sub-sectors with large potentials for value added gains over the whole (global) value chain
- Demand and marketing analyses (international and domestic) are included in all value chain analyses
- Food processing value chain analyses shall in particular include the postharvest linkages from agricultural (and forestry-, fisheries-) production (harvesting, handling, transport and storage) and natural resource management into consideration
- Livelihood rehabilitation interventions shall only aim at establishing productive capacity to international competitiveness standards, where the pre-crisis sub-sector(s) were internationally competitive.

Interventions with the rural development focus also comprise food and non-food processing interventions as well as the agro machinery and the livelihood type interventions. These interventions have considerable scope for contributing to increasing rural (farm and non-farm) employment and income through supporting increases in agricultural production. These types should therefore play a larger role in the future AGR intervention portfolio. The present portfolio contains seemingly few interventions of the food processing type and the agro machinery type evaluated also point towards a need to try to change this situation. The livelihood interventions with the rural focus by "restoring livelihood" in crisis-affected areas are similarly having rather direct employment and income effects and they should be maintained (but further developed) as an important category in the future.

### Recommendation:

It is recommended that:

- Efforts are made to include more food processing interventions in the PTC/AGR portfolio, which add value to food products from agricultural (and forestry-, fisheries-) production over the full domestic value chains and which contribute to basic food security needs
- Similar efforts are made to identify the most relevant agro machinery interventions, which are required to increase agricultural production from smallholder farmers with sufficient potential and resources for increasing their production, taking natural resource management and marketing into consideration
- The bamboo interventions, comprising the present non-food processing type, showing good prospects for impact, shall be maintained and expanded, where possible, to include other forestry products
- The livelihood interventions are also to be maintained but further developed (possible into several prototypes) to secure needed complementarities between the emergency and the sustainable development perspectives, including natural resource management perspectives

### 7.4 Design and implementation

Past experience on project cycle management point towards three key areas for improvements: a) More time and resources devoted to context analyses, including the institutional context and key stakeholder groups at the three levels, b) involvement of all the key stakeholder groups (including decentralized government structures and potentially financing donors) in the preparatory as well as in the design and implementation activities and c) more attention paid to the

design of project organizational and management structure and to decentralized implementation.

Recommendation:

It is recommended that:

- More time and resources are allocated for context analytical work to be used for strengthening objectives and consequent project design
- All key stakeholder groups at the micro- meso- and macro-levels are being involved throughout the preparation, design and implementation (project cycle) process for strengthening project design and implementation
- The project organization and management (decision-making) structures needed for effective implementation, including decentralized management, shall be thoroughly analyzed and described in the project document

### 7.5 Organization and financing

The AGR staff is presently overloaded with work and opportunities and challenges lying ahead point towards a larger, not a smaller workload. Also, a considerable amount of the available time is presently spent on project management, related not only to the technical aspects, but also to many administrative aspects. The many very small projects are one reason for this situation, but the management burden could also be lifted from the technical staff, if management was concentrated in a few positions, which were given administrative assistance and which would also be responsible for "marketing" AGR. The rationalization and streamlining of interventions, suggested above, could also imply some re-organization measures as they imply some staff positions with types of work and management responsibilities requiring social, economic and institutional rather than specific technical expertise. With respect to financing the key issue is to secure sufficient funding for the preparatory work, including value chain analyses, required for improved identification, design and follow-up activities.

Recommendation:

It is recommended that:

• The predominantly technical expertise of the present AGR staff is supplemented with some social/economic/institutional expertise to broaden the expertise available in AGR for institutional analyses in relation to e.g. value chain analyses, demand and marketing analyses and

economic, ecological and social aspects of natural resource management analyses

- AGR considers a matrix organization with technical responsibilities divided according to the required technical competencies for the different subsector type of interventions and with institutional and managerial expertise divided according to the two main categories, the international competitiveness (global value chain) category and the rural development focus (domestic value chain) category
- The administrative burden on the technical staff related to project management is reduced by concentrating overall management responsibilities in a few project management positions, to be supported with administrative personnel and also being responsible for "selling" the services of AGR
- Efforts are made to convince financing partners that the preparatory work is essential for the funds used for implementation to have the intended impact
- Considerations on a revised AGR strategy are taken as an opportunity to consider how the "grey areas" between the mandates or practical operations of the AGR and other UNIDO branches may be reduced and synergies from cooperation be realized.
- Similar considerations are undertaken in relation to other UN agencies, such as FAO, UNEP, UNDP etc.

