Independent UNIDO Evaluation


TANZANIA INDUSTRIAL UPGRADING AND MODERNIZATION PROGRAMME (TIUMP)

Project Nos: FB/URT/12/G04, YA/URT/12/C04; SAP ID: 102175
Independent UNIDO Evaluation


TANZANIA INDUSTRIAL UPGRADING AND MODERNIZATION PROGRAMME (TIUMP)

Project Nos: FB/URT/12/G04, YA/URT/12/C04
SAP ID: 102175
The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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

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

This document has not been formally edited.
Acknowledgement

The Evaluation Team wishes to thank all those who contributed to the preparation and realisation of the mission. These include UNIDO and relevant UN agencies’ officials, the Technical Assistance personnel, counterparts, project staff, the Permanent Secretary of the Ministry of Industry, Trade and Investment of the United Republic of Tanzania and the Project steering committee members, representatives of the private sector organisations, beneficiary enterprises and officials of international organisations and national agencies whose projects and interventions are complementary or have an impact on the UNIDO Tanzania Industrial Upgrading and Modernization Project (TIUMP). The report includes Evaluation Team’s findings, conclusions and recommendations expected to be informative to stakeholders and beneficiaries in respect of the results of the pilot project, the follow-up over remaining months of implementation and the roll out phase in Tanzania from June 2016
## Contents

ACRONYMS AND ABBREVIATIONS .................................................................................................................. V
GLOSSARY OF EVALUATION-RELATED TERMS ............................................................................................ VI
EXECUTIVE SUMMARY .............................................................................................................................. VIII

1. NATIONAL CONTEXT AND PROJECT BACKGROUND .............................................................................. 1
   1.1 TANZANIA SNAPSHOT .......................................................................................................................... 1
   1.2 TANZANIA INDUSTRIAL UPGRADING AND MODERNIZATION PROJECT’S (TIUMP) BACKGROUND .......... 2

2. OVERVIEW OF THE TIUMP .................................................................................................................... 4
   2.1 OBJECTIVES OF THE TIUMP ............................................................................................................... 4
   2.2 PROJECT HIGHLIGHT .......................................................................................................................... 5
   2.3 UPGRADING MODEL ............................................................................................................................ 6
   2.4 PROJECT SITES ................................................................................................................................... 7
   2.5 THE THEORY OF CHANGE OF THE TIUMP ....................................................................................... 8

3. EVALUATION OBJECTIVES, METHODOLOGY AND PROCESS ................................................................... 12
   3.1 EVALUATION OBJECTIVES ................................................................................................................ 12
   3.2 METHODOLOGY ................................................................................................................................... 12
   3.3 PHASING ................................................................................................................................................. 16

4. FINDINGS AND ASSESSMENT OF THE TIUMP ...................................................................................... 17
   4.1 RELEVANCE: NEEDS ANALYSIS AND OWNERSHIP ...................................................................... 17
   4.2 EFFICIENCY ......................................................................................................................................... 20
   4.3 EFFECTIVENESS ................................................................................................................................. 22
   4.4 IMPACT AND SUSTAINABILITY OF PROJECT OUTCOMES ............................................................... 27
   4.5 CROSS-CUTTING ISSUES ................................................................................................................... 31
   4.6 PROJECT MANAGEMENT AND 3C: COHERENCE, COORDINATION AND COMPLEMENTARITY ............ 32

5. CONCLUSIONS AND RECOMMENDATIONS ............................................................................................. 35
   5.1 CONCLUSIONS ..................................................................................................................................... 35
   5.2 RECOMMENDATIONS .......................................................................................................................... 37

ANNEX 1. TERMS OF REFERENCE (SUMMARY) ............................................................................................ 41
ANNEX 2. LIST OF INTERVIEWEES ................................................................................................................ 47
ANNEX 3. DOCUMENTS REVIEWED ............................................................................................................. 52
ANNEX 4. LIST OF UNIDO SUPPORTED PROJECTS IN TANZANIA .......................................................... 54
ANNEX 5. EXAMPLE OF MECHANISM OF IUMP FINANCING ........................................................................ 56
# Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS</td>
<td>Business Development Service</td>
</tr>
<tr>
<td>BRN</td>
<td>Big Result Now programme</td>
</tr>
<tr>
<td>CDA</td>
<td>Cluster Development Agent</td>
</tr>
<tr>
<td>CTA</td>
<td>Chief Technical Advisor</td>
</tr>
<tr>
<td>CEZOSOPA</td>
<td>Central Zone Sunflower Oilseeds Processors Association</td>
</tr>
<tr>
<td>COSTECH</td>
<td>Tanzania Commission for Science And Technology</td>
</tr>
<tr>
<td>CRDB</td>
<td>Cooperative Rural Development Bank Plc</td>
</tr>
<tr>
<td>CTI</td>
<td>Confederation of Tanzania Industry</td>
</tr>
<tr>
<td>DSOC</td>
<td>Dodoma Sunflower Oil Cluster</td>
</tr>
<tr>
<td>EDF</td>
<td>European Development Fund</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>IUMP</td>
<td>Industrial Upgrading and Modernization Project</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>MITI</td>
<td>Ministry of Industry, Trade and Investment</td>
</tr>
<tr>
<td>MAFSC</td>
<td>Ministry of Agriculture Food Security and Cooperatives</td>
</tr>
<tr>
<td>MLDF</td>
<td>Ministry of Livestock Development and Fisheries</td>
</tr>
<tr>
<td>MSME</td>
<td>Micro and Small Enterprises</td>
</tr>
<tr>
<td>NMB</td>
<td>National Micro Finance Bank</td>
</tr>
<tr>
<td>PASS</td>
<td>Private Agriculture Sector Support Trust</td>
</tr>
<tr>
<td>PLC</td>
<td>Public Limited Liability Company</td>
</tr>
<tr>
<td>RAS</td>
<td>Regional Administrative Secretary</td>
</tr>
<tr>
<td>RC</td>
<td>Regional Commissioners Office</td>
</tr>
<tr>
<td>RLDC</td>
<td>Rural Livelihood Development Company</td>
</tr>
<tr>
<td>SECO</td>
<td>State Secretariat for Economic Affairs (Switzerland)</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>SIDO</td>
<td>Small Industries Development Organization</td>
</tr>
<tr>
<td>SITA</td>
<td>Supporting India Trade and Investments for Africa (ITC, DFID)</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>TBS</td>
<td>Tanzania Bureau of Standards</td>
</tr>
<tr>
<td>TIRDO</td>
<td>Tanzania Industrial Research and Development Organization</td>
</tr>
<tr>
<td>TEMDO</td>
<td>Tanzania Engineering and Manufacturing Development Organization</td>
</tr>
<tr>
<td>TCCIA</td>
<td>Tanzania Chamber of Commerce, Industry and Agriculture</td>
</tr>
<tr>
<td>TDL</td>
<td>Tan Dairies Limited</td>
</tr>
<tr>
<td>TEOSA</td>
<td>Tanzania Edible Oilseeds Actors Ltd</td>
</tr>
<tr>
<td>TFDA</td>
<td>Tanzania Food and Drug Authority</td>
</tr>
<tr>
<td>TIB</td>
<td>Tanzania Investment Bank</td>
</tr>
<tr>
<td>TIUMP</td>
<td>Tanzania Industrial Upgrading and Modernization Project</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TPSF</td>
<td>Tanzania Private sector Foundation</td>
</tr>
<tr>
<td>Tsh</td>
<td>Tanzania Shilling (1 USD = 2,000 Tsh)</td>
</tr>
<tr>
<td>UNDAP</td>
<td>United Nations Development Assistance Plan</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organisation</td>
</tr>
<tr>
<td>VETA</td>
<td>Vocational Education and Training Authority</td>
</tr>
<tr>
<td>UUT</td>
<td>Upgrading Unit Tanzania (TIUMP)</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>The extent to which the development intervention’s objectives were achieved, or are expected to be achieved, taking into account their relative importance.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>A measure of how economic resources/inputs (funds, expertise, time, etc.) are converted to results.</td>
</tr>
<tr>
<td>Impacts</td>
<td>Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.</td>
</tr>
<tr>
<td>Indicator</td>
<td>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.</td>
</tr>
<tr>
<td>Institutional Development impact</td>
<td>The extent to which an intervention improves or weakens the ability of a country or region to make more efficient, equitable, and sustainable use of its human, financial, and natural resources, for example through: (a) better definition, stability, transparency, enforceability and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Such impacts can include intended and unintended effects of an action.</td>
</tr>
<tr>
<td>Lessons learned</td>
<td>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</td>
</tr>
<tr>
<td>Log frame</td>
<td>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.</td>
</tr>
<tr>
<td>Outcome</td>
<td>The likely or achieved short-term and medium-term effects of an intervention’s outputs. Related terms: result, outputs, impacts, effect.</td>
</tr>
<tr>
<td>Outputs</td>
<td>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.</td>
</tr>
</tbody>
</table>
| Relevance               | The extent to which the objectives of a development intervention are consistent with beneficiaries’ requirements, country needs global priorities and partners’ and
<table>
<thead>
<tr>
<th>donors’ policies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.</td>
</tr>
<tr>
<td><strong>Results</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
</tr>
</tbody>
</table>
Executive Summary

Introduction

The purpose of this evaluation was to assess the relevance, effectiveness, efficiency and sustainability of the Tanzania Industrial Upgrading and Modernization Project (TIUMP) and provide recommendations for the roll-out phase of the project planned to be launched in June 2016. As indicated in the Terms of Reference, the evaluation covered a part of the implementation period of the pilot phase of the Project, from 2012 till the end of 2014. In view of the planned roll-out phase it was clear from the onset that this had to be a forward-looking review that seeks to identify the best practices and areas for improvement.

The evaluation has been conducted by the Independent International Evaluation Consultant and team leader, Mr. Pierre BIDE: Team Leader together with the National Evaluation Consultant Mr. Salome KISENGE.

This evaluation was originally started as a mid-term evaluation, but given the fact that the project implementation was approaching the end of the operations, this evaluation is considered as terminal evaluation as it covered almost all the project lifecycle.

The applied evaluation methodology consisted of a combination of the inter-related activities including document study, a briefing at UNIDO headquarters (HQ) in Vienna, and a series of meetings with a broad spectrum of key stakeholders and beneficiaries during the field missions in Tanzania. This review has been facilitated by: (i) the availability of baseline data for comparison purposes (i.e. turnover, employment, share of exports in sales, etc.) and; (ii) the information systems and internal monitoring mechanisms used by the UUT and the project’s stakeholders to track progress and assess the effectiveness and likely impact of the TIUMP. These have been invaluable for this evidence-based assessment.

The Project FB/URT/12/G04, YA/URT/12/C04 aimed to promote competitive industrial production and market access by private sector enterprises. It was included under component (2) of the UNIDO Country Programme of Technical Cooperation with the United Republic of Tanzania, which encompassed three components: (1) Industrial Policy and statistics support; (2) Investment promotion and enterprise support for enhanced competitiveness, and (3) Cleaner production and renewable energy for productive uses. The country programme was developed in the framework of and was aligned to the UNDAP that was implemented over the same timeframe. At its pilot phase, the expect outputs of the TIUMP are:

(i) Industry support institutions assisted in order to establish and strengthen business and technical service centres for selected sectors;
(ii) Upgrading Unit Tanzania (UUT) established with the required technical and managerial tools and equipment;
(iii) Selected manufacturing SMEs and industrial enterprises in the priority sectors diagnosed in conformity with upgrading processes including reviews of business plans; and
(iv) Priority SMEs supported and promoted (with possibility of development of export consortia).
Against this background, and in order to better understand the changes attributable to this specific project, UNIDO’s “Methodological Guide: Restructuring, upgrading and industrial competitiveness” and the “Thematic evaluation of UNIDO projects relating to industrial upgrading” conducted in 2013 were considered. In the context of this evaluation a “Theory of Change” model was developed for the TIUMP’s intervention logic. The Guide and the Thematic evaluation suggest that UNIDO interventions in industrial upgrading combine technical support to selected pilot firms with capacity building of business development service providers (BDS) and technical centres and advocate a combination of micro, meso and macro level interventions. In the case of the TIUMP no financial incentive was granted to the targeted enterprises. During its pilot phase the Project only dealt with micro and meso level interventions (i.e. capacity building of institutions, technical support to MSMEs and training of individuals). Macro-level support relevant to the TIUMP was addressed under other UNIDO’s projects. These include projects such as “Industrial policy and statistic support” and Agri-business value chain development support”. In particular, it is noteworthy to underscore that the TIUMP does not explicitly target social impact (i.e. job creation, poverty alleviation, etc.). In order for the success of the Project (i.e. improved results for the 19 participating enterprises) to be scaled-up at the national level, macro-level actions need to be more closely integrated into the TIUMP. Alternatively, the synergy between the TIUMP and the other relevant projects will need to be further strengthened.

The findings of the Mid-Term Evaluation are synthesised below.

Key evaluation findings

Relevance

**FINDING 1**: The TIUMP was found to be relevant and responsive to the main national development plans (i.e. Vision 2025, Development Plan 2011/12 – 2015/16, etc.), which recognise the catalytic contribution of trade and manufacturing in pursuing the socio-economic development of Tanzania.

**FINDING 2**: The Project’s firm-level interventions were in line with the various challenges and constraints faced by the majority of the local SMEs. In particular these are high production factor costs, inadequate technology and equipment, shortage of qualified labour, production level below capacity and insufficient demand.

**FINDING 3**: Local stakeholders and beneficiaries have been involved and supportive of the Project from its inception. Ownership has continued to be good and implementation to date has been flexible and adaptable to the local context.

Efficiency

**FINDING 1**: Whereas the mix of programme inputs (i.e. short and long-term technical assistance, equipment, training, methodologies, etc.) has been adequate, the allocated budget of US$1.9 million for the Project is considered insufficient. This is in view of the size of the Tanzanian economy and the
identified needs and the expectations of assistance at the level of beneficiary MSMEs and Industry support institutions.

**FINDING 2:** The initial counterpart contribution in terms of office space allowed for a fast start-up of the activities of the TIUMP. However, the evaluation has noted the inability of the MITI to mobilise the required financial resources to complement the funding of the Upgrading Unit staff at the second half of the project implementation. As a result, the salary of the local staff for the entire period of the project implementation had to be paid for by the TIUMP itself. This resulted in relatively fewer resources being available for project activities. Overall, the counterpart contribution did not fully correspond to the planned inputs.

**FINDING 3:** Key activities such as procurement of equipment for the Industry Support Organisations (ISO) were delayed due to the untimely disbursement of funds. Indeed, the main challenge to the timely execution of activities under the Project stemmed from the unpredictability of disbursements from the United Nation System “One Fund”.

**FINDING 4:** It is in regards to the Dodoma sunflower oil cluster that the TIUMP is recording its most efficient intervention. This initiative can readily serve as a model for the development of other clusters in oil and other crop processing for small and micro enterprises. In particular, the coaching and mentoring of the CEZOSOPA enabled it to establish trust between members and made possible several other key developments. These include: (i) the co-sharing of a mini-laboratory and the expertise availed by the Cluster Development Agent (CDA) and a food technologist and (ii) the introduction of a low-cost and locally manufactured semi-refinery technology with the assistance of a UNIDO engineer from Ethiopia. This intervention has improved the quality of the sunflower oil and has consequently increased the sales and income of the processors.

**Effectiveness and impact**

It has to be acknowledged that the TIUMP developed a good monitoring and evaluation (M&E) and reporting system that allows the Project’s Unit and stakeholders to monitor results and impacts based on clearly identified baseline data.

**FINDING 1:** With respect to Output 1 of the TIUMP, evidence available indicates that overall progress has been as planned and that the related purpose of the pilot phase of the TIUMP is being achieved. However it was noted that due to resource constraints, the strengthening of the targeted Industry Support Institutions (ISO) is yet to be achieved such that they are in a position to improve significantly their services to the MSMEs. The training of national consultants has not been up-scaled beyond the initial generic training. These caveats notwithstanding, it is evident that a capacity strengthening process is underway particularly at TIRDO and TEMDO as a result of the good quality of the diagnosis reviews and upgrading plans produced under the Project. As beneficial outcomes, these have significantly contributed to raising the awareness of stakeholders to the needs and issues that should be addressed to ensure that these two institutions are, in the medium term, capable of delivering quality services to their clients.

**FINDING 2:** With respect to Output 2, the UUT has been established and is operational in the premises of TIRDO, under the MITI. The necessary tools have been developed and are being utilised. An all-inclusive Steering Committee (SC) was set up from the onset and had met four times by
December 2014. The appointment of the full complement of UUT staff (i.e. financial analyst and a Head of Unit) has yet to be effected. During the period covered by the review, the CTA was the de facto Head of Unit with the technologist being the only other professional staff member. This is an area of concern for the current set-up and for the roll-out phase of the TIUMP from June 2016.

**FINDING 3:** In relation to Outputs 3 and 4: A total of 19 SMEs (against 15 SMEs planned at inception) benefited from the TIUMP’s interventions in terms of diagnosis reviews and/or designs of up-grading and various degrees of technical assistance and/or coaching in the priority agro-processing sub-sectors identified (i.e. dairy; edible oil and fruit and vegetable). In the specific case of Dodoma it is noteworthy that the TIUMP achieved the planned results by combining up-grading and cluster development tools. This allowed the Project to meet efficiently and effectively the needs of the mostly small-scale beneficiaries. By the time of the Review mission, seven SMEs were reported as ready to order the semi-refinery oil whose prototype was designed and constructed under the TIUMP. Furthermore, preparation was underway for the relocation at the Chamwino Industrial Park of the processors operating in residential areas. This follows the acquisition of land by the Dodoma Joint Investment Company from the development-minded local authorities of the Chamwino District. Without doubt, evidence gathered indicates that the interventions at Dodoma are the most effective of the components of the TIUMP.

**FINDING 4:** With respect to Outputs 3 and 4, using 2012 as a baseline, the key results recorded by 2014 for the 19 SMEs assisted by the Project are as follows: a 38% increase in turnover; capacity utilisation increased from 28% to 76% and growth in employment was 4%.

