Independent Evaluation Report

LEBANON

Increase Access to Export Markets for Lebanese Products and Improvement of its Quality Infrastructure to increase TBT/SPS Compliance (MACLE)

UNIDO project US/LEB/06/002
UNIDO EVALUATION GROUP

Independent Evaluation

LEBANON

Increase Access to Export Markets for Lebanese Products and Improvement of its Quality Infrastructure to increase TBT/SPS Compliance (MACLE)

UNIDO project US/LEB/06/002

Funded by the
Swiss State Secretariat for Economic Affairs (SECO)

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2010
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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 involved Governments and of UNIDO.

This document has not been formally edited.
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Acknowledgements

We would like to express our gratitude to all persons met. Our special thanks go to Mr. Peter Loewe, Senior Evaluation Officer of the UNIDO Evaluation Group, the National Project Coordinator (NPC), the Project Manager, the UNIDO Country Office and the Embassy of Switzerland in Beirut for the excellent support provided in preparing and conducting this evaluation.

We hope that the proposed recommendations will contribute to the continuous improvement of similar projects in other countries and to the mobilization of funds for a possible second phase of the project.
# Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ALI</td>
<td>Association of Lebanese Industrialists</td>
</tr>
<tr>
<td>AGRIDEA</td>
<td>Swiss Association for the Development of Agriculture and Rural Areas</td>
</tr>
<tr>
<td>EFTA</td>
<td>European Free Trade Area</td>
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<tr>
<td>ELCIM</td>
<td>Euro Lebanese Centre for Industrial Modernization (funded by the EU)</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FTA</td>
<td>Free Trade Agreement</td>
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<td>GAP</td>
<td>Good Agricultural Practices</td>
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<tr>
<td>GFSI</td>
<td>Global Food Safety Initiative</td>
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<tr>
<td>GMP</td>
<td>Good Manufacturing Practices</td>
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<tr>
<td>GHP</td>
<td>Good Health Practices</td>
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<tr>
<td>GoL</td>
<td>Government of Lebanon</td>
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<tr>
<td>HACCP</td>
<td>Standards of hygiene applied in manufacturing</td>
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<tr>
<td>HQ</td>
<td>Headquarter (of UNIDO or SECO)</td>
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<tr>
<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>IFS</td>
<td>International Featured Standards (private food safety standards/labels of European retailers)</td>
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<td>IP</td>
<td>Integrated Programme (of UNIDO)</td>
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<tr>
<td>IRI</td>
<td>Industrial Research Institute (Lebanon)</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>ISO 22000</td>
<td>Standard for Food Safety Management System</td>
</tr>
<tr>
<td>LAISER</td>
<td>Lebanese Agro-Industry Support &amp; Economic Recovery Project</td>
</tr>
<tr>
<td>LAU</td>
<td>Lebanese American University</td>
</tr>
<tr>
<td>LibanPack</td>
<td>Lebanese Packaging Centre (established under MACLE)</td>
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<tr>
<td>LIBNOR</td>
<td>Lebanese Standards Body</td>
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<tr>
<td>MACLE</td>
<td>Market Access &amp; Compliance for Lebanese Exports</td>
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<tr>
<td>MoET</td>
<td>Ministry of Economy and Trade</td>
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<tr>
<td>NPC</td>
<td>National Project Coordinator</td>
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<tr>
<td>NQI</td>
<td>National Quality Infrastructure</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>---------</td>
<td>-------------</td>
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<tr>
<td>QMS</td>
<td>Quality Management System</td>
</tr>
<tr>
<td>QUALEB</td>
<td>EU quality programme (funded by the European Union)</td>
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<tr>
<td>SECO</td>
<td>Swiss State Secretariat for Economic Affairs</td>
</tr>
<tr>
<td>SIPPO</td>
<td>Swiss Import Promotion Programme</td>
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<tr>
<td>SMTQ</td>
<td>Standards, Metrology, Testing and Quality</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and Phytosanitary Measures (SPS Agreement under WTO)</td>
</tr>
<tr>
<td>SVI</td>
<td>Swiss Packaging Institute (Schweizerisches Verpackungsinstitut)</td>
</tr>
<tr>
<td>TIPCEE</td>
<td>Trade and Investment Programme for Competitive Export Economy</td>
</tr>
<tr>
<td>TBT</td>
<td>Technical Barriers to Trade</td>
</tr>
<tr>
<td>TCB</td>
<td>Trade Capacity Building</td>
</tr>
<tr>
<td>TRTA</td>
<td>Trade Related Technical Assistance (WTO)</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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</tbody>
</table>
# Glossary of evaluation related terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Baseline</td>
<td>The situation, prior to an intervention, against which progress can be assessed.</td>
</tr>
<tr>
<td>Effect</td>
<td>Intended or unintended change due directly or indirectly to an intervention.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>The extent to which the development objectives of an intervention were or are expected to be achieved.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>A measure of how economically inputs (through activities) are converted into outputs.</td>
</tr>
<tr>
<td>Impact</td>
<td>Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.</td>
</tr>
<tr>
<td>Intervention</td>
<td>An external action to assist a national effort to achieve specific development goals.</td>
</tr>
<tr>
<td>Lessons learned</td>
<td>Generalizations based on evaluation experiences that abstract from specific to broader circumstances.</td>
</tr>
<tr>
<td>Log frame (logical framework approach)</td>
<td>Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives)</td>
</tr>
<tr>
<td></td>
<td>also called RBM (results based management) principles.</td>
</tr>
<tr>
<td>Outcomes</td>
<td>The achieved or likely effects of an intervention’s outputs.</td>
</tr>
<tr>
<td>Outputs</td>
<td>The products in terms of physical and human capacities that result from an intervention.</td>
</tr>
<tr>
<td>Relevance</td>
<td>The extent to which the objectives of an intervention are consistent with the requirements of the end-users, government and donor’s policies.</td>
</tr>
<tr>
<td>Risks</td>
<td>Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention’s objectives.</td>
</tr>
<tr>
<td>Sustainability</td>
<td>The continuation of benefits from an intervention, after the development assistance has been completed.</td>
</tr>
<tr>
<td>Target groups</td>
<td>The specific individuals or organizations for whose benefit an intervention is undertaken.</td>
</tr>
</tbody>
</table>
Executive summary