# VIII

### **Lessons Learned**

Some lessons have been learned, which could be useful for possible future studies of a similar nature, e.g. on evaluations of intervention strategies of other branches.

- A thematic evaluation can give valuable inputs to a strategy review but cannot in itself provide a complete basis for decisions concerning possible strategic changes and possibly important organizational and financial implications.
- Analyses of branch organization, staffing and finance require that basic information, such as sources and uses of funds, working and decision-making procedures and responsibilities and staff expertise (e.g. CVs) is readily available for the evaluator.
- Basing a thematic evaluation on previously undertaken evaluation studies limits the scope for extracting relevant past experience from the sample interventions. The reason is that evidence needed to analyze the "theories of change" behind the interventions may not – or not to a sufficient degree – be found in the evaluation documentation, which is based on evaluation fieldwork undertaken in a different perspective.
- An alternative method would be to start from a given portfolio of interventions, which are typical for the branch in question, then construct the assumed "theories of change" and then undertake the fieldwork of the interventions in an Evaluation Sample, selected representatively from the given intervention portfolio of the branch.
- The Consultant will in any case need to be supported by a fulltime research assistant attached to her/him throughout the study period as well as by a UNIDO staff administrative assistant.

### **Annex A: Terms of Reference**



## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

**Terms of Reference** 

### Thematic Evaluation of UNIDO Agribusiness/Agro-industry development interventions

September 2009

### I. Background and overview

UNIDO Agri-Business Development Interventions

The agricultural sector can play an important role in reducing poverty as some 2.5 billion people in developing countries, and in particular in Least Developed Countries (LDCs), depends on agriculture for their livelihoods. Evidence points to the critical role of the industrial processing of agricultural produce in developing countries to provide their fast-growing populations with sustainable livelihoods. The UNIDO Agri-Business Development Branch (PTC/AGR) is responsible for providing specialized services to address the specific needs of UNIDO Member States in this context.

The key functions<sup>5</sup> of the Branch include:

- Assist developing countries to improve their food processing industries to reduce economic losses and improve food security.
- Support developing countries to develop their textile and leather-based industries as a source of increased international competitiveness and domestic employment generation, while reducing the environmental risks posed by these industries.
- Promote rural industries to support the agricultural sector and meet national requirements for tools and equipment.
- Undertake various global forum activities, including expert group meetings in related fields and the publication of specialized training manuals, guides and electronic media.

The current portfolio of the Branch is around USD 82 million, of which 62% has been spent or committed, as shown in the table 1. The portfolio is likely to increase with the estimated value of the pipeline projects of more than USD 173 million. The average project size has also become larger for the last few years. The average size of closed projects is around USD 160,000, whereas the size of the ongoing projects is <u>four</u> times larger amounting to USD 690,000 and of pipeline projects nearly 20 times larger, at around USD 3.2 million.

Projects	Allotment (USD)	Expenditure (USD)	No. of projects	Average project size
Completed projects (between 1996-2008)	51,451,393	50,067,505	320	160,786
Ongoing projects (starting from 2003)	81,856,289	51,114,317	119	687,868
Pipeline projects (expected to start from 2002 onwards)	173,735,544		55	3,158,828
TOTAL	307,043,226	101,181,822	494	621,545

#### Table 1. UNIDO Agribusiness development projects

Source: Infobase as of July 2009.

<sup>&</sup>lt;sup>5</sup> Source: The Director-General Bulletin: UNIDO Secretariat Structure, February 2008

The Branch consists of three units: Food Processing Unit, Textiles and Leather Unit and Agro-Industry Support Unit. The allotment, expenditure and project size of each unit are presented in table 2. So far the Agro-industry Support Unit has mobilized the largest pool of funding within the Branch (USD 55 million) and also has had the largest average project size of USD 520,000, doubling the size of the other two units. The data of pipeline projects indicate an increased project size of all the three units.

Unit	Allotment (USD)	Expenditure (USD)	No. of projects	Average project size		
Actual (Completed and Ongo	ing projects)					
Food Processing Unit	40,717,841	32,633,807	188	216,584		
Textile and Leather Unit	37,436,974	33,520,631	145	258,186		
Agro-industry Support Unit	55,152,867	35,027,384	106	520,310		
Expected (Pipeline projects)						
Food Processing Unit	31,093,965	-	17	1,829,057		
Textile and Leather Unit*	83,488,928	-	16	5,218,058		
Agro-industry Support Unit	59,152,651	-	22	2,688,757		

Table 2. UNIDO Agribusiness Development Projects by Unit

Source: Infobase as of July 2009.