**FINDING 5:** In view of its achievements to date it is clear that the TIUMP has been able to demonstrate a strong potential for contributing to unlocking the economic potential of the MSME targeted including those more linked to the rural segment of the economy – Dodoma being a case in point. This notwithstanding, it is evident that if access to finance including working capital by the beneficiary SMEs had been secured, the results and impact of the TIUMP would have even been greater.

**FINDING 6:** The outlook for future impact by the TIUMP remains optimistic in the targeted sub-sectors. This is evidenced in particular by: (i) the opportunities that exist for dairy product processors to expand and diversify their products given the huge potential for dairy production and markets in Tanzania\(^1\); and (ii) sunflower oil having been identified as a potential major export product for Tanzania to India among other destinations in the context of the “Supporting India’s Trade Preferences for Africa” (SITA) a DFID funded project for 2015-2020. The draft Action Plan being prepared under SITA is considering the promotion of collective marketing and production of sunflower through the adoption of the UNIDO cluster model implemented in Dodoma. Thus there could be opportunities for UNIDO to be involved in the implementation of SITA.

**FINDING 7:** During its pilot phase the TIUMP has demonstrated, albeit with relatively limited resources, both its capacity and a satisfactory methodological approach to industrial upgrading

---

\(^1\) The East Africa Dairy Development Project (EADD) is a five-year regional industry development programme whose main objective is to sustainably improve livelihoods of 35,000 smallholder farmers. In order to understand the status of the dairy industry and develop a nationwide strategy for this sub-sector a market study was commissioned under the EADD, the results of which were presented to stakeholders in September 2015.
aimed at addressing production and market issues. The actions supported have shown a clear demonstration effect that catalyses market development at the level of the assisted MSMEs. These interventions can possibly be replicated and scaled-up in view of the existing demand from the MSMEs and industry support organisations. It can therefore be deduced that with additional resources, the results achieved thus far could be replicated to achieve a greater impact through employment and income generation and subsequently poverty reduction. This has been most evident in the interventions in support of sunflower oil processing and dairy production.

**Sustainability**

**FINDING 1:** Sustainability was identified as a key factor of success in the Project document. However, the failure by MITI to mobilise the necessary resources for the employment of the foreseen staff complement required for a full-fledged UUT is to be deplored. At the time of the Evaluation, the technologist was the only professional staff member of the UUT. Now that the Tanzanian constitutional reviews and elections have been concluded, expectations are more positive that the MITI will be able to convince the Ministry of Finance and Planning of the need to allocate budgetary resources to the TIUMP.

**FINDING 2:** Prospects for sustainability of the interventions are good in view of the choices made in terms of institutional capacity building, sectors of interventions and the spread of MSMEs that have been supported. With the new Government having declared industrialisation a top priority for the next five-year development plan, the prospects for the roll-out phase would be greatly enhanced if the national authorities were to allocate more budgetary resources to industrial upgrading and modernization.

**FINDING 3:** It has not been possible for the Evaluation mission to establish if and/or to what extent the TIUMP did have indirect effects, in particular on firms and private BDS providers that were not directly supported. However, due to the limited resources available to the TIUMP for a country the size of Tanzania, it can be assumed that the Project did not unduly create a bias or externalities for other MSMEs.

**FINDING 4:** Given the importance of access to finance for the growth of SMEs, the Evaluation is of the view that more attention should have been given to this issue from the outset of the Project.

**FINDING 5:** Almost all beneficiaries consulted have expressed the opinion that while being grateful for the support provided, they wished the TIUMP were more endowed in terms of technical assistance, coaching and facilitation of access to financial resources. These remarks were consistently made by the SMEs, TIRDO, TEMDO and the MITI. These stakeholders and beneficiaries expressed that some of their needs were still wanting.

**Coherence, coordination and complementarity**

**FINDING 1:** During the period covered by this Mid-term Evaluation, the TIUMP Steering Committee met four times. This corresponds on average to one meeting per year. Given that the Project was in its pilot phase and that closer strategic oversight was required it can be argued that one annual meeting of the SC was inadequate. Several SC members expressed the opinion that more sessions should have been organised to allow the Committee to be more involved in steering the Project.
FINDING 2: As far as coordination and complementarity are concerned the TIUMP was innovative in that it integrated UNIDO’s Upgrading and Networking approaches (Cluster approach of BIT’s Cluster and Business Linkage (PTC/BIT/CBL). Furthermore, the interventions in Dodoma capitalized on the experience of the UNIDO intervention in Ethiopia (joint project of UNIDO’s PTC/BIT/CBL and Agri-Business Development Branch (PTC/AGR)).

FINDING 3: The UUT developed complementary interventions with UNIDO and several other Development Partners’ interventions and initiatives [Rural Livelihood Development Company, DANIDA’s Local Investment Climate (LIC) sub-component of the Business Sector Programme Support Phase IV, and USAID’s Tuboreshe Chakula (Let’s Improve Food) Project]. However, coherence, coordination and complementarity could have been better observed and promoted amongst the 18 national projects of UNIDO’s portfolio. It was foreseen that a national programme steering committee would be established under UNIDO Country Programme. This SC would have contributed to ensuring a systematic complementarity of UNIDO’s national projects.

Key conclusion

The key conclusion of this Mid-Term Evaluation is that overall the pilot project is successfully implementing an adapted and need-based industrial upgrading approach. In addition, the TIUMP incorporates a catalytic focus with a good degree of flexibility and adaptability such that it has been possible during its implementation to experiment with different methods that have stressed the demonstrative and replicable nature of the actions undertaken. The “pilot” scheme has offered stakeholders the opportunity to spell out and monitor the assumptions for managerial and behavioural change at the enterprise level with the introduction of soft up-grading interventions rather than hardware upgrading.

It has to be stressed that it is difficult to measure exactly how and to what extent the TIUMP impacted the change in the enterprises concerned, and systematically show case the evidence on the achievements recorded. It can nevertheless be argued that the actions developed, starting from the initial diagnosis of the problems followed by the coaching for implementation of priority actions (or coaching companies to mobilise investments), has to be viewed in a holistic way in terms of the transfer of knowledge in some specific domains which can also benefit indirectly others as well as the whole company. The TIUMP, at least, did manage to mobilize the interest of the managers whose MSME’s interacted with the project.

The key recommendations of the Mid-Term Evaluation are:

To the MITI and Government of Tanzania:

- In view of the achievements of the Project to date, it is clear that the TIUMP should be rolled out such that more MSMEs, beyond the 19 pilot enterprises, can benefit from industrial upgrading in Tanzania. In this respect the MITI and the SC of the TIUMP should proceed to review the concept note prepared by the UUT such that it may be formally adopted. This
would then pave the way for the formal launch of the formulation of the roll-out programme which should be carried out through a participatory process involving all stakeholders and potential beneficiaries.

➢ As far as financing of the IUMP is concerned, the Government should allocate budgetary resources to the programme. Lessons learned on IUMP initiatives indicate without doubt that the success of these projects is heavily dependent on strong Government commitment.

➢ The stakeholders should seriously consider organising at least two meetings of the SC per annum. This would allow for more informed opinions and thus a more regular follow-up of strategic issues tabled for discussions and decision making. In addition, it might be worth, in any event, considering the establishment of a sub-SC comprised of a few key stakeholders who would meet more regularly to ensure the implementation of decisions made by the full SC.

To UNIDO and the TIUMP:

➢ While designing the detailed interventions and activities of the roll-out programme, UNIDO should ensure that a demand-based approach in supporting MSMEs is up-held and further strengthened.

➢ The strategy for strengthening business developing services (BDS) should be more market-based\(^2\). Indeed, there remains as yet an untapped potential to create business opportunities for local entrepreneurs through a programme that emphasizes market-based approaches to the delivery of its support. This could be achieved for instance by working more closely with local enterprises as implementing partners or suppliers of works and services in the context of the TIUMP.

➢ For its remaining months, the TIUMP should devote more of its focus to the facilitation of access to finance by the Project beneficiaries’ as this is one of the key success factors of any IUMP. The promotion of linkages with the financial sector should be built into the programme of the roll-out phase.

➢ The setting up of dedicated mechanisms for facilitating access of SMEs to financial resources should form an integral part of the roll-out programme (i.e. upgrading funds, guarantee scheme, equity fund, etc.). A revolving arrangement that allows for the sustainability of the upgrading fund should be the preferable option.

➢ Given that private sector development requires a multi-sectoral approach and depends on actions that are beyond the scope of the TIUMP, the pilot project and its successor should further foster complementarity and synergy with all other relevant projects and initiatives at the national and regional levels.

---

\( ^2 \) While donor intervention should not distort markets, more emphasis has to be put on harnessing the potential for development assistance to catalyze market development in the Tanzanian economy. To guarantee development impact and sustainability it is critical to minimize to the extent possible the potential for market distortions.
Given the large number of projects in UNIDO’s Tanzania portfolio, the national Steering Commission foreseen in UNIDO’s Country programme should be set up and made operational to ensure effective coordination and complementarity amongst the various projects.

Many UNIDO projects are reportedly under-funded and thus the organisation is perceived as being thin on the ground. To address this situation it is advised that UNIDO uses a two-prong approach. Firstly, sustained effort should be devoted to resource mobilisation by all concerned parties to increase the financial resources available to UNIDO’s projects in Tanzania. This recommendation notwithstanding, there should be discussion as to the pros and cons of reducing the number of projects and availing more funds to a fewer number of projects under the UNIDO’s next CP.

Finally, it is advised that UNIDO be prepared to respond favourably to the request made by the Tanzanian Planning Commission with respect to the formulation of the next Five Year Plan. This is in line with the recent decision taken by the country’s policy makers to focus the next national plan around industrialisation.
1. National context and project background

Tanzania snapshot

Tanzania is the largest nation in East Africa with a population of 48 million of which 44% are below the age of 15 and over 70% are rural dwellers. The Tanzania Investment Guide for 2014-2015 ranks the country among the 20 fastest growing economies of the world. Free market principles have been gaining ground as over the past two decades successive governments have continued to liberalize the previously centrally planned economy. Tanzania has enjoyed 7% real GDP growth over the last five consecutive years. Inflation rates have dramatically fallen from 27.4% in 1995 to 7.48% estimated for 2015. The country is one of those forecasted by the World Bank to achieve a real GDP growth rate of 7% or more over the next decade.

The agriculture sector, with an annual growth rate of 6%, accounts for nearly half of national GDP contribution, 70% of rural household income, and absorbs 80% of the entire workforce. In August 2009, the government introduced Kilimo Kwanza “Agriculture First”, a special agricultural revolution initiative. The aim of this initiative was to accelerate agricultural transformation through commercialised agriculture and the improvement of the cultivation methods of peasant farmers to supplement agribusiness and assure the country of self-sufficiency in food supplies. Several reforms have been undertaken or initiated under Kilimo Kwanza. These include a review of land laws as an attempt to facilitate long term leases for foreign companies and the redefining of the role of government and the private sector to make it easier for the latter to participate in production, processing and marketing, while the State retains control of the regulatory and public support functions.

Tanzania’s livestock has been increasing by 5% per annum in recent years. Its cattle, which number 21.3 million, make it the largest population in southern Africa. However, smallholders who are often faced with poor productivity and yields keep 97% of all animals. Less than 5% of milk is processed. The goal being pursued for the sub-sector is to position Tanzania such that it can benefit from the exponential growth in demand for livestock products across the region.

Horticultural is the fastest growing industry within the agricultural sector. It has recorded annual average growth rates of 9 to 12% over the past five years. This sub-sector aims at establishing modern vegetables, fruits, flowers, spices and horticultural seed business operations for domestic, regional and international markets. Horticulture has been earmarked as one of the potential areas for fast growth in the Tanzania Agriculture and Food Security Investment Plan (TAFSIP) and the Southern Agricultural Growth Corridor of Tanzania (SAGCOT). A number of investors are engaged in the production and marketing of horticultural crops mainly for export markets. Indeed, there is a huge demand for quality horticultural products in both local and foreign markets. While Tanzania’s horticultural exports have been significantly increasing, the inconsistent supply of quality products is still forcing the country to import certain fruits, vegetables and spices. Agricultural and livestock are leading economic sectors, which remain critical for achieving sustained growth, poverty reduction and rural development.

3 Tanzania National Census (2012)
Tanzania is endowed with diverse energy sources including biomass, natural gas, hydro, coal, geothermal, solar, wind power and uranium, much of which are untapped. Commercial energy sources such as petroleum and electricity account for only about 8% and 1.2% respectively of the primary energy used. At present, access to electricity is by only 40% of the total population\textsuperscript{4} with coverage in the rural areas amounting to about 7.4%. Considerable scope exists for accelerating the production of electricity to meet the growing demand by both households and industries. For the latter in particular, a reliable and sufficient energy supply at an affordable price continues to be one of the major bottlenecks to the running of competitive businesses. As a result of the on-going construction of several gas-fired plants, 245 megawatts were recently added to the national grid. Using gas to produce electricity is seen as the permanent solution to Tanzania’s power problems. Furthermore, the country is hoping to export power to the East Africa within the medium term.

**Tanzania Industrial Upgrading and Modernization Project’s (TIUMP) Background**

The Tanzania National Vision 2025 acknowledges the development of the industrial sector as a priority. It thus recognizes the need to transform the economy from a state of low agricultural productivity to a semi-industrialized one. Investment inflows in Tanzania are presently concentrated in tourism (31%), manufacturing (29%), transport (15%), commercial building (14%) and agriculture (4%). The remaining sectors account for 7%. The government puts emphasis on a few manufacturing areas namely the textile, leather and food processing sub-sectors. In particular, Tanzania is richly endowed with a large variety of fruits and vegetables yet less than 10% of these produce are processed.

According to the World Bank, industrialisation in Tanzania is still relatively marginal. This is evident in view of the low level of capacity utilization. Manufacturing value added (MVA) per capita estimated at US$15.5 and the sector presently only contributing 8% to GDP clearly reveal that the manufacturing sector is still in its infancy stage. Unprocessed agricultural commodities continue to dominate major exports. However, manufacturing has shown steady growth over the past few years, registering 4% annual growth. The sector employs around 140,000 workers, mainly in the urban areas, accounting for 48% of monthly paid employees. Manufacturing activities contribute to the Tanzanian economy through revenue collection on import and export, corporate and income taxes, which amount to about 20% of foreign exchange earnings. In terms of aggregate contribution to the economy, manufacturing is in third position after agriculture and tourism.

The sector relies on processing of agricultural produce driven to a large extent by an import substitution strategy. Manufacturing in Tanzania comprises mainly of firms engaged in food, beverage and tobacco processing, paper and packaging, textile and garments sub-sectors. Other sub-sectors include steel and steel products, petroleum, chemicals, cement, glass and other non-metallic production. Combined, these activities represent about 65% of Tanzania’s industrial production while agro-based industries such as textiles, clothing, leather and footwear account for 4%.

\textsuperscript{4} Ministry of Energy and Minerals of UR Tanzania, Budget speech, May 2016.
Against a backdrop of a “State Economy” since its Independence, Tanzania started to liberalise its economy in the year 2000\(^5\). With the value of Tanzania’s merchandise exports having multiplied five-fold over the period 2000-2011, the trade-to-GDP ratio has increased accordingly from 13.5% to more than 30% in 2011. The largest contributors to the export basket continue to be primary commodities, particularly gold, coffee, tea, cashew nuts and cotton. Nevertheless, the volume of manufactured exports has been increasing during recent years with the bulk going to markets within the region.

According to the World Bank (2014), the main drivers of Tanzania’s rapid economic growth will continue to be a small number of fast growing capital-intensive sectors. These mainly include communication, financial services, construction, manufacturing and retail trade sectors. However, both the low level of competitiveness of local manufacturing and the unattractive business environment (Tanzania is ranked 134th out of 185 countries in Doing Business) represent some of the major constraints to growth. In order to be in a good position to absorb the ever-growing youthful labour force which is estimated to increase by approximately 800,000 job seekers annually, Tanzania needs to promote competitiveness gains in labour-intensive sectors such as manufacturing and services. The small market shares of new labour-absorbing export-oriented industries coupled with the deficiencies prevailing in respect of technical and managerial skills of the majority of local entrepreneurs imply a continuing medium-term risk of high youth unemployment.

Most Tanzanian producers, and in particular those working in the small and medium size category which represents about 90% of the overall number of enterprises, are greatly constrained in their internal capacities to optimize their technological processes and consequently to record competitiveness gains and sustainability, conditions necessary to access the market place. Local manufacturers also lack the capacity to access funding in order to further invest and innovate. This means that they are not able to participate significantly in value addition to local resources. The majority of local enterprises are therefore not yet in a position to produce price and quality competitive goods in the face of the current market needs or to take full advantage of the opportunities availed to them by the regional and international preferential trade arrangements (i.e. FTA in the context of EAC, SADC, the tripartite SADC-COMESA-EAC and the EPA, etc.)

Finally, it is worth mentioning that, during the campaign leading to the general elections of 25 October 2015, all the candidates to the presidency repeatedly stated that industrialisation would be their main economic policy objective.

\(^5\) However it has to be noted that state owned company in textile, cashew and leather for example has been privatised but the performance have not been improved and worsened.
2. Overview of the TIUMP

Objectives of the TIUMP

The Tanzania Industrial Upgrading and Modernization Project (TIUMP) is one of the projects being implemented under the UNIDO Country Programme (CP) of Technical Cooperation with the United Republic of Tanzania. The CP focuses on capacity building support in three areas, namely: Industrial Policy Implementation; SMEs competitiveness; and Renewable Energy and Environmental management.

The CP is comprised of three components namely:

1) The Capacity Building for Industrial Policy formulation, Implementation and Monitoring: this component envisages providing support for industrial and SME policy analysis as well as conducting surveys and developing industrial statistical databases.