This independent final evaluation of the UNIDO project “Increase Access to Export Markets for Lebanese Products and Improvement of its Quality Infrastructure to Increase TBT/SPS Compliance” (MACLE) was conducted by Mr. Daniel Keller and Mr. Fouad Mrad in October 2009.

MACLE was fully funded by the Swiss State Secretariat for Economic Affairs (SECO) with an overall budget of USD 1,946,903 (excluding support cost) and started in March 2007 with a planned end date in March 2010.

MACLE’s overall development objective has been to facilitate industrial development and trade by reducing technical barriers to trade through strengthening the Lebanese TBT/SPS infrastructure and capabilities. The specific objectives set out in the project document were: (1) Upgrading of laboratories, services for packaging and labeling for exports; (2) Technical support, information for market access and consumer protection and (3) Improving Lebanese quality chain of selected agro-based products.

Counterparts and direct beneficiaries of MACLE included: the Ministry of Economy and Trade (MoET); the Industrial Research Institute (IRI); the Lebanese American University (LAU); the Lebanese Standards Body (LIBNOR); the Chamber of Commerce of Tripoli; the Syndicate of Packaging and Syndicate of the Lebanese Food Industry; and the Association of Lebanese Industrialists (ALI) hosting LibanPack at its premises.

The main findings and conclusions of the independent final evaluation are as follows:

(a) Funding and disbursements: The project is fully funded. 85% of the total project budget had been disbursed at the point in time of the evaluation.

(b) Project preparation: Identification and formulation were generally well done, with the exception that UNIDO did not properly apply standard planning tools such as logframe. This shortcoming did, however, not have a negative impact on the implementation of MACLE, with the exception of monitoring and evaluation. Project preparation included careful needs assessment at the company level.