Note: \*) One project alone has an estimated budget of USD 56 million.

### II. Objectives of the evaluation and key issues

The purpose of this thematic evaluation is to assess the past and potential leverage of UNIDO in agribusiness development through an analysis (synthesis) of the project portfolio and of the overall performance of recently evaluated projects with special focus on the projects of the Food Processing Unit (FPU). The evaluation will also review the Branch's staff capacity and budgetary allocations against its strategy, mandate and objectives. The evaluation is a forward looking exercise as it will provide analyses and recommendations to guide the future direction of the Branch's interventions, taking into account the work of other development agencies active in this field and needs and priorities of developing countries.

The evaluation will also examine the existing and possible linkages with other UNIDO's Technical Cooperation (TC) branches and units.

The key evaluation issues are:

### Overall performance and results of the Branch's projects

- How well have the evaluated projects performed in terms of relevance, effectiveness, efficiency, impact and sustainability?
- What have been key results of other large scale projects, not yet subject to an evaluation?
- What have been the qualitative and quantitative results (in terms of outputs, outcomes and impacts, if any) of the projects? More specifically,

- What changes (if any) have the interventions brought in terms of agroindustry development, income, employment, productivity and poverty reduction. Apart from the economic dimension of poverty, what were the other effects on the target groups in terms of human, political, social, gender and environmental objectives?
- What are the demonstration effects of the pilot interventions? Has the model been replicated by the government, other enterprises or development agencies?
- To what extent have the desired benefits continued after the completion of the projects?
- What are the key factors that determine high or low performance of the projects and long term effects?
- Which best practices can be identified?

### Design and implementation of the Branch's projects

- What are the typical intervention logic(s) (or theories of change) of UNIDO agri-business development projects? How can they be described?
- What is the quality of the intervention logics (through analysis of the log frames)?
- If there are log frames in the project documents, have the projects been implemented accordingly? Were the project log frames used to monitor and review the projects' progress during implementation?
- What are the strengths and weakness of the project design, implementation and management?
- Have lessons and feedback been adequately integrated into project design and implementation?

### Linkages with other UNIDO TC branches' interventions and with other UN agencies

- What kind of cooperation has occurred between projects of the Branch and those of other UNIDO TC branches? What have been the main benefits and drawbacks of the cooperation (such as cost savings in implementing UNIDO services and coordinating with stakeholders; increased impact by combining several interventions to support the same target group; improved effectiveness by providing services simultaneously at macro, meso and micro levels, on the enabling environment, support institutions and enterprises; slower implementation speed by aligning with activities by other branches; less efficient as coordination requires more time and efforts; and so on)?
- What kind of cooperation has been developed with other UN agencies, such as FAO and WHO?
- What are potential areas for cooperation between the Branch and other UNIDO Technical Corporation (TC) branches and other development agencies active in agro-industry development?

### Staff capacity and budgetary allocations of the Branch

- To what extent does the Branch have adequate staff *capacity* and *competence* to deliver the services it is supposed to provide and implement its current portfolio?
- How adequately have the administrative budgets and programmable funds (*seed money*) been allocated to the Branch to implement its services?
- How appropriate is the Branch organizational set-up for the effective implementation of its interventions?
- What are the internal monitoring and decision making systems to ensure that the Branch's work programme is effectively implemented?

### III. Evaluation methodology

The evaluation will be managed by the UNIDO Evaluation Group (OSL/EVA) and carried out by one international consultant. OSL/EVA will provide additional support as needed. The evaluation will encompass the following steps:

### 1. Desk review, UNIDO staff interviews and analysis

A desk review will be carried out to extract information on the performance and results of the evaluated projects; on the strengths and weaknesses of project design, implementation and management; and on information to describe typical intervention logics or 'theories of change' of UNIDO Agri-Business Development projects and compare them with those of other organizations involved in this area, such as FAO. This step will include:

- Systematic review and analysis of UNIDO evaluation reports that contain food processing, textile and leather, and agro-industry support projects such as the IP evaluations/reviews in Burkina Faso, Cameroon, Ethiopia, Ghana, Indonesia, Mali, Uganda, Syria, Sierra Leone and etc; and the project evaluations/reviews in Bangladesh, Ethiopia, Eritrea, Iraq, Mali, Mozambique, Vietnam<sup>6</sup>.... (a list of projects that have been evaluated or will be soon evaluated: to be included later)
- Review of UNIDO project documentation such as project documents, completion reports, progress reports, technical reports from subcontractors and consultants etc.
- Review UNIDO documents and publications on agro-industry development including sectoral strategies, concept papers, work plans, project and programme documents, reports for and of Global Forum functions, progress and final reports and existing evaluation reports.