2) Investment Promotion and enterprise support for enhanced competitiveness in a value chain context under which it is envisaged to: (i) establish an Investment Monitoring Platform and a Sub-contracting Partnership Exchange; (ii) improve the organization and coordination of value chains for the targeted sectors of cashew and meat/leather; support industrial upgrading and trade through the strengthening of networks for business information, business and technical support services, upgrading for specific manufacturing enterprises and strengthening capacity to trade, quality and standards.

3) Cleaner Production and Renewable Energy for Productive Uses which aims at promoting awareness and adoption of renewable energy and cleaner production technologies for increased green industrial productivity and rural economic participation.

In line with the on-going reforms within the context of the UN system in Tanzania, the UNIDO country programme has been developed in the framework of the UNDAP that will be implemented over the same timeframe.

As part of the UNIDO CP, the TIUMP which was launched in 2012 aims to promote competitive industrial production and market access by private sector enterprises through among other interventions building the capacities of support institutions to deliver the appropriate services. At the enterprise level, the TIUMP provides the necessary training and advisory support on technology and business processes to improve the quality and quantity of industrial output.

It is intended that TIUMP will be fully aligned with and compliment other interventions such as the agro-industrial support as well as investment promotion projects to ensure enhanced synergies and fully packaged interventions to the industry. Furthermore the TIUMP should build on and consolidate the past interventions implemented through the One UN joint programmes of which it is a part, as well as the EAC-Norad project on quality and standards issues. It has been expected that the TIUMP will work closely with other UN agencies in the economic growth cluster to support the attainment of the UNDAP outcome to promote regional integration and international trade.

Specifically, the project is expected to produce the following outputs:
Output I  Industry support institutions assisted in order to establish and strengthen business and technical service centres for selected sectors;

Output II  Upgrading Unit Tanzania (UUT) established with the required technical and managerial tools and equipment;

Output III  Selected manufacturing SMEs and industrial enterprises in the priority sectors diagnosed in conformity with upgrading processes including reviews of business plans; and

Output IV  Priority SMEs supported and promoted (with possibility of development of export consortia).

Implicitly, one of the objectives of the TIUMP is to hand over to the Government a tool of Industrial Policy to improve economic competitiveness (UUT, Methodology, technical centres) which is in line with recent Tanzania’s Big Result Now programme (BRN).

Based on preliminary findings of the project inception mission which included meetings with the national counterpart institutions, particularly Ministry of Industry, Trade and Investment, Ministry of Agriculture, Ministry of Livestock Development and Fisheries (MLDF) and other relevant institutions, the following priority agro-processing sub-sectors were identified for the Tanzania IUMP:

1. Dairy Sector;
2. Edible Oil Sector;
3. Fruit and Vegetable and Crop Processing Sector; and
4. Packaging Industry. Packaging was identified to be constraint for the micro-enterprises during the inception of the TIUMP. The Steering Committee (SC) did finally not retain it.

Project Highlight

<table>
<thead>
<tr>
<th>Project Number:</th>
<th>102175 (FBURT11G04, YAURT 12C04)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic areas:</td>
<td>PRP, TCB, EAE</td>
</tr>
<tr>
<td>Project budget:</td>
<td>USD 1 900 000</td>
</tr>
<tr>
<td>Donors</td>
<td>UNIDO, One UN Fund</td>
</tr>
<tr>
<td>Implementation organisation:</td>
<td>UNIDO</td>
</tr>
<tr>
<td>Project inception phase:</td>
<td>11/2011-03/2012</td>
</tr>
<tr>
<td>Start date:</td>
<td>04/2012</td>
</tr>
<tr>
<td>End date:</td>
<td>06/2016</td>
</tr>
</tbody>
</table>
Upgrading model

**ENABLE**
**BUSINESS ENVIRONMENT**
- Policy support and regulatory and institutional framework
- Competitiveness analysis and positioning studies
- Financial and non-financial incentives

**BUILD**
**INDUSTRY SUPPORT SERVICES**
- Technical support and business advisory institutions
- National experts
- Financial institutions and professional associations

**EMPOWER**
**ENTERPRISE PERFORMANCE**
- Production technology and resource efficiency
- Best marketing practices
- Human resources and financial management
- Quality management

**COMPETITIVENESS**

**LOCAL MARKETS**

**EXPORTS**
Project Sites

*Including Jakma J. Enterprises in Dodoma*
The Theory of Change of the TIUMP

Introduction

The project document of the TIUMP did not include a Theory of Change (ToC) of the pilot phase of the Project. The chart below is an attempt by the Evaluation Team to construct what a ToC of the TIUMP could have looked like. The aim is to help capture the key components of the project’s intervention logic and to describe the pathway to the TIUMP’s objectives and impact.

As can be gathered, the TIUMP mainly comprises interventions at the meso (institutional) and micro (enterprise) level. These include capacity building of institutions and business development services providers that therefore become able to provide better services to the beneficiary MSMEs. By using the improved services available to them, the MSMEs are expected to make changes (i.e. industrial up-grading, training or skills development of their work force) such that they might become more competitive and hence be in a position to sell more goods. As they record higher level of turnovers, the MSMEs may be more able to safeguard existing jobs and/or create new ones. With the interventions at the level of the pilot enterprises having proven to be successful, the pilot project can then be rolled out with additional enterprises able to benefit from the upgrading interventions. With the project being up-scaled, the long-term macro-economic and social impact of the TIUMP might materialise.

TIUMP interventions can be summarized as actions at different levels within the beneficiary MSMEs:

- During the process of delivering the technical assistance, the TIUMP experts interact with individual members of the enterprises and they gain knowledge and awareness in the process;
- The design and implementation of new standard operating procedures and practices (GMP, GHP, HACCP) and budgeting, strategic planning, formal organizational structure, human resource management (rewards and incentives);
- The recommendations for tangible investment in order to improve the productivity of the assets of the MSMEs.

Within the UNIDO’s Tanzania Country Programme, the other UNIDO’s projects that are most complementary to the TIUMP in view its ToC include the following:

- Industrial Policy and Capacity Building;
- Industrial Statistics Capacity Building;
- Value Chain Development;
- Investment Promotion (including SPX);
- Trade Capacity Building; and
- SME Policy Review.

Besides the fact that the chain of events leading to new jobs and employment is long and indirect, the results and social impact of the TIUMP are to a large extent dependent on the effective implementation of the projects listed above which are mostly intervening at the macro-level. The impact of the Project is also dependent on several assumptions.
Theory of change of TIUMP

1. **TIUMP and UNIDO complementary interventions**
   - Immediate change
   - Competitiveness (intermediate change)
   - Growth (LT change)
   - Social Impact

2. **Other UNIDO projects at Macro-level**
   - Policy advice sector analysis, etc.

3. **TIUMP Meso-level**
   - Capacity building for industry support institutions, Upgrading Unit (UUT) etc.
   - Institutions deliver better services and support. UUT operational and effective
   - MSMEs use services modernised/upgraded
   - Replication/up-scaling of pilot MSMEs
   - Better trained/educated MSMEs’ work force
   - Work force more productive
   - Sales of MSMEs increase by 20% (local and international markets)
   - New jobs created

4. **TIUMP Micro-level**
   - TA to selected pilot MSMEs and clusters
   - Training, coaching study tours
   - MSMEs more productive and competitive
   - Tanzanian economy more competitive
   - GDP increases
   - GDP increases
   - GDP increases

5. **Macro-level**
   - Other UNIDO projects at Macro-level
   - Policy advice sector analysis, etc.
   - Capacity building for industry support institutions, Upgrading Unit (UUT) etc.
   - Institutions deliver better services and support. UUT operational and effective
   - MSMEs use services modernised/upgraded
   - Replication/up-scaling of pilot MSMEs
   - Better trained/educated MSMEs’ work force
   - Work force more productive
   - Sales of MSMEs increase by 20% (local and international markets)
   - New jobs created
Key assumptions of the TIUMP

For the scenario as depicted by the ToC to unfold in line with the interventions logic of the TIUMP, one must take account of several assumptions and uncertainties pertaining to the corresponding results chain. Some of the assumptions pertaining to the TIUMP are:

**More sales eventually lead to more employment:** more sales do not always lead to more employment. The extent to which the production of goods is labour intensive is a critical factor. For this outcome to materialise as expected, it is essential that, at the level of the MSMEs, there is no meaningful trade-off between workers and technology and/or capital.

**More competitive enterprises lead to more sales:** given that sales depend on local and international demand, more competitive enterprises may crowd out less competitive ones thereby leading to reduced aggregate sales.

**Competitive economy leads to growth:** in view of the dependence of Tanzania’s economic growth on the state of the international economy, this might not systematically happen. Indeed, international economic recessions can force even competitive economies into stagnation.

**An enabling environment leads to a more competitive economy:** this is not always necessarily so. Economic competitiveness depends on many factors identified by the World Economic Forum as the 12 pillars of competitiveness in the Global Competitiveness Report 2014-2015.

**A conducive business environment depends on government enforcing adopted rules and regulations:** for both existing and new rules and regulations to lead to change they must first be implemented and enforced. Furthermore, the concerned stakeholders must comply with the rules and regulations.

**MSMEs use services provided by support institutions and make changes:** for this to happen services provided must meet the needs of the enterprises. Furthermore the services must be affordable and of good quality. Undoubtedly, this outcome must be analysed in the medium to long-term perspective.

**Another very important assumption pertains to access to the financial sector by MSMEs:** without access to finance, MSMEs might remain in a position where they are not able to implement critical aspects of their industrial up-grading plans.

As will be the case for the TIUMP, success in terms of MSMEs becoming more competitive and being in a position to create more jobs, depends on many assumptions at various levels. Unquestionably, the intervention logics of the TIUMP are quite long and mostly fairly indirect in so far as they require numerous subsequent changes to take place for the impact of the interventions to be realised.

The ToC of the TIUMP also demonstrates that parallel interventions at several levels including at those pertaining to other UNIDO’s complementary projects must be successfully carried out to increase the likelihood of the TIUMP being effective and delivering its expected impact.
Finally, it emerges clearly from the ToC of the TIUMP that an in-depth analysis of the markets, financial sector, macro-economic context, institutional set-up and the business environment of Tanzania is a critical step without which the relevant assumptions would not be fully understood. This level of knowledge would increase the likelihood of the successful implementation of the TIUMP going forward to its roll-out phase.
3. Evaluation objectives, methodology and process

Evaluation objectives

The purpose of this independent mid-term evaluation is to assess the effectiveness, efficiency and sustainability of the TIUMP and provide recommendations for the roll-out phase. The Evaluation results are seen as important in the context of regional and international free trade areas agreements, as well as with respect to the UNIDO Industrial Upgrading and Modernization Programme for the East Africa Region (EAC IUMP), which is currently under consideration by the EAC Secretariat.

The mid-term evaluation is also expected to address other evaluation criteria singled out in UNIDO’s Evaluation Policy, such as relevance, impact, as well as management, gender mainstreaming, environmental sustainability, alignment with the UNIDO’s Inclusive and Sustainable Industrial Development (ISID) agenda, and potential to promote ISID.

The mid-term evaluation is expected to be a forward-looking exercise that seeks to identify the best practices and areas for improvement. As such, in the short term the goal is to draw lessons that can be used in the implementation of the roll-out phase and for similar projects to be implemented by UNIDO in other countries and at the regional level. The long-term interest comes from the strategic importance of this Project constituting a part of Component II: Investment Promotion and Enterprise Support for Enhanced Competitiveness in a Value Chain Context (4.2: Tanzania Industrial Upgrading and Modernization Project (TIUMP)) of the UN Country Programme of Technical Cooperation with the United Republic of Tanzania 2011-2015 developed under the UNDAP framework for 2011-2015. In this connection, the mid-term evaluation is to produce lessons learned and recommendations on how to optimize the multi-dimensional approach to UNIDO’s "Industrial Upgrading and Modernization Programme”.

Furthermore, this mid-term evaluation is relevant for both organizational challenges identified as critical by the management of UNIDO:

- Enhance cooperation between different departments of the Organization to improve synergies ("Delivering as One UNIDO");
- Optimize the use of UNIDO's Field Office for the implementation of technical assistance.

These above challenges are the subjects of an organizational change programme and the mid-term evaluation is expected to make a contribution in this regard.

Methodology

The Evaluation Team based its analysis on the criteria listed in the Terms of reference (ToR) of the assignment. The methodology applied consisted of a combination of intensive document study, a briefing at UNIDO headquarters in Vienna, a series of meetings with a broad spectrum of key stakeholders and beneficiaries during the field mission in Tanzania, and the use of a number of analytical...
review tools. The desk review covered the range of programme documents and other reports made available by the different stakeholders on the occasion of the meetings. Where necessary, the evaluation team requested relevant additional documents. Access to the project files was deemed from the onset as of critical analytical importance for this mid-term review.

An extensive list of interviews with key stakeholders in Tanzania was drawn up and included: UNIDO and relevant UN agencies’ officials, the Technical Assistance personnel, counterparts, project staff, steering committee members, representatives of the private sector organisations, beneficiary enterprises and officials of international organisations and national agencies whose projects and interventions are complementary or have an impact on the TIUMP. Throughout the assignment regular feedback was provided to the project manager and the other relevant UNIDO HQ officials. Formal debriefing sessions were planned and organised in the field and at UNIDO HQ. The production of deliverables has been in compliance with the requirements of the ToR of the assignment.

Given that it is foreseen that the pilot phase of the TIUMP would be followed by a roll out phase, the evaluation ensured that lessons learned from the implementation of the Project’s activities are clearly noted not only so that they can feed into any corrective measures for the existing project but also in order to inform the approach to be followed in so far as the new programme is concerned.

The mid-term evaluation has been facilitated by the following factors:

- the consistent and clear ToR for the assignment as to the background, objectives and services to be provided and outputs required;
- the access to the files of the TIUMP; and
- the accessibility, availability and commitment of the project personnel, their counterparts, the project beneficiaries and stakeholders.

Particular attention has been paid by the review team to the following aspects:

- the availability of baseline benchmark data for comparison purposes;
- the information systems and internal monitoring mechanisms used by the technical assistance personnel and the project’s stakeholders to track progress and assess the effectiveness and likely impact of the TIUMP;
- the centring of the assessment on gathered evidence.

The mid-term evaluation’s approach has been informed by the specific objectives of the assignment. As requested by the ToR, the evaluation questions and analytical instruments were validated with the concerned officials at UNIDO HQ in Vienna during the inception phase.

The overall approach to the evaluation has been (1) independent, (2) participatory, (3) output and results oriented, (4) comparative and (5) forward oriented.

The evaluation has been independent and free of the control of those responsible for the design and implementation of the TIUMP. It was characterized by full access to information and by full autonomy in
carrying out investigations and in reporting findings. A participatory process has been promoted throughout. Key stakeholders, beneficiaries and end-users have been part of the evaluation process at each phase of the assignment. This facilitated a better learning and capitalization of existing knowledge and provided a greater base for the ownership of recommendations. The analysis aimed at providing a framework for identifying a range of options for strengthening the comparative advantage of the TIUMP through enhancing the results and impact of its interventions.

The TIUMP has been assessed on the basis of the overall answers to the Evaluation Questions, which were chosen and arranged so as to encompass the criteria and transversal issues identified during the inception phase. The mission assessed the extent to which the intended outputs and results have been achieved and how far they have contributed to the operational and specific objectives within the overall national context, taking into account the changes in the areas on which the TIUMP is intended to impact.

A mix of evaluation methods and tools was purposely used. The primary evaluation tool was an activity and results-based management model. The review constructed ex-post a theory of change for the TIUMP. As recommended by the ToR, special attention was paid to interviews in order to increase the likelihood of unbiased reporting. Where possible the mid-term review used triangulation to verify facts and observations obtained from different information sources.

Given that the TIUMP has a strong technical assistance component (i.e. essentially based on TA for diagnosis and coaching for implementation of selected priority actions) it was recognized that in some cases, this creates several methodological difficulties for evaluation purposes. First, it had to be acknowledged that technical assistance outputs being intangible, they might only be identifiable through indirect indicators. These outputs may be indistinguishable from outputs of other projects and initiatives making it difficult to gauge the specific impact of any particular project, including in this case the TIUMP. Indeed, it is to be acknowledged that it is not easy to measure how the TIUMP impacted the change at the level of the beneficiary enterprises. For obvious reasons it had to be factored in that the beneficiary enterprises continued their own process of development. In any event, it would have been unrealistic to assume that the concerned enterprises would discontinue all of their other actions. In that theoretical scenario, the measurement of impact of the TIUMP would have been more straightforward. This being stated, it can be argued that the actions implemented, starting from the diagnosis and the coaching for the implementation of priority actions, has to be viewed in a holistic managerial intervention leading to transfer of knowledge in specific domains which benefit the entire enterprise and thereby contribute to improving their competitiveness. Furthermore the assistance of the TIUMP having been limited to technical assistance, all opportunities for actions was an opportunity to accompany the beneficiary company in a process of change and coaching. This might be seen as the actual TIUMP contribution. In clear, limiting the outcomes and impacts recorded to the sole immaterial actions/activities of the TIUMP (quality, GMP, GHP, Training, Reports) without any assumption would also be contrary to the effectiveness of knowledge transfer as dealt with in the literature. For instance the extent to which technical assistance that improved the quality of yoghourt in a particular SME has also impacted the other dairy products in the company is difficult to measure.
To the extent possible, the evaluation took account of the TIUMP’s complementary projects and interventions while focusing on its direct outputs and results. It was then possible to judge how effective these outputs have been in the prevailing context of efforts aimed at Tanzania’s industrialisation process. The project logical framework provided indicators that were used to assess performance. This tool aided the identification of indicators measuring each level of the causality chain: resources, outputs, and expected changes at both the level of specific and ultimate goals.

The main tools/instruments that the evaluation relied on to gather information were:

**Documentation review:** this is always very important step in the identification of objectives and measures or examples of achievements, beneficiaries (intended and effective), activities, service providers, cost and sources of funds, success and failures.

**Economic and financial analysis:** to the extent possible and taking into account the fact that the procurement activities of the TIUMP were rather limited, a rapid economic and financial analysis was carried out.

**Rapid appraisal tools:** semi-structured interviews were the most common method used to gather information. They proved most useful for developing an in-depth understanding of qualitative issues such as reasons for motivation, behaviour and perspectives of customers and partners, in addition to learning how attitudes can help explain successes and shortcomings. These interviews were undertaken with all of the TIUMP’s stakeholders identified as follows:

- Government and public agencies’ officials;
- Cooperation partners;
- Executive (Project Manager, staff);
- Direct beneficiaries and end users of services provided by the TIUMP.

It cannot be overstated how important individual stakeholders’ perspectives are for an evaluation such as this. Each reflects differently on the progress of the Project’s activities. The approach selected by the evaluator integrated the participation of stakeholders at each phase of the evaluation process including data generation, analysis, and feedback.

A set of Evaluation Questions was formulated on the basis of documents analysed and the project intervention logic. For each evaluation question, judgement criteria were selected which are more focused and explicit than the former. Each judgement criterion is assessed on the basis of quantitative and qualitative indicators which, as the main performance measures, are the basis for gathering the basic data and information necessary to substantiate the corresponding judgement criteria. Finally the TIUMP is assessed in view of the overall answers to the Evaluation Questions, which were selected and applied so as to bring to the fore the criteria and transversal issues as suggested by the ToR of the assignment. The analysis thus focussed at the outset on both the relevance of the TIUMP and UNIDO’s and the other stakeholders’ approaches aimed at industrial upgrading and modernization in the context of Tanzania. The evaluation then assessed the extent to which the intended outputs and outcomes were
achieved and how far they have contributed to the global and specific objectives of the project whilst being mindful of the changes and related priorities in the areas of intervention of the project.

**Phasing**

In line with the specifications of the ToR, the evaluation has been carried out in three different stages, namely: 1) inception phase including the initial desk review of project documents and relevant reports and a briefing at UNIDO HQ in Vienna; 2) field studies and analysis in Tanzania and; 3) synthesis, reporting and debriefing phases.

- During the inception Phase on 21-29 August 2015 and 14-18 September 2015, the evaluators mainly carried out the following activities: (i) desk review and production of the inception report including the evaluation questions; and (ii) briefing meetings at UNIDO HQ, further documentary review and refinement of the inception report based on the clarification of the key stakeholders expectations and an agreement on the evaluation methodology and time table.

- The field mission and analysis in Tanzania (i.e. Dar es Salaam, Dodoma and Arusha) was organised and undertaken on 13-29 October 2015. Of particular significance to the evaluation were the visits to the project sites at Dodoma and Arusha. Indeed, these provided the opportunity to complement the assessment drawing on evidence directly gathered in-country with stakeholders and beneficiaries outside of Dar es Salaam.

- The home-based analysis of data collected and findings and the preparation of the evaluation report including the conclusions and recommendations of the assignment took place in November 2015. This phase also included the formal debriefing sessions in line with the plan included in the ToR. In particular the evaluation team held debriefing meetings with several key members of TIUMP’s Steering Committee during the last week of November 2015. The PS of the MIT and the other officials met and overwhelmingly accepted the main findings, conclusions and recommendations of the Mid-term Evaluation.
4. Findings and Assessment of the TIUMP

The focus of this mid-term evaluation has been on the main aspects of: design, ownership and relevance; efficiency of implementation, project coordination and management; and effectiveness, impact and sustainability. Additionally, gender and youth mainstreaming and environment related questions have been covered by the review.

Relevance: Needs Analysis and Ownership

Problem and Needs Analysis

Key Evaluation Question: To what extent are the objectives of the TIUMP’s interventions consistent with the beneficiaries’ needs and priorities in relation to Tanzania and the UNIDO strategy of cooperation?

As will be discussed in the following paragraphs, evidence points to the fact that the TIUMP is consistent with the national policies framework and that further firm-level interventions have been incorporated at the design stage.

Under its poverty reduction strategies, Tanzania has formulated Mkukuta/Mkuza, its five-year development plan with the objective of supporting pro-poor economic growth through the promotion of a competitive export-oriented private sector. In this vein, a particular attention is accorded to small-scale enterprises with an agro-processing orientation. Furthermore, in order to achieve the goals set out for the industrial sector, the Government has consistently stated the key role expected to be played by the private sector in general and SME in particular in income generation and employment creation.

Both the current UNDAP and UNIDO Country Programme (CP) for Tanzania support and contribute to cluster one of Mkukuta and Mkuza II through the strengthening of the key drivers including inclusive pro-poor economic growth, agro-productivity and manufacturing linkages enhancement, improved employment opportunities and productivity of low-income entrepreneurs and wage earners and greater human development outcomes from trade. SME development is one the several policies that underpin Tanzania’s vision 2025 which aims at transforming the economy from a low productivity agricultural economy into a semi-industrialised one.

The overall objective of the TIUMP is “enhanced participation of national enterprises in regional and international trade”. This is consistent with the national trade and export development strategy of 2007. The TIUMP incorporates through its components 3 and 4 respectively support to “selected manufacturing SMEs and industrial enterprises in the priority sectors in conformity with upgrading processes including reviews of business plans;” and “priority SMEs supported and promoted (with possibility of development of export consortia)”. 
The above interventions were in response to findings that were reported in the TIUMP’s inception report of March 2012. According to the Annual Survey of Industrial Production and Performance (2008), most manufacturing companies in Tanzania suffer from a number of constraints and challenges that hamper industrial development which leads to most of the existing industries operating below their full capacity. This state of affair results from limitations including: high factor costs, inadequate technology or lack of equipment, shortage of qualified labour, insufficient production capacity, insufficient demand and marketing, unfair competition, and weak technical support.

Given the above diagnostic and in view of the critical importance of support institutions and Business Development Service (BDS) providers, the TIUMP integrates under its Output 1 some assistance to: Industry Support Institutions (ISOs i.e. TIRDO, TEMDO) to CEZOSOPA and to national consultants in order to establish and strengthen business and technical service centres and technical assistance available to the selected sectors. It has been foreseen that diagnostic reviews would be carried out to ascertain the capacity building needs of these beneficiaries prior to providing them support.

From the review of the project document the only significant aspect that has not been substantially dealt with during the inception phase is the critical issue of access to finance by the beneficiary SMEs. As per the available records, the UNIDO inception mission did meet with the Tanzania Investment Bank. In particular, the establishment of a memorandum between the TIUMP and TIB was considered but this did not result in a formal arrangement. Consequently, activities in support of access to finance by the beneficiaries’ enterprises were not explicitly integrated into the TIUMP project document. The evaluation mission does take cognisance of the fact that during the implementation of the Project, on-demand activities were undertaken to facilitate access by some of the concerned entrepreneurs to banks and other financial institutions.

Unlike some more advanced industrial upgrading programme, the TIUMP did not incorporate environmental and energetic issues into its approach in Tanzania.

Ownership and Adaptability of the TIUMP

**Key Evaluation Questions:** To what extent are local actors involved and do they “own” the TIUMP? Has the pilot phase been flexible and adaptable in view of the local context?

During the course of the inception mission, the UNIDO Team had a series of meetings with several ministries (Industry and Trade, Agriculture, Food Security and Cooperatives, Livestock Development and Fisheries), the Tanzania Chamber of Commerce Industry and Agriculture (TCCIA), the Confederation of Tanzania Industries (CTI), Tanzania Private Sector Foundation (TPSF), Small Industries Development Organization (SIDO), Tanzania Bureau of Standards (TBS), Tanzania Investment Bank (TIB), Danish International Development Agency (DANIDA)/Development Partner Group (DPG) on Private Sector Development and Trade. In addition, the inception mission also visited three manufacturing enterprises operating in the agro-processing sector. These provided the opportunity for the initial UNIDO mission to
gather the opinions of the actors and stakeholders and exchange views on their expectations with respect to industrial upgrading in the context of the Tanzanian economy. Prior to its finalisation, stakeholders and the MITI reviewed the project document.

At inception an agreement was reached with the MITI on the modalities for coordination and management of the implementation of the Project. Within this framework, the priority agro-processing sub-sectors proposed for the TIUMP were identified:

- Dairy,
- Edible oils,
- Crop processing.

Unlike the classical upgrading projects, macro-level interventions aimed at changes in the policy framework or sector strategy were not explicitly addressed in the TIUMP. These were dealt with under other UNIDO national projects and interventions (i.e. support to industrial policy formation and capacity building for MITI, drafting of manufacturing sector policies and strategies, technical assistance for supporting public-private sector dialogue, etc.).

From the onset the MITI allocated offices to the TIUMP within TIRDO and a technologist from the Ministry was seconded to the project unit. The SC deemed the criteria for selection of companies based on a strong financial performance as reflected by a positive profit and loss account for the last two years deemed difficult for local enterprises especially for those in the edible oil category. It was agreed that the criteria for a positive Net Asset Value should be sufficient for the edible oil SME category. Furthermore it was decided that the criterion concerning the number of employees should have some flexibility and adequate mechanism to include casual workers, as part of the staff complement of the targeted SMEs.

It was further agreed that the TIUMP’s sectoral scope should be flexible and adapted as required in view of intervening changes and modifications subject to the approval of the Steering Committee. A decision was also reached that until such a time (within the next two years) when the MITI is able to accommodate the respective budget for the staffing needs, the Chief Technical Advisor (CTA) will directly manage the Unit and the project activities in close cooperation and coordination with the Ministry (including relations with the Steering Committee) and TIRDO. The responsibilities of the CTA were to include the identification of the future head of the unit.

In the context of the sunflower oil cluster development in Dodoma, the financial contribution made by members of the cluster for the acquisition of joint industrial land (more than Tsh. 70 million has been contributed for the acquisition of 30 hectares of industrial land) is a clear indication that there is a sense of strong ownership of the project by the members of the Joint Company. At the meeting in Chamwino district, the local authorities indicated that the lack of basic infrastructure (electricity, water, access road) at the allocated Industrial land that has delayed the development of the industrial park was being addressed.
Efficiency

**Key Evaluation Question:** How well did the various activities transform the available resources into the intended results in terms of quantity, quality and timeliness as compared to what was initially planned?

The mix of programmed inputs during the pilot phase (i.e. short and long-term technical assistance, equipment, training, methodologies, etc.) was adequate. The TIUMP can be credited for having mobilised a pool of highly qualified and experienced international experts combining knowledge in market intelligence, financial management, resource/energy efficiency, engineering, etc. with practical skills in specific manufacturing sectors, methodological, technical and information support for the implementation of the pilot phase.

One of the key challenges of the Project stems from the fact that the TIUMP was allocated an initial estimated budget of US$ 1.9 million with part of it not being initially secured and thus had to be mobilised over the duration of the Project. As of December 2014, about US$ 1.25 million had been mobilised and spent from the estimated budget. Furthermore, financial records received from the UNIDO project manager indicated that by December 2015 expenditures would reach US$ 1.45 million. Given both the size of the Tanzanian economy and in comparison with budgets available for industrial upgrading and modernization in other countries on the continent. This budget can be considered as modest even for a pilot project.

Several stakeholders and beneficiaries reported that the insufficient level of resources of the TIUMP gave the impression that the project was too thinly spread on the ground. Many beneficiaries voiced their appreciation for quality of the assistance provided but at the same time they expressed the opinion that greater support from the TIUMP in terms of coaching and mentoring in respect of the implementation of their upgrading plans would have been more beneficial. For the SMEs, this includes assistance in accessing bank loans particularly as concerned the acquisition of the required equipment deemed necessary for their growth.

It would appear that in view of the ambitious results expected from the TIUMP more resources should have been mobilised and availed to the project. In spite of the foregoing, the majority of the beneficiaries and stakeholders expressed the views that the technical inputs and services were delivered with a good level of professionalism and competence.

In order to ensure an effective coordination of the pilot upgrading activities with the national counterpart and to prepare a firm base for sustaining the upgrading momentum across the industrial sector of Tanzania in the long-term, it has been foreseen from the onset that the funding of UUT activities including the staff charges will be taken up by the MITI after the first two years of the project implementation. A direct consequence of the MITI not being able to meet its obligation in this regard has meant that some funding that could have been allocated for project activities had to be diverted to financing part of the running costs of the UUT. It is worth highlighting again though that the UUT has been established at the TIRDO premises as a host institution through the provision of office facilities with basic office communication infrastructure (power supply).

To date the main challenge to the efficiency of the TIUMP’s intervention stems from the unpredictability of disbursements from the “One Fund”. This has meant for instance that the realisation of the planned procurement of equipment for TEMDO and TIRDO was only possible in 2015. Overall, the strengthening
of these two institutions calls for resources over and beyond what is available to the TIUMP. Since 2014 when UNIDO availed additional funds to the TIUMP it has been attempting to catch up on the procurement of equipment and coaching sessions. However, Government’s limited allocation of funds to the two institutions will continue to remain an issue in the short to medium term.

The financial analysis of the TIUMP is somewhat constrained by the fact that the budget of the Project does not fully reflect the expenditure of funds for activities planned and undertaken including trainings, study tours, etc. In this respect it is noted a total amount of USD$ 45,529.62 was spent on the following activities: (i) introductory trainings on industrial upgrading and modernization for 50 national experts; (ii) study tour for high level officials of the MITI; and (iii) the organisation and holding of four Steering Committee meetings.

The practical training and coaching activities were undertaken by UNIDO International experts assisted by national experts during their field missions. Thus expenditures in this regard were included in the fees of the experts. As such, the project budget lines do not fully reflect the actual expenditure incurred in implementing the capacity building activities.

It is in respect in particular to the Dodoma cluster initiative that the TIUMP recorded its most efficient interventions, which can serve as a model for the development of other clusters in oil and other crop processing for small and micro enterprises. In particular, the coaching and mentoring of CEZOSOPA enabled it to establish trust between members and made possible the following achievements:

- The consolidation of the CEZOSOPA’s association (constitution, etc.);
- The establishment of a permanent office in collaboration with SIDO has helped ease communication among members and stakeholders of CEZOSOPA;
- The recruitment of a full-time local food technologist whose salary the association pays for and who is at the disposal of all the association members has helped to bridge the knowledge gap between them and the regulators. This technologist has been instrumental in correctly interpreting the regulatory requirements and translating them for easy understanding by the concerned entrepreneurs, the majority of whom have a relatively low level of education;
- The TIUMP has demonstrated the possibility of co-sharing both a mini-laboratory and expertise availed by the Cluster Development Agent (CDA) in addition to the food technologist. The need to set up a complete set of laboratory equipment for the analysis of sunflower oil as per regulatory requirements does continue to limit the capacity of the mini-common laboratory to serve fully the needs of CEZOSOPA’s members. At the time of the Mid-term Evaluation, additional equipment was being acquired through the DANIDA project “Local Investment Climate” with the CDA assisting the process.
- The introduction of a low-cost semi-refinery technology (degumming and neutralisation) locally manufactured by VETA in Dodoma with the assistance of a UNIDO expert from Ethiopia and an Engineer from TEMDO was a very cost-efficient solution that lead to an improvement in the quality of the sunflower oil, and an increase in sales and income for the processors. The results of the tests of the refining process were found to be within the acceptable range of refining loss (i.e. 4.2% against a standard refinery loss of 4-8%) using a fair level of inputs consumption such as electric power, table salt, caustic soda and water. However, the refinery has been designed for the production of 1000 litres of sunflower oil per batch and; two/three batches per day. After testing the two prototype refineries recorded a production process that lasted 18 hours, which does not allow the expected two batches per day. Solutions are currently being investigated to reach the output target of at least two batches per day.
Effectiveness

**Key Evaluation Questions:** To what extent were the Project results attained and used? What difference did the pilot project results make to the operations of the targeted beneficiaries?

The key evaluation questions answered in this section relate to the effectiveness of the support provided. The assessment is carried out through several judgement criteria that investigate respectively the progress in each result area namely: (i) Industry support institutions assisted in order to establish and strengthen business and technical service centres for selected sectors; (ii) Upgrading Unit Tanzania (UUT) established with the required technical and managerial tools and equipment; (iii) Selected manufacturing SMEs and industrial enterprises in the priority sectors diagnosed in conformity with upgrading processes including reviews of business plans; and (iv) Priority SMEs supported and promoted (with possibility of development of export consortia).

Under the thematic of effectiveness, the evaluation is centred on investigating whether the purpose of the TIUMP is being achieved. The aim is to seek to establish to what extent the project’s results were attained, and the specific objective(s) achieved, or are still expected to be reached.

While assessing the effectiveness of the TIUMP, it has to be acknowledged that technical assistance outputs being intangible, they might only be identifiable through indirect indicators. These outputs may be indistinguishable from outputs of other projects and initiatives making it difficult to gauge the specific impact of any particular project.

**In respect of its Output 1: Industry support institutions assisted in order to establish and strengthen business and technical service centres for selected sectors; the evaluation mission was able to make the following observations:**

Under the TIUMP, diagnosis of the technical capacities of the two Industry support organisations (i.e. TEMDO and TIRDO) identified during the inception phase was carried out and upgrading plans were produced as early as August 2012. In both cases, the goal was to strengthen their institutional and operational capacities so they could better respond to the needs of the manufacturing enterprises. Besides finding the two institutions virtually bankrupt in 2012 based on strict commercial standards, the diagnosis reports listed in both cases several areas in which support was needed if these institutions were to become effective. As part of the upgrading plan for the two institutions, UNIDO is expected to contribute technical assistance in several areas among other inputs. Due to TEMDO and TIRDO’s budgetary constraints the majority of these activities (i.e. training in market research methodologies, marketing, sales, business plan development and support in the areas of financial department and introduction of a new and updated costing and cost control systems, introduction of profit centres, setting up of an integrative consultancy unit, etc.) which would have contributed to the turn-around strategy of the two institutions were not carried out. Business plans for identified Proximate Analysis (food nutritional information) have been established for TIRDO. In addition, the procurement of Computer aided Design (CAD) and ICT equipment for TEMDO has been initiated and training is on-going.
The process of strengthening the capacity of both institutions continues through coaching and training on managerial and technical diagnosis and the implementation of priority actions and projects. Two national experts from the two institutions have been involved in the diagnosis and production activities for beneficiary enterprises and institutions. Other achievements observed are as follows:

(i) the design, production and commissioning of the sunflower oil semi-refinery prototype at VETA Dodoma. In particular, the involvement of experts from VETA and TEMDO in the design, production and commissioning of the prototype of a simple effective and affordable sunflower semi-refinery in cooperation with a UNIDO expert from Ethiopia illustrated a successful process of South-South technology transfer, using only locally available materials. At the time of the Evaluation, TEMDO was found to be working on fine tuning the initial design of the semi-refinery in order to augment its capacity and improve the operational efficiency to suit the processors requirement (i.e. 2-5 tons per batch/per day capacity against the initial one ton per batch/day);

(ii) the training of a staff member of TIRDO as a Trainer by the TIUMP who has since been able to share his skills with several of his colleagues;

(iii) the diagnosis of five agro food SMEs;

(iv) the planning for the implementation of the SECO project. For details of this project, please refer to the section on “Project management and 3C (coherence, coordination and complementarity)” below.