<sup>&</sup>lt;sup>6</sup> Iraq: Rehabilitation of the date palm sector in Iraq, forthcoming in 2009, and Pilot project for rehabilitation of the dairy sector in Iraq, forthcoming in 2009; Mali: Développement de l'entreprenariat féminin dans le secteur agro-alimentaire en Mali in 2000; Mozambique: Enhancing the Capacities of the Mozambican Food Safety and Quality Assurance System for Trade in Mozambique in 2008; and Vietnam: Entrepreneurship development programme for women in food processing in central Viet Nam (phase II) in 2007.

- Review of recent literature and publications on agro-industry development and strategies and programmes of other development cooperation agencies active in this field.
- Discussions with relevant UNIDO managers and staff at the headquarters on the evaluation issues and on possible ways forward.
- Review staff capacity (including in-house competence) and allocations of administrative budgets and programmable funds to the Agri-Business Development Branch.
- Based on the above key evaluation issues, the evaluation consultant will develop a standardized framework for assessing each project. This will ensure consistency when reviewing projects and help extract comparable information.

### 2. Development of UNIDO Agri-Business Development intervention logics

Based on the desk review and discussions with project managers, the evaluation consultant will construct the *intervention logics* or the *theories of change* of typical UNIDO food processing, textile and leather, and agro-industry support interventions. These theories will map out how inputs and activities should have logically led to outputs, outcomes and impacts. This will enable the evaluation to conduct analysis along the causal chain from inputs to impacts, to build the story around these interventions, and to determine if these interventions have worked as planned.

The theories of change will be validated through discussions with the staff members of the Branch and the Evaluation Group. *The close consultation between the consultant and the Branch in this step will be useful for the Branch to validate its own strategy.* 

### 3. Reporting

The main deliverable of the evaluation exercise is the final report of around 35-40 pages with a 3-page executive summary in English. The report should cover the key evaluation issues outlined in section II. It should describe the methodology used and highlight any methodological limitations, identify key concerns and present evidence-based findings, conclusions, recommendations and lessons learned.

The draft report will be shared with UNIDO staff for initial review and consultation. They may provide feedback on any error or fact and may highlight the significance of such errors in conclusions. The evaluator will also seek agreement on the findings and recommendations. He/She will take comments into consideration when preparing the final version of the report.

**Quality assessment of the evaluation report.** All UNIDO evaluation reports are subject to quality assessments by the UNIDO Evaluation Group. The Final Evaluation Report will be submitted to UNIDO's Executive Board.

The Evaluation Management Response will outline the evaluation recommendations. The Branch and Unit Management and the concerned project managers will be responsible to provide comments (of acceptance or non-acceptance of the evaluation recommendations), actions for follow-up and deadlines in the document. This document, which will be posted on the UNIDO intranet, allows tracking of the follow-up of each recommendation and ensure learning across UNIDO. The evaluation report will be posted on the UNIDO internet website: http://www.unido.org/evaluation.

#### IV. Evaluation team and timing

The evaluation will be carried out by one international consultant with expertise in evaluation and agro-industry development in developing countries. The tasks of the international consultant are specified in the job description attached to these terms of reference in Annex 1.

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project or theme under evaluation. This principle is underlined in the UNIDO Evaluation Policy: *"For independent evaluations, the members of an evaluation team must not have been directly responsible for the policy-setting, design or overall management of the subject of evaluation (nor expect to be so in the near future)"*.

### Timing

The evaluation is scheduled to take place as soon as practically possible within 15<sup>th</sup> September to 30<sup>th</sup> November 2009.