The limited budgetary resources available to the ISOs did not allow for the full implementation of the actions identified to significantly strengthen TIRDO and TEMDO (TIUMP’s Output 1). However, even though the TIUMP itself was resource constrained, to effectively strengthen the targeted business and technical service centres (BTSC) within the industry support institutions it is evident that a capacity strengthening process is underway. The good quality of the diagnosis and upgrading plans prepared for TIRDO and TEMDO have significantly contributed to the raising of awareness as to the needs and issues that should be addressed to ensure that these two institutions are in the medium term capable of delivering quality services to the enterprises in Tanzania in line with their mandates. In addition to its assistance to TIRDO and TEMDO it has to be noted that the TIUMP initiated contact and exchanges with the Tanzania Commission for Science and Technology (COSTECH) whose main function is to advise, coordinate and promote R&D and S&T in Tanzania. The aim is to collaborate in technology upgrading and technology transfer to SMEs.

In all, 50 national experts were trained on industrial upgrading methodologies. These included 10 experts from five Industrial Support Organisations (SIDO, TBS, TCCIA, TEMDO and TIRDO), three members of the Steering Committee, and free-lance consultants. According to the post-training survey of trainees, 63% of participants reported they were satisfied with the training opportunity availed to them while 22% reported being very satisfied. Out of the free-lance consultants trained, seven have reported to be relatively active. Some of the trained consultants are being involved in diagnosis and coaching under TIUMP. A handful of experts are now applying the UNIDO methodology to offer services to industries independently from the TIUMP. Of particular note is that one of the trained consultants has since assumed the position of an effective Cluster Development Agent (CDA) for the sunflower oil
cluster in Dodoma. There would have been a case of scaling-up the initial training provided beyond the relatively generic introduction to the methodology of up-grading. This move would have been consistent with the approach of training consultants and using their enhanced capacities in the context of any industrial upgrading programme. This is a complicated and lengthy process yet it is one that is crucial for ensuring effectiveness and sustainability\(^6\).

**In respect of its Output 2: Upgrading Unit Tanzania (UUT) established with the required technical and managerial tools and equipment; the review evaluation found that:**

The Upgrading Unit Tanzania (UUT) has been established and is operational in the premises of TIRDO, under the MITI. The tools developed to date include: standard operational procedure for UUT operations, application forms, brochures for TIUMP presentation, a diagnosis and upgrading plan template, a data base for identified SMEs, M&E framework, consultants and other stake holders, training material for consultants and various reporting formats. Monitoring and evaluation information are regularly collected. A SC was set up from the onset. The number of SC members has been increased twice to cater for stakeholders that were deemed relevant to the oversight of the effective implementation of the TIUMP. Overall the TIUMP’s Unit and the staff complement posted at Dodoma appear to be fully operational and their deliverables are well appreciated by the stakeholders and beneficiaries concerned.

Some of the shortcomings of the TIUMP are related to the delay in appointing the full complement of staff members (i.e. financial analyst and a Head of Unit). As the result of this situation the CTA has been playing the role of Head of Unit, which was recently assumed by the technologist on an acting basis. It was planned that that the staff complement in secondment from the MITI would be funded from the Ministry’s budget. Due to the inability of the MITI to mobilise the required budgetary resources in line with this initial commitment, the timeline for this undertaking was initially extended to two years and more recently to three. Unless bold moves are made by the MITI, it is unlikely that the Ministry will be able to mobilise in the immediate future the required budgetary resources for this undertaking. Undoubtedly, this is a critical issue in view of the future roll-out phase of the TIUMP.

**In respect of its Outputs: (3) Selected manufacturing SMEs and industrial enterprises in the priority sectors diagnosed in conformity with upgrading processes including reviews of business plans; and (4) Priority SMEs supported and promoted (with possibility of development of export consortia), the review established that:**

During its first seating, the SC amended and adopted the TIUMP’s eligibility criteria for the priority sectors determined by MITI. This was in recognition of the reality that only a few SMEs would meet the more classical upgrading eligibility criteria. Following this diagnosis activities were initiated for most of the beneficiaries: five SMEs from the dairy sector; 10 SMEs in the oil sector (this comprises a medium-sized company in Arusha and eight micro-enterprises members of CEZOSOPA in Dodoma and one micro-enterprise in Iringa); two tomato processing companies and two milling companies. For the small

---

\(^6\) Thematic Evaluation of UNIDO projects related to “Industrial Upgrading” UNIDO 2013
sunflower oil crushers in Dodoma, the tool used under the pilot project successfully combined the classical upgrading methodology with the cluster approach to ensure economies of scale. This Evaluation has noted that the support of the TIUMP to the Dodoma Oil Cluster (DOC) was not planned as such in the initial project document. This action was later included at the request of the MITI and was motivated by the lack of medium enterprises in sunflower oil processing. It is important to bear in mind that one of the Government’s priorities is to reduce the large volume of imported palm oil, which accounts for the second largest import in terms of foreign exchange after petroleum products.

Whereas the project document initially targeted 15 SMEs, a total of 19 SMEs in dairy, edible oil and food processing sectors were coached for implementation of specific upgrading actions. The outcome was an overall improved business performance by these both in terms of cost and quality as illustrated in the table below. The data used in the table are derived from the project files including: the application form completed by the MSMEs, the diagnosis reports and business plans of the beneficiary enterprises and the monitoring questionnaire completed by year end.

<table>
<thead>
<tr>
<th>KEY INDICATORS</th>
<th>2012 BASELINE</th>
<th>2014 MILESTONE</th>
<th>CHANGE IN %</th>
<th>SPECIFIC MEANS/ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURNOVER (in 000US$)</td>
<td>$34,570,520</td>
<td>$47,781,457</td>
<td>+38%</td>
<td>Increased capacity (two new plants) enhanced production, maintenance and marketing</td>
</tr>
<tr>
<td>OPERATING MARGIN</td>
<td>-7.40%</td>
<td>16%</td>
<td>+23.4%</td>
<td>Better utilisation of capacity Reduction of losses</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>790</td>
<td>822</td>
<td>+4%</td>
<td>Increased ratio of qualified people</td>
</tr>
<tr>
<td>CAPACITY UTILISATION</td>
<td>28%</td>
<td>76%</td>
<td>48 percentage points</td>
<td>Improved products and sales</td>
</tr>
<tr>
<td>WASTE LOSSES REDUCTION</td>
<td>5% in meal cake 4% raw milk</td>
<td>2% in meal cake 2% raw milk</td>
<td>-3 percentage points -2 percentage points</td>
<td>Maintenance, improved handling, piping, better cleaning</td>
</tr>
<tr>
<td>SHARE OF EXPORTS IN TOTAL SALES</td>
<td>15%</td>
<td>20%</td>
<td>+5 percentage points</td>
<td>With two main companies doubling exports</td>
</tr>
<tr>
<td>REGIONAL EXPORTS</td>
<td>$5,185,578</td>
<td>$9,556,291</td>
<td>84%</td>
<td></td>
</tr>
<tr>
<td>(% OF SALES)</td>
<td>15%</td>
<td>20%</td>
<td>+5 percentage</td>
<td></td>
</tr>
</tbody>
</table>
## KEY INDICATORS

<table>
<thead>
<tr>
<th>LOCAL MARKET</th>
<th>2012 BASELINE</th>
<th>2014 MILESTONE</th>
<th>CHANGE IN %</th>
<th>SPECIFIC MEANS/ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$29,384,942</td>
<td>$38,225,165</td>
<td>+30%</td>
<td>points</td>
</tr>
</tbody>
</table>

*Source: Compiled based on TIUMP Monitoring and Evaluation System*

Out of the four dairy companies selected, three were ably coached and implemented at least part of their upgrading plan. Two companies needed financing for hard upgrading to reach expected results. One company for which a diagnosis for a technical turnaround plan had been drafted in 2013 had to close down due to financial difficulties. It would appear that the assistance this company required at the time was financial restructuring, which was not part of the TIUMP. The coaching of a medium enterprise in Arusha enabled it to reduce the solvent extraction losses. Moreover, through the upgrading plan, this company realised the need for setting up a better-equipped laboratory.

As part of the support to the Dodoma cluster, the commissioning of the semi-refinery prototype gave the opportunity to showcase the process through which semi-refined sunflower oil can be produced thereby adding value to crude sunflower oil. To date, seven more crushers are reported as being willing to acquire the semi-refinery equipment while more than 15 are willing to participate in DSOC. It would appear that consumers in Dodoma are expressing a good level of demand for the semi-refined oil. This being said, a critical issue that needs to be addressed is the one pertaining to testing of samples taken by TBS in order for the refined oil to obtain the certification of TBS. At the time of this Mid-review, six weeks after the collection of samples, the enterprises concerned were still awaiting the results from TBS. The Review team raised this issue with both the TBS and the PS in MITI. TBS had committed to expedite its decision on this matter.

Overall, even though there have been some documented approaches of financial institutions by some of the beneficiary SMEs with some support from the TIUMP (i.e. Roots Capital, TIB, etc...) difficulties in accessing to finance has been reported by virtually all the enterprises interviewed. It has already been noted that the TIUMP did not include in its project document any action to address this critical dimension of SME access to finance. This is a major constraint to the upgrading and development of SMEs (i.e. lack of guaranty scheme, equity capital, etc.). The evaluation found that many beneficiary SMEs would have turned out higher performances if the issue of access to finance including working capital had systematically and fully been addressed. In the context of Tanzania, which has an interest rate at 22%, one cannot but agree with suggestions that the private sector in general and the SMEs in particular are being crowded out by the public sector through its issuance of large stocks of bonds and treasury bills.

It is a positive move that discussion was facilitated by the TIUMP with financing institutions including the Private Agriculture Sector Support Trust (PASS), the National Micro Finance Bank (NMB) and Tanzania Warehouse Board who have shown interest to finance CEZOSOPA’s investments being considered by

---

7 In 2016, TBS certified the refined oil of two SMEs using the UNIDO developed equipment.
CEZOSOPA. Furthermore a round table meeting to present the roll-out program to potential development partners is being planned under the project.

Impact and Sustainability of Project Outcomes

The analysis has been carried out against the overall objective of the Project. Under this section the aspect of sustainability is reviewed. Specifically, the likelihood of positive results continuing to be achieved beyond the life time of the TIUMP and the subsequent impact on the industrial structures and development objectives of Tanzania was examined. The analysis is completed by the review of cross-cutting issues.

Impact

**Key Evaluation Question:** Are the wider effects of the TIUMP being or likely to be achieved?

Currently agriculture (including dairy) contributes to the livelihood of more than 80% of the Tanzanian population of 48 million. The production of dairy products and sunflower oil represents activities in which Tanzania has great potential. This is confirmed by various studies and planning or policy documents. With respect to dairy products, the East Africa Dairy Development Project (EADD) is a five year regional industry development programme whose main objective is to sustainably improve livelihoods of 35,000 smallholder farmers through a competitive and inclusive industry in Tanzania. In order to understand the status of the dairy industry and develop a nationwide strategy for this sub-sector, a market study was commissioned under the EADD, the results of which were presented to stakeholders in September 2015. The reading of the report indicates that local milk production is estimated at 2.06 billion litres per year with milk consumed at the farm level accounting for about 90% of the total. Only about 10% then of total milk production is marketed out of which 80% is traded informally with only 20% going through formal markets. Furthermore, national average per capita milk consumption was found to stand at 47 litres per annum, which is way below the FAO/WHO recommendation of 200 litres annually.

The dairy sector accounts for 30% of the livestock sector’s 4.4% contribution to GDP. Even though they are considerably more expensive than locally produced products, imported dairy products dominate sales in supermarkets and some smaller grocery stores. This is partly attributed to the prevailing low supply and poor quality of local dairy products and deficiencies in packaging. It is hence evident that there are opportunities for any processor to expand to be the market leader in any of the dairy product categories given the huge potential for dairy production and markets in Tanzania. The results of the TIUMP and its impact in respect of the support of the dairy sector have to be assessed in this light. In particular it is clear that the TIUMP, through its achievements as pilot project, has demonstrated that in the context of a well-funded roll-out programme the potential of industrial modernisation and upgrading is huge for value addition, employment, food security and poverty reduction in Tanzania if there was more support by the Government to upgrade the entire dairy sector.
Thanks to the well-appreciated support provided by the TIUMP through the Tanzanian CDA recruited under the project, CEZOSOPA has improved its capacity and visibility to serve its members. The common mini-laboratory is operational and the skilful food technologist is assisting members in the process of meeting established quality standards. Nevertheless, more equipment is still required for the current mini-laboratory to meet the standards set by TBS. Furthermore a joint company owned by the 23 cluster SMEs has been formed under the name “Chamwino Sunflower Co. Ltd” and was duly registered on 6 July 2015. This company will specialise in implementing joint activities such as common storage, repair and maintenance, refining and marketing. The industrial park from where the Joint Company (JC) will operate is being developed. This will make it possible for the members to invest in common facilities such as refineries, storage of sunflower seeds, cleaning, packaging, fortification and joint marketing actions.

During the commissioning event of the semi refinery prototype in May 2014, the MITI emphasised the developmental impact of the interventions of UNIDO. The Deputy Minister specifically underscored the multiplier effect of the TIUMP’s intervention as it allows replication of the successful practices through the sharing of technology and know-how in a transparent manner. The interventions have already had a positive impact on the farmers through the establishment of contract farming arrangements which are meant to provide the necessary signals and incentives for the supply in the short to medium term of good quality sunflower seeds to meet an increasing demand from the upgraded crushers. It is telling that the MITI has already requested the TIUMP to replicate the successful experience of the Dodoma cluster in the Singida region.

“Supporting India’s Trade Preferences for Africa” (SITA) is a project for 2015-2020 funded by DFID for four east African countries including Tanzania in order to promote trade, enhance investments, partnership, transfer of knowledge, expertise and technology between India and the beneficiary countries. DFID mandated the International Trade Centre (ITC) to design and implement the SITA under which, among other commodities, sunflower oil has been identified as a potential major export product for Tanzania to India.

The TIUMP’s actions and achievement in the sunflower oil processing sector, both with the Dodoma oil Cluster and with a medium sized enterprise convinced the ITC team to identify UNIDO/IUMP as a potential partner in the SITA project. Consequently, the CTA/TIUMP was invited to participate in a need assessment mission in Tanzania as well as in three Partnership Platform meetings in Nairobi, Kigali and Addis Ababa.

As part of the “Sunflower Oil Value Chain Strategy” for Tanzania, the stakeholders concerned are discussing a draft Plan of Action (PoA). Among others, these stakeholders include the TIUMP’s CDA and CEZOSOPA’s Chairperson. Several relevant actions are being crafted under the strategic objectives being considered which include:

**Strategic Objective 1**: To increase productivity and production levels of sunflower through the adoption of modern production techniques to meet national and international demand.

**Strategic Objective 2**: The professionalization of the sunflower sector through strengthened coordination, institutions, and skills across the value chain. Under this objective it is being proposed to
strengthen advocacy for the sunflower sector to stimulate a better working policy environment. In this regard an urgent activity would be the review of the 2014 VAT policy targeted taxation of large enterprises, which creates an unfair playing field in favour of smaller operators that do not pay VAT. This bias is being singled out because of its tendency to encourage firms to remain small rather than promote growth. In addition, the commissioning of an impact analysis of palm oil imports on consumers and their health as well as on production and employment effects in Tanzania is under consideration. The aim is to inform the National Trade Policy which is currently under review.

**Strategic Objective 3:** To improve quality by complying with national and international standards and ensuring adherence to good agricultural and manufacturing practices.

**Strategic Objective 4:** To stimulate the sunflower sector’s growth by implementing coherent and supportive policies in line with the national development objectives.

**Strategic Objective 5:** To provide accurate market entry support for effective market development. Under this objective the promotion of collective marketing and production of sunflower through the adoption of UNIDO cluster model implemented in Dodoma is being considered.

Through the Project to date, a number of training and coaching sessions have been provided to the cluster members at Dodoma. These include good manufacturing practices, financial management and record keeping, business plan preparation and implementation. In addition to the group trainings, the Project has provided close guidance to nine enterprises in relation to drafting upgrading plans for eight cluster-based SMEs and support to three individual cluster-member SMEs to prepare loan/grant applications. As already reported above, 20 CEZOSOPA members have contributed more than Tsh. 23 million shillings for the establishment the Chamwino industrial park and part of which was used for joint acquisition of land for Chamwino industrial park. CEZOSOPA, which was previously being managed from the Chairperson’s factory premises, has since established an office with a permanent address at SIDO premises. The successful introduction of the affordable sunflower oil semi-refinery technology and the establishment of a common laboratory facility equipped with basic edible oil analysis equipment have all contributed to the developmental objective of the TIUMP.

Throughout its interventions the TIUMP has demonstrated significant results and impact at its beneficiary level over 2012-2014. This is evidenced by the following records: 38% increase in turnover; capacity utilisation increasing from 28% to 76% and growth in employment by 4%. In view of its achievements to date it is clear that the TIUMP has been able to demonstrate a tangible impact in contributing to un-locking the economic potential of Tanzania including in the rural segment of the economy. The Project has demonstrated, albeit as a pilot undertaking and hence on a limited basis, it’s potential to leverage private sector growth and investment by the beneficiary MSMEs. For the macro-economic impact of the TIUMP to be fully realised it would have been necessary that more resources be allocated to the Project. It is only under this scenario that its impact in terms of poverty reduction can be more significant.
As already alluded to earlier in the report, it is to be acknowledged that other developments did certainly contribute to the impressive results at the level of the assisted enterprises. This is a key assumption as it would not have been possible to measure exactly how the TIUMP precisely impacted the change at the level of the beneficiary enterprises. For these reasons it had to be factored in the realistic fact that the beneficiary enterprises continued their own process of development. In any event, it would have been unrealistic to assume that the concerned enterprises would discontinue all of their other actions. In that theoretical scenario, the measurement of impact of the TIUMP would have been more straightforward. This being stated, it can be argued that the actions implemented, starting from the diagnosis and the coaching for the implementation of priority actions, has to be viewed in a holistic managerial intervention leading to transfer of knowledge in specific domains which benefit the entire enterprise and thereby contribute to improving their competitiveness.

As far as the project’s selected sectors are concerned, the industrial policy and context did not record any major new policy decision during the TIUMP’s implementation period. This is despite the fact that different requests were made by the association of industry operators in respect to the review of the rate of VAT and calls for market protection measures, etc.

Sustainability

| Key Evaluation Questions: Would the outcomes of the TIUMP continue after the end of the Project and provide longer term benefits? Which are the developmental changes brought about by the TIUMP and how far are they sustainable? |

Sustainability was identified as a key factor of success in the Project document. As it turns out the failure by MITI to mobilise the necessary resources for the employment of the staff complement required for a full-fledged UUT is to be deplored. This situation raises the question of sustainability in view of the fact that the trained professional staff complement of the UUT is limited to the technologist. This being said it has to be acknowledged that the Ministry did provide all the other required support. Now that the constitutional reviews and the elections are out of the way, expectations are more positive regarding MITI in terms of it being in a better position to convince the Ministry of Finance and Planning of the need to allocate budgetary resources to the TIUMP. This would indeed constitute a key indicator of ownership and commitment to the success of upgrading and industrial modernisation in Tanzania. Prospects for sustainability of the interventions are also good in view of the choices made in terms of institutional capacity building, sectors of interventions and the spread of SMEs that have been supported. These would be greatly enhanced under the roll-out programme if the Government were to allocate more budgetary resources to industrial upgrading and modernising in Tanzania.

Due to the limited resources budgeted and disbursed under the TIUMP for a country the size of Tanzania, it was not possible for the evaluation mission to establish if or to what extent the TIUMP did have indirect effects, in particular on firms and private BDS providers that were not directly supported. This is despite the fact that the TIUMP developed a good M&E and reporting system that allows the Project’s Unit and stakeholders to monitor results and impacts based on clearly identified baseline data.
As far as the promotion of the private sector is concerned, there is enough evidence to conclude that the TIUMP fits in well with the drive for private sector development in Tanzania. This is notwithstanding the Project’s relatively limited budget and outreach platform. As concerns sustainability, it is unfortunate that more attention was not given to the issue of access to finance by the beneficiary SMEs already at the Project inception phase. Almost all beneficiaries consulted have expressed the opinion that while being grateful for the support provided, they would have liked to have benefited more from the TIUMP. These remarks were consistently made by the SMEs, TIRDO and TEMDO and the MITI.

Considering that the TIUMP is at its pilot phase with relatively limited resources it is not exaggerated to state that the Project has demonstrated its capacity and a satisfactory methodological approach to industrial upgrading to address production and market issues. Given the existing demand from the SME and industry support organisations, it can be deduced that with additional resources, the results achieved thus far could be replicated to achieve a greater impact through employment and income generation and finally poverty reduction. This has been made the most evident in the interventions in support of sunflower oil and dairy production.

**Cross-Cutting Issues**

**Key Evaluation Question:** Are cross-cutting issues (environment, gender, etc.) integrated into the TIUMP’s implementation?

The relatively larger industries (i.e. dairy, fruits and vegetables and sunflower oil) visited during the field phase of the evaluation were observed to have a satisfactory working environment where hygienic standards were adhered to. The industrial premises were designed in such a way that, there is no air pollution from boilers and oil/water spillage from the pipes. The industries had adequate extinguishers for controlling possible fires in the premises. There was enough water for food processing and cleaning to maintain hygienic processing standards as required by the TFDA.

Contrary to the situation of the larger industries, several of the CEZOSOPA oil producers where seen as facing environmental issues since most are currently operating in residential areas. These issues should be addressed through the relocation of the concerned plants in the short term to the Chamwino industrial park. Indeed most of the small sunflower oil entrepreneurs have indicated their eagerness to move their production lines to this industrial site. Some of the entrepreneurs have already purchased a piece of land in the park where there are assured to have the opportunity to improve the conditions under which they currently operate.

The majority of MSMEs visited during the field visit appear to integrate gender issues into their business development plans. At the outset, even though the project did not integrate gender issue at the design stage, the TIUMP made sure to target at least a few women-owned MSMEs in its clientele. Some of the entrepreneurs even claimed that their female employees have a higher level of productivity than their male counterparts. In particular, women farmers were reported as showing a relatively higher level of commitment and efficiency in utilization of funds provided for sunflower seed growing. Invariably, men workers are preferred when it comes to operating industrial machines and carrying out maintenance
tasks. On the floor of the majority of industries visited, women comprised the majority of workers involved in tasks such as sorting seeds, cleaning, processing and packing. The position of food technician was almost the preserve of women.

**Project management and 3C: Coherence, Coordination and Complementarity**

This section deals with management and coordination issues. Due regard is accorded to the optimization and the capacity to adjust the interventions of the Project to its changing environment. Synergy aspects are addressed in relation to other UNIDO activities. In addition, complementarity with other development partners programmes is investigated.

**Project management**

**Key Evaluation Questions:** How effective has the management of the TIUMP been so far? To what extent has the Project been designed and implemented so as to be consistent with changes in the project environment?

The Upgrading Unit Tanzania (UUT) project management unit was established from the onset of the Project. It has been staffed by the CTA, who has acted as the Head of the UUT, a technologist, an assistant and a driver. The foreseen complement of staff (i.e. a financial analyst and a substantive Head of Unit) has yet to be recruited. Reasons for this stem from the un-availability of budgetary allocations from the MITI. The Evaluation found that barring the above shortcoming, the UUT is equipped with the required managerial and operational skills and tools for the management and follow-up of the Industrial Upgrading and Modernization Programme in Tanzania (TIUMP).

Further to its establishment, the TIUMP’s Steering Committee held its first meeting on 12 April 2012, three months after the start of the implementation of the Project. As recorded in its minutes, a set of key decisions (i.e. approval of the rules and procedures and the agreement on the priority sectors and the eligibility criteria for manufacturing enterprises that will participate in the Project) was made during their first meeting. The membership of the SC has since been expanded to include representatives of other key organisations (i.e. planning commission, TIRDO, and TBS) and as such is now comprised of all of the concerned stakeholders of industrial modernisation and upgrading in Tanzania. By the time of this Mid-term Evaluation, the SC had met four times which is roughly once yearly as was foreseen at the inception of the Project. In order to specifically deal with the Dodoma cluster initiative it has been decided that a regional SC will be set up. The membership of the latter will include all the players in the public, private, academia, research and development partners. Of noteworthy is the decision to include representatives of the local government in the regional SC.

The TIUMP has integrated monitoring and self-evaluation activities as an integral part of the Project implementation plan as can be seen from the reports produced and submitted to the SC. These have informed decision-making based on verifiable indicators of outputs and outcomes. Adaptive management was observed as is evidenced by the review and adoption of new selection criteria for
beneficiaries and the use of an operational approach of the TIUMP that successfully combined cluster and upgrading tools. During the implementation of the TIUMP, all changes made in the planning documents have been submitted and approved by the SC. The perusal of the minutes of the SC meetings held so far indicate that the Committee has been able to provide the necessary guidance and oversight to the successful implementation of the TIUMP.

Management from UNIDO HQ and backup services including coordination, quality control and technical inputs were found to have facilitated in a timely fashion the implementation of the TIUMP in spite of unpredictable disbursements from the One Fund, which constituted a major challenge. The attendance by an important delegation from UNIDO HQ alongside the Deputy Minister of MITI of the commissioning event of the prototype of semi refinery in Dodoma in May 2014 was a sign of commitment and partnership in the context of the TIUMP.

Coordination and Complementarity

**Key Evaluation Questions**: To what extent has the TIUMP been designed and implemented so as to be consistent with the different assistance deployed by UNIDO, the other UN Agencies and development partners active in Tanzania to complement them and to what extent were these interventions coordinated?

The SECO Project Tanzania (SAP ID 120104) is a joint ILO-ITC-UNCTAD-UNIDO initiative aimed at increasing the production capacities of horticulture producers and the supply of high value agro-products and establish linkages with the tourism industry. Under the TIUMP, complementary interventions were developed with the PTC/TCB’s SECO/UN Trade Cluster. Through the provision of coaching, the TIUMP enabled TIRDO staff to deliver the required technical services to horticultural processing SMEs and TEMDO was involved in the design of the semi-refinery. In particular, TIRDO experts in the food industry were involved alongside UNIDO’s International experts in diagnoses and coaching missions of food processing SME’s. Through these training sessions, several local experts were able to gain hands on experience in their respective fields.

The TIUMP attempted to establish close collaboration with the UNIDO’s Subcontracting and Partnership Exchange (SPX) of the BiT’s Investment and Technology Promotion Unit (PTC/BiT/ITU) Project in the field. In particular, the TIUMP availed information to the latter in terms of company profiles, identification of potential suppliers to enterprises identified for the upgrading, etc. Actual opportunities for complementary actions between the two projects were rather limited due to the nature of the companies) assisted under the SPX project (i.e. metal-work, machine and spare-part building, engineering, etc.)

In the context of the assistance to the small sunflower crushers at the Dodoma Oil Cluster, the TIUMP made a deliberate move to integrate UNIDO’s Upgrading and Networking approaches (Cluster approach of BiT’s Cluster and Business Linkage (PTC/BiT/CBL). Furthermore, the interventions in Dodoma capitalized on the experience of the UNIDO intervention in Ethiopia (joint project of UNIDO’s
In pursuance of the UN Country Management Team’s recommendations, a UN Joint Programme on Youth Employment was formulated under the UNDAP 2011-2016 to revamp efforts for the One Fund resource mobilization and to align current UNDAP efforts with Government priorities. This move succeeded in drawing interest from some donors, and SIDA signed an agreement on 22 October 2014 allocating 30 Million SEK to this new initiative. Four of the UN Agencies, namely: ILO as Lead/Coordinator, UNIDO, FAO and UNWOMEN, are participating in this intervention. The component that will be managed under the TIUMP will be implemented in close collaboration with the MITI, the Ministry of Agriculture Food Security and Cooperatives (MAFSC) and the Ministry of Livestock Development and Fisheries (MLDF). Most of the SMEs that have benefited from the TIUMP have already indicated that they are willing and prepared to accept some of the young professionals for job placements.

The Evaluation noted that UNIDO manages 18 projects in Tanzania which are listed under Annex 4. The areas of intervention include: Industrial Policy Capacity Building Industrial, Statistics Capacity Building, Investment Promotion, Value Chain Development (3ADI), Business Information Centres Development Trade Capacity, and Building Cleaner Production for Green Industry and National System of Innovation. As can be deduced from the foregoing list, some of the UNIDO projects in Tanzania share the same beneficiaries, counterparts and contribute to the same overarching objectives as the TIUMP.

In view of the challenges of coordination, complementarity and synergy posed by the large number of projects under the UNIDO Country Programme in Tanzania it was foreseen that a country programme steering committee would be established. Additionally a national programme coordinator recruited by UNIDO will serve as the secretariat to the SC. Importantly it was also foreseen that the national programme coordinator will produce quarterly implementation progress reports that will be reviewed by the SC. The Evaluation found no evidence of the SC having been constituted. Furthermore, as far as the Evaluation team could gather, the coordination between existing UNIDO projects is done on an ad hoc rather than a systematic basis. In view of the potential complementarity amongst several of UNIDO Tanzania’s portfolio of projects there undoubtedly presently exists a case of missed opportunities for more systematic and synergetic interventions.
5. Conclusions and Recommendations

Conclusions

The key conclusion of this mid-term evaluation is that overall the TIUMP is successfully implementing an adapted and need-based industrial upgrading approach. In particular at the local level in Dodoma, this approach mixes IUM interventions and support to cluster development initiatives. The local Joint Investment Company (created with the technical assistance through the TA of the CDA) is working in close collaboration with the Chamwino local authorities to develop an industrial park.

Unlike other more classical upgrading projects that also include subsidies for “hard upgrading”, the interventions carried out at the level of beneficiaries under this pilot project include subsidised support only for a limited list of activities. These are:

- **At the micro-level**: carrying out of diagnostic reviews and drawing-up of upgrading plans, targeted coaching and training and provision of selected technical assistance interventions. In a few cases, the latter includes support in facilitating access to bank loans. No subsidy was provided under the project for the procurement of equipment for the assisted MSMEs.

- **At the meso-level**: (i) implementation of a diagnostic review and the formulation of upgrading plans for TIRDO and TEMDO with targeted support for the implementation of the plans and provision of some equipment by the time of the Mid-Term Evaluation; (ii) building of the prototype oil refinery and the initial procurement of equipment for the CEZOSOPA’s mini-laboratory and (iii) capacity development of BDS consultants through generic training sessions which were not consolidated and up-scaled by more specialized training thereafter. Two of the trained consultants did become fully involved in the implementation of the projects’ activities.

The principal challenges found by the mid-term evaluation pertain to:

- **At the firm level**, the issue of ownership and a demand driven approach: It was found in particular that the larger beneficiary companies often requested assistance much beyond what the TIUMP could offer in view of the Project’s limited resources. Furthermore, in cases where these beneficiaries belong to a group or where the owner has several businesses, their level of adherence to the TIUMP and in particular their readiness to implement the upgrading plan was in most cases dependent on the owner’s business plan. In most cases, the UUT was not made aware of these plans. This conduct was less of an issue with the micro or smaller beneficiaries of the Project. It was found that these latter categories tend to place greater value on the Project’s inputs.

- **The limited budget of the TIUMP has been an issue during implementation which has constrained the Project in so far as its outreach strategy is concerned. In addition, the unpredictability of disbursements from the “One UN Fund” led to delay or a reduced scope in the implementation of certain interventions. It is very clear that given a larger budget, TIUMP’s contributions would have had a greater impact at the micro and meso levels. Many of the
interviewed beneficiaries voiced the opinion that they required interventions whose scope was beyond the Project’s resource endowment.

- The MITI’s inability to mobilise financial resources to cover the salaries of the UUT staff as was planned. This meant that the TIUMP had to divert some funds earmarked for other interventions under the Project for this purpose. It also resulted in the inability of the UUT to recruit its full staff complement and in particular, the financial analyst and the Head of Unit.

- Access to finance has been an issue throughout. Almost all of the beneficiaries consulted during the Evaluation mission confirmed that they were disappointed that their enterprises were unable to secure access to finance, in particular from the banking sector. Indeed, there has hardly been a case of a successful application by an SME with local banks. Some of the TIUMP beneficiaries did manage though to secure loans from developmental financial institutions at concessional rates. This has been in particular the case with some of the CEZOSOPA members. In the case of the Dodoma Joint Investment Company, negotiations are on-going to secure a loan to cover the amount needed for the development of the Industrial park at Chamwino.

- Developing synergy between TIUMP and other complementary UNIDO interventions in Tanzania: the Mid-term review found that complementarity between the pilot Project and other UNIDO projects has not been systematically pursued. Where there has been complementarity and coherence in implementation these have been the results of ad hoc arrangements. It was foreseen within the UNIDO country programme that a national UNIDO steering committee would be set-up. The resulting action would have helped somewhat in respect of coordination and synergy amongst UNIDO’s 18 projects. Indeed, the UNIDO portfolio of national projects includes some which are complementary to the TIUMP and can contribute to a more comprehensive and holistic approach in terms of achieving the overall objective of the UNIDO country programme and thereby that of the UNDAP.

The principal achievements of the TIUMP are as follows:

- The UUT and the SC were established and made operational from the onset of the project. However, since the SC has met on average once a year it can be argued that this arrangement is not optimal in that it did not ensure that members gave their full attention to the TIUMP.

- A set of tangible results were achieved against the baseline situation at the firm level as evidenced by the indicators generated by the M&E tools developed in the context of the Project. These have facilitated the monitoring of the quantitative and qualitative performances of beneficiary firms in terms of production, sales, value added, employment creation and profits. The TIUMP’s tangible results were widely acknowledged and appreciated by the beneficiaries and stakeholders alike.

- Even though the TIUMP has been so far implemented as a pilot project with a relatively small budget, it has incorporated a catalytic focus. The Project was flexible and adaptable enough
such that it has been possible during implementation to experiment with different methods that stressed the demonstrative and replicable nature of the actions undertaken. This has been most evident with the cluster development component. The success of the latter has led the stakeholders including the MITI to request that the Project model be extended to cover other areas in Tanzania including Siginda, Iringa, etc. Furthermore, as the Government’s next five year development plan is currently being designed, the Planning Commission has requested UNIDO to contribute to the formulation of the next national plan which should be centred on industrialisation.

❖ Since TIUMP is due for completion in June 2016, and further to a request made by the MITI, the UUT has formulated a concept note for the roll-out phase of industrial upgrading in Tanzania. The perusal of the concept note informs that the main lessons learned so far from the implementation of the pilot Project have been incorporated in the future programme which will target 80 companies nationwide. In addition, a project fiche has been prepared for a “sustainable and inclusive industrial development approach for the sunflower oil clusters in Tanzania”. This was done on the basis that sunflower seed production has the potential to create substantial opportunities for improving the revenues as well as the overall welfare of smallholder farmers. The value chain approach and cluster development initiatives aimed at collective efficiency can be effective interventions in building trust among the concerned actors.