(Annex I)

### JOB DESCRIPTION Post number 127347 PS FE20-RB-8211110-CC1-2009

- Post title: International consultant on evaluation and agro-industry development
- **Duration:** 63 days over a period of three months
- Starting date: ASAP
- **Duty station:** Home based and travel to Vienna (3 missions)
- **Duties:** The consultant will carry out the thematic evaluation according to the evaluation Terms of Reference. S/he will be responsible for preparing the thematic evaluation report, according to the standards of the UNIDO Evaluation Group. S/he will perform the following tasks:

Main duties	Duration/ Location	Deliverables		
1. Review UNIDO documents/publications on agro- industry development (including selected presentations made during the last two years), work sectoral		1. Typical intervention logics of different types of UNIDO agro-industrial development projects / programmes		
strategies, concept papers, work plans, project and programme documents, reports of Global Forum functions, progress and final reports and existing evaluation reports	11 days Home	2. Standardized framework for assessing projects included in the thematic evaluation		
2. Review recent literature and publications on agro-industry development and selected strategies	base	3. Identified evaluation issues. Identified information gaps		
and programmes of other development cooperation agencies active in this field		4. Mapping of agro-industry programmes and instruments used		
3. Development of a detailed		5. Report of desk review		
evaluation work plan		6. Evaluation work plan		
4. Briefing of the UNIDO Evaluation Group, interviews of Agri-Business Development Branch staff and other HQ staff	7 days (incl. travel) Vienna	7. Interview notes of key issues discussed, revised intervention logics and project assessment		
5. Review of staff capacity (including in-house competence) and budgetary resources of PTC/AGR.		framework 8. Analysis of human resources and budgetary		

Main duties	Duration/ Location	Deliverables
		allocations of PTC/AGR
6. Prepare performance profile of each project already evaluated, based on the standardized assessment framework	16 days Home base	9. Performance profile of each evaluated project with comparable information
7. Draft thematic evaluation report, taking into account all above mentioned analyses	20 days Home base	10. Draft report
<ul> <li>8. Present overall findings and recommendations of the thematic evaluation to stakeholders at UNIDO HQ</li> <li>9. Discuss validated intervention logics with stakeholders at UNIDO HQ</li> </ul>	3 days (incl. travel) Vienna	<ol> <li>Presentation slides</li> <li>Validated intervention logics</li> </ol>
10. Revise and finalize the draft evaluation report based on comments from UNIDO Evaluation Group and stakeholders	4 days Home base	13. Final thematic evaluation report
11. Participate in the strategic planning workshop of PTC/AGR as a resource person	2 days (incl. travel) Vienna	14. Inputs to the workshop as agreed with the two branches (PTC/AGR and OSL/EVA).
TOTAL	63 days	

### **Qualifications:**

- ✓ Advanced degree in engineering, economics, business administration, development studies or related areas;
- Extensive evaluation experience in of the field of agribusiness or agroindustrial development, particularly in developing countries;
- ✓ Excellent analytical and writing skill;
- ✓ Experience in human resource and budgetary allocation assessment, and experience with the UN system (as staff member or consultant) desirable.

**Language:** English (French a valuable asset)

### Absence of Conflict of Interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project or theme under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Evaluation Group.