❖ The TIUMP has demonstrated that building trust among actors in the process of establishing clusters is a lengthy undertaking. It calls for step by step implementation of inclusive actions, coaching and coordinating stakeholders to address in a pragmatic manner the day to day problems of processors. In addition, having acknowledged that a reliable seed supply from farmers is a key prerequisite for the sustainability of the processing companies, the TIUMP has developed a project in support of value chain in sunflower production and processing.

❖ Finally, overall the project has facilitated, the process of the entrepreneurs coming out of the confidentiality syndrome and accepting the notion of upgrading of the beneficiary SME. Having successfully achieved this, the TIUMP has confirmed that a well-crafted rolled-out industrial upgrading and modernisation programme can indeed make a viable and sustainable contribution to the industrialisation goals of Tanzania.

**Recommendations**

➢ In view of the achievements of the Project to date, it is clear that the TIUMP should be rolled out in the next cycle, which starts in June 2016. In this respect the MITI and the SC of TIUMP should proceed to review the concept note prepared by the UUT and ensure that if required it should be revised and adopted. This would then allow UNIDO to formally launch the formulation of the roll-out programme. It is recommended that the formulation exercise is carried out through a rigorous and participatory process, one which involves all the stakeholders and beneficiaries of the programme. It is further advised that the beneficiaries of the pilot project should be involved in the design of the roll-out programme by using them as a sounding board.
Furthermore, these 19 beneficiaries should be requested to present testimony on their experiences whenever required as part of the advocacy and sensitisation drive for the prioritisation of the IUMP as a powerful tool for industrial development in Tanzania. The fact that most of them have already stated their readiness to provide on the job training opportunities to young graduates under the TIUMP Component of the Youth Employment Programme is a good indication of their willingness to continue to take part in the TIUMP as mentors and resource people. Looking forward, it goes without saying that UNIDO should ensure that the roll-out programme continues to integrate the lessons learned to date and build on the achievements of the pilot phase.

- While designing the detailed interventions and activities of the roll-out programme, UNIDO should strengthen its demand-based approach for supporting SMEs as well as a stronger market-based strategy for strengthening business developing services (BDS). The availability of high quality BDS, in particular specialized technical consultancy and support services is indeed a key success factor for any IUMP undertaking. This will require among others to: (i) establish dynamic linkages with existing service providers; (ii) analyse the strengths and weaknesses of the respective public and private BDS providers; (iii) identify market failures; and (iv) to define strategies and targets for more efficient BDS markets.

- Given the opportunity that a Theory of Change (ToC) model provides to undertake an in-depth analysis of the markets and the business environment of Tanzania, it is recommended that a ToC be constructed for the TIUMP roll-out phase. The knowledge that this exercise would gain would increase the likelihood of the successful implementation of the scaled-up project. Indeed robust problem analyses, the careful selection of sectors, the strength of the national partners including those from the private sector are all key factors that determine the performance of a project such as a TIUMP.

- The Project should seriously consider organising at least two meetings of the SC per annum. This would allow for more informed opinions and follow-up of strategic issues tabled for discussions and decision making. In addition, it might be worth considering the establishment of a sub-SC comprised of a few key stakeholders who would meet more regularly to ensure the implementation of decisions made by the full SC. This sub-committee would also be able to more closely monitor the activities of the TIUMP particularly during this critical period of transition from the pilot project to the roll-out programme. In this vein, the availability of the CTA to undertake critical project activities should be ensured.

- For its remaining six months, the TIUMP should devote more of its focus on the facilitation of the Project beneficiaries’ access to finance as this is one of the key success factors of any IUMP. The promotion of linkages with the financial sector should be built into the programme of the roll-out phase. In this regard the respective assumptions should be systematically identified and monitored.

- The setting up of dedicated mechanisms for facilitating access of SMEs to financial resources should form an integral part of the roll-out programme (i.e. upgrading funds, guarantee scheme,
equity fund, etc.). Ideally a revolving arrangement that allows the sustainability of the upgrading fund should be the preferable option. This could reduce the need to regularly replenish the financial resources of the scheme established to facilitate the access of SMEs to financial resources. Furthermore, a revolving scheme allows more beneficiaries to access loans. (Refer to the Appendix 5 for a brief presentation of the financial schemes of Tunisia and Morocco) 

- As far as financing of the IUMP is concerned, the Government should allocate budgetary resources to the programme. The experiences of several African countries suggest that upgraded SMEs can contribute to investment promotion, value addition, export, job creation and revenue collection, etc. This has also been demonstrated to a certain extent through the experiences of TIUMP to date. Lessons learned on IUMP initiatives indicate without doubt that the success of these projects is heavily dependent on strong Government commitment. This includes initiating and guaranteeing the required policy and regulatory reforms and availing adequate budgetary resource allocations from the national budget.

- Given that environmental and energetic issues are becoming ever prominent, the upgrading tools should consider including activities aimed at environmental compliance and energy efficiency by the beneficiary enterprises. A good point of departure would be for the TIUMP to strengthen its collaboration with CTI. The latter manages a scheme aimed at energy efficiency, which is being supported through a credit line set up in collaboration with AFD at the Bank of Africa.

- Gender mainstreaming should be ensured as part of the formulation of the project document of the future roll out phase. In this respect the formulation exercise should strategically pay adequate attention to the experience and interests of women and men in the process of industrialisation in Tanzania by aiming to place women and men on an even footing. In this regard it is noted that UNIDO recently launched a “Guide on Gender Mainstreaming."

- Mindful of private sector development requiring the adoption of a multi-sectoral approach and actions that are beyond the scope of the TIUMP, the project and its successor should maintain a list of all projects and other initiatives that contribute to the development of the private sector in Tanzania. The strategic aim would be to foster complementarity and synergy with all other relevant projects and initiatives at the national and regional levels.

- The size of UNIDO’s portfolio of projects in Tanzania raises some serious issues of coordination and complementarity of a large number of interventions. It is recommended that the national SC foreseen in the Country programme should be set up and made operational. Furthermore, the UNIDO Field Office should play a more active role in coordinating these projects through

---

8 It has been noted that the TIUMP should keep abreast and build on several pipe-line initiatives aimed at facilitating access to finance by the SMEs (i.e. the financial loan scheme in support of industrial development that JICA intends to launch in collaboration with TIB. There is also a proposal to establish a credit guarantee scheme in a partnership that involves JICA and the Cooperative Rural Development Bank Plc. (CRDB) for an amount of 3 Billion Tsh. Similarly, it is worth mentioning that the Central Bank of Tanzania has commissioned an on-going study to assess the accessibility of SME to finance).
information sharing and the identification and implementation of complementary activities across the portfolio of projects. Ideally, the next UNIDO Country Programme should be more explicit in so far as synergy of the various projects is concerned. In practical terms, complementarity should be mainstreamed already at each project identification phase and complementary activities should be identified and listed in both the Country Programme and at the project level.

- Beyond UNIDO’s projects, coordination with national programmes and other donors’ interventions should continue to be pursued. In this regard, it is recommended that the TIUMP continue to stress and advocate for the importance of external coordination, links to national level policies and programmes, and the involvement of the private sector.

- Many UNIDO projects are reportedly under-funded; this leads to UNIDO being perceived as thin on the ground and thus it is advised that the Organisation uses a two-prong approach to tackle this situation through sustained effort at resource mobilisation. This recommendation notwithstanding, there should be discussion as to the pros and cons of reducing the number of projects under the next CP with the aim of consolidating the portfolio of projects. In turn this could contribute to economies of scale in respect to administrative costs. The projects might also become more effective and visible as a result of this move.

- Finally, it is advised that UNIDO be prepared to respond favourably to the request made by the Tanzanian Planning Commission in respect to the formulation of the next Five Year Plan. This is in line with the recent decision taken by the country’s policy makers to focus the next national plan around industrialisation.
Annex 1. Terms of reference (summary)

PURPOSE OF THE EVALUATION

The purpose of this independent mid-term evaluation is to assess the effectiveness, efficiency and sustainability of the project and provide recommendations on the roll-out phase, which is expected to be initiated in 2016 to improve competitiveness of the manufacturing SMEs.

This evaluation results are also important in the context of regional and international free trade areas agreements, as well as the UNIDO developed Industrial Upgrading and Modernization Programme for the East Africa Region (EAC IUMP), which is currently under the consideration for final approval by the EAC Secretariat. In this light, the evaluation will, inter alia, assess the evaluability of the outputs, outcomes and tasks related to job creation for women and youth.

The mid-term evaluation will also address to the extent meaningful other standing evaluation criteria singled out in UNIDO’s Evaluation Policy, such as relevance, impact, also on UNDAP objectives, as well as management, gender mainstreaming, environmental sustainability, alignment with the UNIDO’s Inclusive and Sustainable Industrial Development (ISID) agenda, and potential to promote ISID.

The mid-term evaluation will be thus a forward-looking exercise and seek to identify the best practices and areas for improvement in order to draw lessons that can be used in the implementation of the roll-out phase and for similar projects to be implemented by UNIDO in other countries and the region.

Short-term interest is that the current mid-term evaluation will provide the basis for the roll-out phase of the Tanzania IUMP and substantial recommendations and lessons learned that will enable sustainable and effective accommodation of increased demand for upgrading services in the United Republic of Tanzania. Therefore, the recommendations of this mid-term evaluation should be available in time to be taken into account in the formulation process of this new phase.

The long-term interest comes from the strategic importance of this program constituting a part of Component II: Investment Promotion and enterprise support for enhanced competitiveness in a value chain context, 4.2: Tanzania Industrial Upgrading and Modernization Project (TIUMP), of the UN Country Programme of Technical Cooperation with the United Republic of Tanzania 2011-2015 developed under the UNDAP framework for 2011-2015. In this connection, the mid-term evaluation will produce lessons learned and recommendations on how to optimize the multidimensional approach to UNIDO "Industrial Upgrading and Modernization Programme".

Furthermore, the mid-term evaluation is relevant for both organizational challenges identified as critical by the management of UNIDO:

- Enhance cooperation between different departments of the Organization to improve synergies ("Delivering as One UNIDO");
- Optimize the use of UNIDO’s Field Office for the implementation of technical assistance.

These challenges are the subject of an organizational change programme and the mid-term evaluation should be able to make a contribution.

The evaluation aims to produce:
• Short-term recommendations for UNIDO for the planned roll-out phase of the Tanzania IUMP and for the potential EAC IUMP implementation;
• Strategic recommendations for UNIDO in optimizing the approach of the "Industrial Upgrading and Modernization";
• Complement external evaluations by the donor.

The mid-term evaluation will assess the achievement of results, as stated in the project document and the contributors to success or lack thereof. Moreover, the mid-term evaluation will assess the interventions design, level of national ownership, relevance to various stakeholders and the exploration of synergies with other UNIDO projects and with initiatives of the Government. It will follow a consultative process and seek inputs from a broad range of stakeholders, including policy makers and enterprises using the system. The exact scope and approach of the mid-term evaluation will be decided during the inception phase.

The mid-term evaluation will be undertaken as per UNIDO Evaluation Policy, the Guidelines for Technical Cooperation Programmes and Projects and the project document. The Project Manager, in collaboration with the Office for Independent Evaluation (ODG/EVA) will commission the mid-term evaluation.

SCOPE OF THE EVALUATION

The mid-term project evaluation will cover the project implementation period from 2012 till the end of 2014 covering all the activities that are part of the project, with particular focus on the performance indicators achieved by the beneficiary enterprises, as well as on the evaluability of the outputs, outcomes and tasks related to job creation for women and youth, as a result of the UNIDO upgrading and modernization activities, including inputs and activities, impact and sustainability of the project implementation.

• Consider all the activities that are part of the project;
• Cover the entire results chain from inputs and activities to impact and sustainability and review processes as well as results;
• Produce recommendations for the planned roll-out phase (e.g. what has worked and what has not and what are the lessons from implementation to date, which issues needs to be addressed in a possible next phase and what conditions should be in place);
• Have a national coverage, but with field visits to up to three locations, to be identified by the evaluation team.

EVALUATION ISSUES AND KEY EVALUATION QUESTIONS

Timing issue: There is a time lag between diagnosis and launching of the upgrading and modernization, as well as the capacity building activities at the beneficiary enterprises. Therefore, it is important to control the time lapse in order to have a correct estimation of the effectiveness of upgrading actions.

The evaluation consultant(s) will be expected to prepare a more targeted and specific set of questions and to design related survey questionnaires as part of the Inception Report, and in line with the above evaluation purpose and focus descriptions.

However, the following issues and questions are expected to be included in the assessment:
Ownership and relevance

The extent to which:

- The project objectives, outcomes and outputs are relevant to the different target groups of the intervention;
- The counterpart(s) has (have) been appropriately involved and were participating in the identification of their critical problem areas and in the development of technical cooperation strategies and are actively supporting the implementation of the project approach;
- The outputs as formulated in the project document are relevant and sufficient to achieve the expected outcomes and objectives;
- The project is relevant to the UNDAP objectives and ISID agenda.

Efficiency of implementation

The extent to which:

- UNIDO and counterpart inputs have been provided as planned and were adequate to meet requirements.
- The quality of UNIDO inputs and services (expertise, training, methodologies, etc.) was as planned and led to the production of outputs.
- UNIDO procurement services are provided as planned and were adequate in terms of timing, value, process issues, responsibilities, etc.

Project coordination and management

The extent to which:

- The national management and overall field coordination mechanisms of the project have been efficient and effective;
- The UNIDO management, coordination, quality control and technical inputs have been efficient and effective;
- Monitoring and self-evaluation was carried, were based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management;
- Changes in planning documents during implementation have been approved and documented;
- Synergy benefits can be found in relation to other UNIDO activities in the country or elsewhere.

Effectiveness

The extent to which:

- Outputs have been produced and how the target beneficiaries use the outputs;
- Outcomes have been or are likely to be achieved through utilization of outputs;
- The project/programme contributes to inclusive and sustainable industrial development.
**Impact and sustainability**

- To what extent developmental changes (economic, environmental, social, inclusiveness) have occurred or are likely to occur as a result of the intervention and are these sustainable;
- Was the project replicated/did it have a multiplying effect;
- Was sustainability correctly factored in the project strategy (risks analysed and assumptions identified at design stage and appropriately monitored during implementation);
- What is the prospect for technical, organizational and financial sustainability.

Furthermore, the evaluation will address the following questions specific to the private sector development related questions:

- How has private sector development (PSD) been promoted through industrial upgrading and modernization of the manufacturing sector enterprises? Did this modality fit the project purpose and objectives?
- Did the project work at the macro, meso and/or micro level? Were the choices made appropriate?
- Have private sector institutions/associations been involved in the project design and implementation? If yes, in what way? If not, should they have been?
- Did the approach adopted have the potential to address the problems identified/achieve the project objective?
- Did the project address production and market issues in a satisfactory manner?
- Has the issue of possible market distortions been considered?
- Have beneficiary companies been selected based on transparent, fair and appropriate criteria?
- Is the project affecting the competitiveness of existing enterprises? Have any measures been introduced to prevent market distortion?
- To what extent have private companies been subsidized by the project?
- Are companies paying for services rendered or equipment obtained?
- If the project has worked with a limited number of selected companies, can the results be expected to be replicated to achieve higher impact?
- Have linkages to financial institutions been established? If yes, what were the results? If not, was there a need for this?
- Can enterprise effects be expected to lead to socio-economic impact such as employment or income generation, gender, equality and poverty reduction?
- Did an M&E system exist, including baseline information, to allow for measurement of results and impact?
- Have synergies with other UNIDO branches/services been exploited, in particular TCB, environment, agri-business development and energy? Would there have been a case to establish such linkages?

The following gender mainstreaming and environment related questions shall be also covered by the evaluation.

**Gender and youth**

- To what extent have women and youth benefited from the project/can be expected to benefit?
- Has gender been mainstreamed in the implementation of the project?
- Have gender analyses been included in baseline studies, monitoring and reporting?
• Has there been gender balance in the contracting of experts and consultants?

Environment

• Has the project promoted environmental sustainability?
• Are any positive environmental benefits likely, even if they may be indirect?

EVALUATION APPROACH AND METHODOLOGY

This mid-term evaluation will be carried out in accordance with UNIDO Evaluation Policy and the Guidelines for the Technical Cooperation Programme and Project Cycle. While maintaining independence, the mid-term evaluation will adopt a participatory approach and will seek the views and feedback of all parties. The lead evaluation consultant will liaise with the Project Manager on the conduct of the evaluation and methodological issues.

The lead evaluation consultant will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources (including literature reviews, field visits, surveys and interviews with counterparts, beneficiaries, donor representatives and program managers). The lead evaluation consultant will develop interview guidelines.

The mid-term evaluation will apply the standard for assessing the relevance of criteria of effectiveness, efficiency, impact and sustainability of programs to assess achievements against objectives and indicators outlined in the Logical Framework.

The methodology will be based on the following:

• Desk review of project document including, but not limited to:
  (a) project / programme policy documents;
  (b) The original project document, monitoring reports (such as progress and financial reports, output reports (case studies, action plans, sub-regional strategies, etc.) and relevant correspondence;
  (c) Notes from the meetings of committees involved in the project (e.g. approval and steering committees);
  (d) Other project-related material produced by the project.
• Interviews with project management and technical support including staff and management at UNIDO HQ and in the field and – if necessary - staff associated with the project’s financial administration and procurement.
• Interviews with project partners including Government counterparts, companies, and partners that have been selected for co-financing as shown in the corresponding sections of the project documents.
• Interviews with intended users for the project outputs and other stakeholders involved with this project. The evaluator shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organizations.
• Interviews with the UNIDO’s project management and TIUMP Steering Committee (PSC) members and the various national and sub-regional authorities dealing with project activities as necessary.
• Other interviews, surveys or document reviews as deemed necessary by the lead evaluator and/or UNIDO EVA.