### **Annex B: List of Review Sample Interventions**

COUNTRY	PROJECT NO.	TITLE	LENGTH	US\$ Mio.	TYPE	PROJECT NAME
Afghanistan	TF/AFG/04/002	Assistance in reducing the humanitarian deficits of war-affected rural communities through increased agricultural productivity and the promotion of auxiliary income-generating activities	2 years from 2004	0.9	PD	Afghanistan - Livelihood
Bangladesh	EE/BGD/05/A02	Bangladesh Quality Support Programme – Supporting Quality Infrastructure: Textile Component	4 years from 2005	10	PD	Bangladesh - Textile
	EE/BGD/05/B02	Bangladesh Quality Support Programme – Supporting Quality Infrastructure: Fisheries Component	4 years from 2005	1	PD	Bangladesh - Fisheries
Burkina Faso	US/BKF/01/189	Développement de la transformation industrielle et artisanale du Coton. Lutte contre la pauvreté par la création d'emplois.	3 years from 2002	0.8	IE 05	Burkina Faso - Textile
	YA/BKF/05/001 YA/BKF/07/001	Appui à l'initiative privée et renforcement des capacités des entreprises agro-industrielles. Sous-Componsantes A.1 : Lait	3 years from 2005	0.5	IP 09	Burkina Faso - Dairy
	XP/BKF/07/002 US/BKF/04/099 XP/BKF/04/050	Appui à l'initiative privée et renforcement des capacités des entreprises agro-industrielles. Sous-Componsantes A.2 : Fruits et Légumes	3 years from 2005	0.2	IP 09	Burkina Faso - Food Safety
	YA/BKF/04/440	Appui à l'initiative privée et renforcement des capacités des entreprises agro-industrielles. Sous-Componsantes A.3 : Karité	3 years from 2005	0.2	IP 09	Burkina Faso - Food Safety
		Appui à l'initiative privée et renforcement des capacités des entreprises agro-industrielles. Sous-Componsantes 0.4 : Qualité et Sécurité des Produits Alimentaires	2 years from 2005	0.3	IP 09	Burkina Faso - Food Safety
Cameroun	US/CMR/03/073	Programme Intégré pour une Nouvelle Politique Industrielle au Cameroun : Composante Industriel agro-alimentair : Renforcement des Capacités Productives avec un Accent particulier sur l'agro-alimentaire.	4 years from 2003	0.15	IP 10	Cameroun - Dairy
	XA/CMR/03/608	Programme Intégré pour une Nouvelle Politique Industrielle au Cameroun : Composante Industriel agro-alimentair : Food- Processing MSME	4 years from 2003	0.05	IP 10	Cameroun - Spice Drying
Egypt	US/EGY/02/140	Assistance to the small-scale leather products in Egypt (Phase II)	2.5 years from 2003	0.5	CSF 05	Egypt - Leather
Eritrea	DG/ERI/01/012	IP for Sustainable and Competitive Industrial Development: Develop the Agriculture and Tools Industry	3 years from 2003	0.2	IP 05	Eritrea - Agro Machinery
	US/ERI/05/141	Rehabilitation of the Leather based Industry	3 years from 2000	0.5	IP 05	Eritrea - Leather
Ethiopia	TE/ETH/08/008	Technical Assistance Project for the Up-Grading of the Ethiopian Leather and Leather Products Industry	2 years from 2009	3.8	IP 09	Ethiopia+- Leather
	TE/ETH/04/001	IP Ethiopia Phase II: Assistance to the Leather and Leather Products Technology Institute (LLPTI) for the Development of its Managerial and Operative Capacities	1 year from 2005	2	IP 09 + IE	Ethiopia - Leather

	FC/RAF/05/010	Market based Development with Bamboo in Eastern Africa – Employment and Income Generation for poverty Alleviation	4 years from 2005	2.5	IP 09	Ethiopia - Bamboo
Ghana	US/GHA/04/090	IP for Poverty Reduction and Competitiveness: Sub-Component 3.4 - Sectoral Support to the garment/textile sector	3 years from 2004	0.33	IP 08	Ghana - Textile
	FC/RAF/03/065	IP for Poverty Reduction and Competitiveness: Sub-Component 3.1 - Industrial Development of Sorghum Malt and its Utilization in the Food Industries	4 years from 2004	1.3	IP 08	Ghana - Sorghum
	YA/GHA/04/433 XA/GHA/01/633 UB/GHA/00/015	IP for Poverty Reduction and Competitiveness: Sub-Component 3.3 – Sectoral Support for the wood/bamboo sector		0.2	IP 08	Ghana - Bamboo
	US/GHA/04/091	IP for Poverty Reduction and Competitiveness: Sub-Component 4.1 – Food Processing	4 years from 2004	0.05	IP 08	Ghana - Agro Machinery
Uganda	TF/UGA/05/003	Agro-processing and private sector development: SKIPI Component	2 years from 2005	0.6	IP 09 + IE	Uganda - SKIPI
	TF/UGA/04/A01	Agro-processing and private sector development: TEXDA Component	2 years from 2005	0.5	IP 09	Uganda - Textile
	TF/UGA/04/001	IP for Agro-processing and private sector development: Food Component	2 years from 2005	0.15	IP 09	Uganda - Food Safety
	US/UGA/99/141	IP for enhanced Competitiveness and Sustainability of Industrial Development in Uganda with particular Emphasis on Agro- Industries and Micro and Small-scale Enterprises: Sub- component 1.C – Leather Industry		0.6	IP 04	Uganda - Leather
India	DG/IND/97/160	Cane and Bamboo Technological Upgradation and Networking		1.6	IP 07	India - Bamboo
Indonesia	SF/INS/07/001	CSF Phase II 2005-2007: Ensuring Sustainability of Industrial Skill Development Centre for Smaller Communities in Tsunami/Earthquake affected Areas in Aceh	3 months from Oct 2006	0.09	CSF 09	Indonesia - Tsunami
	SF/INS/06/001 SF/INS/05/003 SF/INS/07/001	CSF Phase II 2005-2007: Maluku Province-Rural Development in Post Conflict Situation (Phase I + Phase II)	2 years from 2005	0.55	CSF 09	Indonesia - Malukku
Iraq	FB/IRQ/04/001	Promotion of cottage industries in rural and urban areas project	3 years from 2004	5	IE	Iraq - Cottage
	FB/IRQ/07/003	Rehabilitation of the Date Palm Sector in Iraq	18 months from 2006	3.1	PD	Iraq - Date Palm
	FB/IRQ/06/003	Rebuilding Food Safety and Food Processing Industry Capacity in Iraq	1 year from 2006	6.5	PD	Iraq - Food Safety
	FB/IRQ/04/003	Pilot project for the rehabilitation of the dairy sector in Iraq	6 months from 2004	3	PD	Iraq - Dairy
Kenya	SF/KEN/03/001 UE/KEN/04/087 US/RAF/00/014	IP: Leather Component	2 years from 2004	1.6	IP 09	Kenya - Leather
	US/KEN/03/013 YA/KEN/03/423 XA/KEN/03/614	IP: Fish Component	2 years from 2004	0.8	IP 09	Kenya+- Fisheries
	DP/KEN/03/006	IP: Apiculture Component	2 years from 2004	1.5	IP 09	Kenya - Apiculture
Lao	TF/LAO/06/002	Social and economic rehabilitation of former opium poppy- growing communities – alternative livelihood development	3 years from 2006	2.4	PD	Lao - Opium

Lebanon	FB/LEB/09/002	Support for livelihoods and economic recovery in war-affected areas of Lebanon	2 years form 2007	3.6	IE 08 + 09	Lebanon - Livelihood
Madagascar	UE/MAG/04/081 US/MAG/03/081 US/MAG/04/081 US/MAG/03/A10 US/MAG/03/010 US/MAG/02/080	IP d'appui aux activités generatrices de revenues et d'emplois pour la réduction de la pauvreté à Madagascar: Sub-component 1.2 : Promotion de la Filière de la Soie.		0.23	IP 04	Madagascar - Textile
Malawi	TF/MLW/05/001	Empowering poor rural Communities with Labour-saving Technologies for increased Labour Productivity, Food Production and Income Generation	2 years from 2005	1.2	PD	Malawi - Agro Machinery
Mali	US/MLI/04/097	Assistance to establish a Pilot Centre in Cotton Processing	3 years from 2004	0.08	IP 07	Mali - Textile
	XA/MLI/03/625 YA/MLI/03/437	Programme d'Appui à la Valorisation des Produits Agropastoraux et au Développement du Secteur Privé, Phase II (2004-2007). Composantes agro-alimentaires: Support to Food Industry	3 years from 2004	0.3	IP 07	Mali - Fruit Drying
	XP/MLI/04/036	Programme d'Appui à la Valorisation des Produits Agropastoraux et au Développement du Secteur Privé, Phase II (2004-2007). Composantes agro-alimentaires : Programme promotion and Fund Mobilization	3 years from 2004	0.03	IP 07	Mali - Fruit Drying
	US/MLI/04/082	Programme d'Appui à la Valorisation des Produits Agropastoraux et au Développement du Secteur Privé, Phase II (2004-2007). Composantes agro-alimentaires : Pilot Centres for Fruits/Vegetables Processing and Programme Coordination	3 years from 2004	0.2	IP 07	Mali - Fruit Drying
	XP/MLI/07/003 YA/MLI/07/001	Programme d'Appui à la Valorisation des Produits Agropastoraux et au Développement du Secteur Privé, Phase II (2004-2007). Composantes agro-alimentaires : Assistance to agro-processing pilot centres	3 years from 2004	0.07	IP 07	Mali - Fruit Drying
Morocco	UE/MOR/04/148	IP Component 4.A: Développement de l'entrepranariat feminine dans le secteur agro-industriel au Maroc	3 years from 2004	0.2	PD	Morocco - Olive Oil
	GF/MOR/09/001	Participatory Control of Desertification and Poverty Reduction in the Arid and Semi-Arid High Plateau Ecosystem of Eastern Morocco.	6 years from 2008	24	PD	Morocco - Desertification
Mozambique	US/MOZ/05/001	Enhancing the Capacities if the Mozambican Food Safety and Quality Assurance System for Trade	3 years from 2006	1.3	PD	Mozambique - Food Safety
RAF (Burkina Faso, Mali, Niger, Sénégal)	FC/RAF/04/088 FC/RAF/04/088 FC/RAF/04/088 FC/RAF/04/088	Hides and Skin Improvement Scheme in West Africa: Component 1/4 to Component 4/4	3 years from 2004	2.3	PD	West Africa - Hides & Skin
Sri Lanka	TF/SRL/06/005	Support for sustainable livelihood recovery among the conflict affected population in the North and East Regions through improved agricultural productivity and community-based entrepreneurship	1 year from 2006	1.8	PD	Sri Lanka - Livelihood
Sudan	TF/SUD/09/002	Recovery of Coastal livelihoods in the Red Sea State of Sudan. The Modernization of Artisanal Fisheries and Creation of new Market Opportunities	30 months from 2009	4.6	DP	Sudan - Fisheries
	FB/SUD/08/001	Community Livelihood and Rural Industry Support Programme (CLARIS) – Phase II –Blue Nile: Emergency Stage	6 months from July 2007	0.4	PD	Sudan - CLARIS
Timor Leste	XP/TMP/08/001 US/TMP/08/003	Establishment of a Bamboo Skills Development and Demonstration Centre in Timor-Leste (Phase II)	18 months from June 2008	0.2	PD	East Timor - Bamboo