This assessment will be also based on and complement the findings and recommendations of the thematic evaluation of UNIDO projects related to “United Nations Joint Programme on Youth and Employment” and “Industrial upgrading”.
### Annex 2. List of interviewees

<table>
<thead>
<tr>
<th>S.No</th>
<th>Institution/Organization</th>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA)</td>
<td>Adam Zuku</td>
<td>Director of Industry Development</td>
</tr>
<tr>
<td>2.</td>
<td>UUT</td>
<td>Margaret Ikongwe</td>
<td>Technologist, Acting Head of UUT</td>
</tr>
<tr>
<td>3.</td>
<td>UUT</td>
<td>Boualem Abassi</td>
<td>Chief Technical Advisor</td>
</tr>
<tr>
<td>4.</td>
<td>Tanzania Industrial Research and Development Organization (TIRDO)</td>
<td>Dr. Ludovick C. Manege</td>
<td>Director of Industrial Research</td>
</tr>
<tr>
<td>5.</td>
<td>Tanzania Industrial Research and Development Organization (TIRDO)</td>
<td>Dr. Mihayo Musabila Maguta</td>
<td>Principal Research Officer</td>
</tr>
<tr>
<td>6.</td>
<td>Tanzania Industrial Research and Development Organization (TIRDO)</td>
<td>Humphrey Peter Ndossi</td>
<td>Research Officer</td>
</tr>
<tr>
<td>7.</td>
<td>United Nations Industrial Development Organization (UNIDO) – Tanzania Field Office</td>
<td>Gerald Runyoro</td>
<td>National Program Officer</td>
</tr>
<tr>
<td>8.</td>
<td>Tanzania Commission for Science and Technology (COSTECH)</td>
<td>Dr. Dugushilu Mafunda</td>
<td>Director Innovation, Entrepreneurship and Competitiveness</td>
</tr>
<tr>
<td>9.</td>
<td>Ministry of Agriculture, Food Security and Cooperatives</td>
<td>Eng. Mark Lyimo</td>
<td>Director of Mechanization</td>
</tr>
<tr>
<td>10.</td>
<td>President’s Office, Planning Commission</td>
<td>Maduka P. Kessy</td>
<td>Deputy Executive Secretary and Head, Productive Sector Cluster</td>
</tr>
<tr>
<td>11.</td>
<td>Confederation of Tanzania Industries (CTI)</td>
<td>Hussein S. Kamote</td>
<td>Director of Policy and Advocacy</td>
</tr>
<tr>
<td>S.No</td>
<td>Institution/Organization</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>Confederation of Tanzania Industries (CTI)</td>
<td>Frank J. Dafa</td>
<td>Policy Specialist (Trade)</td>
</tr>
<tr>
<td>13</td>
<td>Confederation of Tanzania Industries (CTI)</td>
<td>Perege Gumbo</td>
<td>Communications Specialist</td>
</tr>
<tr>
<td>14</td>
<td>Small Industries Development Organization (SIDO) - Headquarters</td>
<td>Pius Wenga</td>
<td>Director of Training and Extension Services.</td>
</tr>
<tr>
<td>15</td>
<td>Small Industries Development Organization (SIDO) - Headquarters</td>
<td>Emmanuel T. Saiguran</td>
<td>Director of Technology Development and Planning</td>
</tr>
<tr>
<td>16</td>
<td>TIUMP, Dodoma</td>
<td>Dr. Vedastus Timothy</td>
<td>Cluster Development Agent</td>
</tr>
<tr>
<td>17</td>
<td>UNIDO – Tanzania Field Office</td>
<td>Andrea Antonelli</td>
<td>Programme Officer</td>
</tr>
<tr>
<td>18</td>
<td>CEZOSOPA, Dodoma</td>
<td>Sofia Majid</td>
<td>Food Technologist</td>
</tr>
<tr>
<td>19</td>
<td>Chamwino District Council, Dodoma</td>
<td>Ms. Saada Mwamka</td>
<td>District Executive Director</td>
</tr>
<tr>
<td>20</td>
<td>Chamwino District Council, Dodoma</td>
<td>Aithan Lucas Chaula</td>
<td>District Investment Officer</td>
</tr>
<tr>
<td>21</td>
<td>Chamwino District Council, Dodoma</td>
<td>Godfrey Mnyamale</td>
<td>Head of Department - Agriculture, Irrigation and Cooperatives</td>
</tr>
<tr>
<td>22</td>
<td>Small Industries Development Organization (SIDO), Dodoma Regional Office</td>
<td>Nehemia M. Kahakwa</td>
<td>Senior Regional Business Development Expert</td>
</tr>
<tr>
<td>S.No</td>
<td>Institution/Organization</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>23.</td>
<td>Tanzania Food and Drugs Authority (TFDA), Central Zone Office, Dodoma</td>
<td>Abel Deule</td>
<td>Inspector</td>
</tr>
<tr>
<td>24.</td>
<td>Glory Farm</td>
<td>Alpha Manyanga</td>
<td>Production Manager</td>
</tr>
<tr>
<td>25.</td>
<td>Nyemo Investment Company Limited</td>
<td>RASHID ALLY MAMU</td>
<td>Managing Director</td>
</tr>
<tr>
<td>26.</td>
<td>Uncle Milo Sunflower Oil Ltd</td>
<td>Joseph Lwoga</td>
<td>Managing Director</td>
</tr>
<tr>
<td>27.</td>
<td>Three Sisters Oil Mill Company</td>
<td>Mariamu Majengo</td>
<td>Owner and Director</td>
</tr>
<tr>
<td>28.</td>
<td>Three Sisters Oil Mill Company</td>
<td>Amina Majengo</td>
<td>Owner and Director</td>
</tr>
<tr>
<td>29.</td>
<td>Three Sisters Oil Mill Company</td>
<td>Neema Benard</td>
<td>Food Technologist</td>
</tr>
<tr>
<td>30.</td>
<td>Jackma J. Enterprises</td>
<td>Fatuma S. Salum</td>
<td>Chairperson</td>
</tr>
<tr>
<td>31.</td>
<td>Jackma J. Enterprises</td>
<td>Jackson A. Massawe</td>
<td>Managing Director</td>
</tr>
<tr>
<td>32.</td>
<td>Tanzania Engineering and Manufacturing Design Organization (TEMDO)</td>
<td>Kalutu P.R Koshuma</td>
<td>Director General</td>
</tr>
<tr>
<td>33.</td>
<td>Nyirefami Limited</td>
<td>Robert M. G. Nyirenda</td>
<td>Managing Director</td>
</tr>
<tr>
<td>34.</td>
<td>Mount Meru Millers</td>
<td>Atul Mittal</td>
<td>Director</td>
</tr>
<tr>
<td>S.No</td>
<td>Institution/Organization</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>35.</td>
<td>M/s Darsh Industries Ltd</td>
<td>Balasaheb Gavane</td>
<td>Director</td>
</tr>
<tr>
<td>36.</td>
<td>Profate Investment Ltd</td>
<td>Feddy P. Tesha</td>
<td>Managing Director</td>
</tr>
<tr>
<td>37.</td>
<td>Tan Dairies Ltd.</td>
<td>D.K. Mmari</td>
<td>Chairman</td>
</tr>
<tr>
<td>40.</td>
<td>Tanzania Bureau of Standards (TBS)</td>
<td>Ashura Katunzi</td>
<td>Acting Head of Certification</td>
</tr>
<tr>
<td>41.</td>
<td>Ministry of Industry, Trade and Investment</td>
<td>Uledi A. Musa</td>
<td>Permanent Secretary</td>
</tr>
<tr>
<td>42.</td>
<td>Ministry of Industry, Trade and Investment</td>
<td>Obadiah M. Nyagiro</td>
<td>Director, Industry</td>
</tr>
<tr>
<td>43.</td>
<td>Ministry of Industry, Trade and Investment</td>
<td>Caroline Lyimo</td>
<td>Industrial Engineer</td>
</tr>
<tr>
<td>44.</td>
<td>Ministry of Industry, Trade and Investment</td>
<td>Juma Mwambapa</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>46.</td>
<td>European Union</td>
<td>Fausto Perini</td>
<td>Programme Officer</td>
</tr>
<tr>
<td>47.</td>
<td>JICA</td>
<td>Tomo Ishikawa</td>
<td>Industrial Development Advisor</td>
</tr>
<tr>
<td>48.</td>
<td>JICA</td>
<td>Makimoto Jiro</td>
<td>Program Advisor (Industrial Development and Private Sector Partnership)</td>
</tr>
<tr>
<td>49.</td>
<td>United Nations Tanzania Delivering as One</td>
<td>Aine Mushi</td>
<td>UN/NRA Coordinator Specialist.</td>
</tr>
<tr>
<td>S.No</td>
<td>Institution/Organization</td>
<td>Name</td>
<td>Position</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>50.</td>
<td>UNIDO - SECO/UN Cluster Tanzania</td>
<td>Grace Bingileki</td>
<td>National Project Coordinator</td>
</tr>
<tr>
<td>51.</td>
<td>UNIDO</td>
<td>Victor I. Akim</td>
<td>National Project Coordinator (Energy and Environment)</td>
</tr>
<tr>
<td>52.</td>
<td>UNIDO</td>
<td>Alusaria Nkya</td>
<td>National Project Assistant Coordinator (Energy and Environment)</td>
</tr>
<tr>
<td>53.</td>
<td>TIB Development Bank</td>
<td>Allan N. Magoma</td>
<td>Principal Officer – Business Development</td>
</tr>
<tr>
<td>54.</td>
<td>TIB Development Bank</td>
<td>Denis Deogratius</td>
<td>Advisory Officer - Advisory Services</td>
</tr>
<tr>
<td>55.</td>
<td>TIB Development Bank</td>
<td>Dr. Hildebrand Shayo</td>
<td>Manager – Research and Planning</td>
</tr>
<tr>
<td>56.</td>
<td>DFID</td>
<td>Alex Mangowi</td>
<td>Private Sector Advisor</td>
</tr>
<tr>
<td>57.</td>
<td>CEZOSOPA</td>
<td>Ringo Iringo</td>
<td>Chairman</td>
</tr>
</tbody>
</table>
Annex 3. Documents reviewed

1. Allocation of UNIDO’s receipts of Tanzania ONE UN FUND Earmarked contribution from SIDA to UNDAP during 2014/2015 (USD).


4. List of UNIDO supported projects in Tanzania.

5. Moffat L, Geadah Y and Stuart R. Two Halves Make a Whole: Balancing Gender Relations in Development.


8. Notes on discussions and deliberations during visit to UNIDO Tanzania Field Office on 31st October, 2014 by Hon Janet Mbene (MP), Deputy Minister of Industry and Trade.


17. The United Republic of Tanzania. The Tanzania Development Vision 2025.

19. Tanzania Industrial Upgrading and Modernization Programme (TIUMP): Progress reports and records of SC Meetings

20. TIUMP Project Fiche: Agro-based value chains development in Tanzania, October 2014

21. TIUMP Project Concept for Roll-out phase December 2015


32. Title of Project/Programme Component: Tanzania Industrial Upgrading and Modernization Project


35. UNIDO (2013). Thematic evaluation of UNIDO projects relating to industrial upgrading.
Annex 4: List of UNIDO supported projects in Tanzania

At its formulation, the UNIDO Country Programme (CP) was envisaged to consist of twelve (12) projects/sub projects organized under the three Country Programme components as follows:

**Table 1: Projects, which were composing the CP at its formulation in 2011**

<table>
<thead>
<tr>
<th>CP Component</th>
<th>Project/sub projects</th>
<th>SAP ID No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrial Policy and Statistics Support</strong></td>
<td>Industrial Policy Capacity Building in URT</td>
<td>100348</td>
</tr>
<tr>
<td></td>
<td>SME Policy Review</td>
<td>120288</td>
</tr>
<tr>
<td></td>
<td>Industrial Statistics Capacity Building in URT</td>
<td>109028</td>
</tr>
<tr>
<td><strong>Enterprises, Competitiveness, Investment and Trade,</strong></td>
<td>Investment Promotion (including SPX)</td>
<td>102208</td>
</tr>
<tr>
<td></td>
<td>Value Chain Development (3ADI)</td>
<td>101185</td>
</tr>
<tr>
<td></td>
<td>Red meat and Cashew nut</td>
<td>101171</td>
</tr>
<tr>
<td></td>
<td>Leather</td>
<td>100228</td>
</tr>
<tr>
<td></td>
<td>Business Information Centers Development</td>
<td>102209</td>
</tr>
<tr>
<td></td>
<td>Industrial Upgrading and Modernization</td>
<td>102175</td>
</tr>
<tr>
<td></td>
<td>Trade Capacity Building</td>
<td>100028</td>
</tr>
<tr>
<td><strong>Energy and Environment</strong></td>
<td>Renewable Energy for Rural Productivity</td>
<td>103176</td>
</tr>
<tr>
<td></td>
<td>Cleaner Production for Green Industry</td>
<td>104180</td>
</tr>
</tbody>
</table>

In the course of implementation, new projects and sub projects were created or formulated, including two for coordinating the projects under each of the two UNDAP Programme Working Groups in which UNIDO is participating namely Economic Growth (EG) and Environment and Energy (EE). Other new projects, and the Country Programme components in which they were incorporated, are as follows:
### Table 2: Projects, which were formulated and incorporated in the CP later

<table>
<thead>
<tr>
<th>CP Component</th>
<th>Project/sub projects</th>
<th>SAP ID No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Policy and Statistics Support</td>
<td>Tanzania National System of Innovation</td>
<td>120302</td>
</tr>
<tr>
<td>Enterprises, Competitiveness, Investment and Trade,</td>
<td>Tanzania UN Trade Cluster – SECO</td>
<td>120104</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurship Education</td>
<td>120576</td>
</tr>
<tr>
<td></td>
<td>Enhancing Youth Employability in URT&lt;sup&gt;9&lt;/sup&gt;</td>
<td>150054</td>
</tr>
<tr>
<td>Energy and Environment</td>
<td>Small Hydropower Mini Grids to Augment Rural electrification in Tanzania</td>
<td>100261</td>
</tr>
<tr>
<td></td>
<td>Promotion of Waste to Energy Application in Agro-industries in Tanzania</td>
<td>120319, 140076</td>
</tr>
<tr>
<td>Coordination</td>
<td>Coordination of projects in EG PWG of UNDAP</td>
<td>107142</td>
</tr>
<tr>
<td></td>
<td>Coordination of projects in EE PWG of UNDAP</td>
<td>100304</td>
</tr>
</tbody>
</table>

In addition to the above, a number of other national, regional and global projects were formulated with components for implementation in Tanzania, but were not incorporated in the CP and therefore could not be captured in the UNDAP framework. Such projects and their SAP ID Nos. include the following:

- PA-3ADI and AfriPANet investment Project (120340)
- Strengthening Institutional Capacities for Industrial Policy in the EAC (140229)

<sup>9</sup> This is a component of a UN Joint Programme on Youth Employment in which other three (3) UN agencies namely FAO, ILO and UN Women and the RCO are participating. For UNIDO, interventions under the Joint Programme on Youth Employment were incorporated in previously existing four (4) projects/sub projects with SAD Nos. 100348, 109028, 100228 and 102175 and a new one with SAP No. 150054.
Annex 5. Example of mechanism of IUMP Financing

The objective of these funding mechanisms is to ensure the sustainability of the IUM programmes.

Possible funding scheme:

- Setting up of funding scheme such as FODEC in Tunisia and FOMAN in Morocco
- Establishment of credit line and guarantee scheme specifically for hard investments in Jordan
- Direct budget support in Algeria

Financing of the IUM programme of Tunisia

The Fund for the Development of Industrial Competitiveness (FODEC) has been set up to help finance the programme. Articles 33 to 46 of the Finance Act (Law No. 94-127 of 26 December 1994) established the FODEC, which is based on 1 per cent of the sales of local enterprises and the value of finished product imports (excluding equipment and machinery).

The purpose of the Fund is to:

- Contribute to the financing of quality improvement measures;
- Contribute to the financing of restructuring operations;
- Finance sectoral studies;
- Grant subsidies to industrial technology centres;
- Undertake any other activities aimed at developing industrial competitiveness.

In 1999 and 2000, the Fund was enlarged to include the following measures:

- Contribute to the financing of priority technology investments: laboratory and analysis equipment, introduction of the HACCP quality assurance system, CAD/CAP/CAPM2 and associated technical assistance;
- Contribute to the organization of management recruitment by SMEs for strategic, research, innovation, quality and method functions.

The legislator was thus concerned essentially with improving competitiveness, in the broad sense of the term, and restructuring industrial enterprises and technology centers responsible for providing assistance and technical support to them. The upgrading of services related to enterprises was thus included in the upgrading programme.

The grants that may be awarded by FODEC are as follows: For the upgrading programme: 70 per cent of the cost of diagnostic and upgrading studies (maximum 21,000 US dollars); 20 per cent of the self-financed share of the restructuring investment (no ceiling); 10 per cent of the remaining portion of the restructuring investment financed by other resources (no ceiling).
Financing of the IUM programme in Morocco

The mechanism set up to finance the upgrading programme takes account of the need to:

- Facilitate access to bank financing;
- Consolidate under-capitalized equity capital;
- Reduce financing costs.

This mechanism involves three instruments:

- **Upgrading Guarantee Fund (FOGAM):** Projects meeting the specific conditions can benefit from a FOGAM guarantee: Equity capital and quasi-equity capital: minimum 30 per cent; Bank loans: maximum 70 per cent.

- **Venture capital:** To contribute to the resources at the disposal of the enterprise wishing to upgrade and to supplement its inadequate self-financing capability, a credit line of 45 million Euros from the European Investment Bank (EIB) has been mobilized under the MEDA programme and managed by the several banks and venture capital company.

- **Upgrading loans:** The Moroccan banking system has undertaken to support enterprises in the process of competitive restructuring by providing them with specific financing for upgrading activities.