### Annex C: The Review Sample Typology

Interventions:	<b>Rural Development Focus</b>	International Competitiveness Focus
Food	Kenya – Apiculture	Uganda – Food Safety
Processing	Ghana – Sorghum	Kenya – Fisheries
_	Cameroun – Dairy	Burkina Faso – Food Safety
	Cameroun – Spice Drying	Morocco – Olive Oil (PD)
	Burkina Faso – Dairy	Mozambique – Food Safety (PD)
	Mali – Fruit Drying	Sudan – Fisheries (PD)
		Bangladesh – Fisheries (PD)
Non-Food	Ethiopia – Bamboo	Uganda – Textile
Processing	India – Bamboo	Mali – Textile
_	Ghana – Bamboo	Burkina Faso – Textile
	East Timor – Bamboo (PD)	Madagascar – Textile
		Ghana – Textile
		Bangladesh – Textile (PD)
		Ethiopia – Leather
		Uganda – Leather
		Egypt – Leather
		Kenya – Leather
		Eritrea – Leather
		West Africa – Hides & Skin (PD)
Agro	Ghana – Agro	
Machinery	Eritrea – Agro	
	Malawi – Agro (PD)	
Livelihood	Iraq – Cottage	Lebanon – Livelihood (IE 08 + IE 09)
Interventions	Uganda – SKIPI	Iraq – Date Palm (PD)
	Indonesia – Malukku	Iraq – Dairy (PD)
	Indonesia – Tsunami	Iraq – Food Safety (PD)
	Lao – Opium (PD)	
	Sudan – CLARIS (PD)	
	Morocco – Desertification (PD)	
	Afghanistan – Livelihood (PD)	
	Sri Lanka – Livelihood (PD)	

### Annex D: Some References

Andersen, Henny (2008) What has UNIDO done to Reduce Poverty – Evidences from UNIDO Evaluations

Da Silver, Carlos A. et al. (2009) Agro-industries for Development, UK; UNIDO, FAO, IFAD.

Estrup, Jørgen (2009) Aid, Paris and the Private Sector: How to Square the Circle, DIIS working paper, DK

FAO (2009) Pathways to Success, Rome

Larsen, Kurt et al. (2009) Agribusiness and Innovation Systems in Africa, Washington D.C, World Bank

Sweehy, N.Mac (2008) Private Sector Development in Post-conflict Countries, UK

UNIDO (2009) PDS Newsletter 3: Boosting the Private Sector as an Engine of Growth and Poverty Reduction, Austria

UNIDO (2008) Director-General's Bulletin UNIDO Secretariat Structure 2008

Wiggins, Steve (2009) Can the Smallholder Model Deliver Poverty Reduction and Food Security for a Rapidly Growing Population in Africa?

World Bank (2008) World Development Report - Agriculture for Development, Washington DC