(c) Implementation: Most activities have been completed as planned. As of October 2009 the following activities were still under implementation: (1) support to laboratories to obtaining accreditation and proficiency testing (2) the twinning arrangement with the Swiss Packaging Institute (SVI), (3) visits to trade fairs, (4) traceability schemes for apples and olive oil, and (5) standard operating procedures and business plan for LibanPack. Taking into consideration the shortage of qualified metrology staff, the Steering Committee decided that a basic set of calibration equipment for market surveillance should be procured instead of the originally planned mobile calibration unit. Finalizing the accreditation of the two packaging laboratories, the standard operation procedures for LibanPack and the traceability schemes will be essential for the success of the project. This requires a non-cost extension by six months from April until September 2010.
(d) Relevance: MACLE matches UNIDO and SECO’s core mandates and competencies and is highly relevant to international priorities, national policies and to the bilateral and multilateral trade agreements that Lebanon has signed. The project was specifically tailored to the needs of enterprises and also responded well to the demand of laboratories and market surveillance. MACLE focused on strengthening packaging services that are relevant across a variety of industries and not covered by other donors in the country.

(e) Ownership: Ownership of stakeholders was exceptionally strong, evidenced by their active involvement into planning of the project, strong support of implementation and the extensive use of outputs produced. UNIDO played an important role in actively strengthening ownership by enrolling and empowering local counterparts.

(f) Efficiency: The management of the project was excellent. Selecting project staff with the right profile and delegating day-to-day management to the National Project Coordinator (NPC) were key success factors. The Project Manager and the CTA focused effectively on those issues of vital importance for the success of the project. With the exception of not applying result-based planning and financial reporting, the management of MACLE could be considered as a benchmark.

(g) Effectiveness: Most planned outputs have so far been achieved. The remaining outputs are likely to be completed within 12 months and within the existing budget. The right mix of capacity building, provision of equipment and the quality of technical inputs contributed to effectiveness. MACLE is also a good example of how a project can add significant value to south-to-south cooperation (twinning with the Tunisian packaging centre, capitalizing on expertise developed by ETRACE in Egypt).

(h) Synergies: Synergies and complementarities with other SMTQ projects (mainly QUALEB and ELCIM) were successfully exploited and economies of scale and scope generated, including through exchanges with ETRACE (Egypt). However, the envisaged linkages within the SECO programme (SIPPO, Geographical Indications) and with Swiss institutions did not materialize mainly because these projects were not designed as synergetic operations, linkages were not specific and formalized, and also because of a lack of interest from the Swiss Packaging Institute (SVI).

(i) Sustainability of results: The Industrial Research Institute (IRI) and the Lebanese American University (LAU) are likely to provide packaging testing services beyond the end of the project, without additional donor funding. Continued support to LibanPack would be essential to consolidate achieved results and enhance perspectives for long-term institutional and technical sustainability. A follow-up phase would also be needed to extend the traceability pilots to other products (including processed food), which would be important for maintaining results. Support to institutionalizing business development services rather than continuing direct interventions at the enterprise level would increase sustainability.
Table 1: Summary of key strengths and weaknesses of the project

<table>
<thead>
<tr>
<th>Main Strengths</th>
<th>Main Weaknesses</th>
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<tbody>
<tr>
<td>1. Niche focus, complementary to other interventions, covering areas where</td>
<td>1. Log-frame as standard project management tool not properly applied and</td>
</tr>
<tr>
<td>UNIDO has a significant comparative advantage - focus on a few aspects and</td>
<td>not updated during implementation of the project. Project document does not</td>
</tr>
<tr>
<td>sectors, but going in-depth rather than staying generic</td>
<td>clearly define management structure</td>
</tr>
<tr>
<td>2. Excellent administrative and technical management - selection of the right</td>
<td>2. Activity- rather than result-based reporting (although reporting is</td>
</tr>
<tr>
<td>NPC, delegation of day-today management to the field level (project)</td>
<td>updated and informative). Detailed assessment of efficiency not possible</td>
</tr>
<tr>
<td>3. High quality of expert input - use of regional and local expertise</td>
<td>3. Effectiveness of direct interventions at enterprise level in the area of</td>
</tr>
<tr>
<td>4. Coordination with other projects, in particular QUALEB</td>
<td>food safety questionable.</td>
</tr>
<tr>
<td>5. Concept of LibanPack - using and strengthening existing capacities of</td>
<td>4. Missed opportunities to implement the envisaged synergies under SECO</td>
</tr>
<tr>
<td>packaging testing providers rather than duplicating infrastructure</td>
<td>programme</td>
</tr>
<tr>
<td>6. Innovative way of expanding TCB approach beyond traditional understanding</td>
<td></td>
</tr>
<tr>
<td>of “compete and connect” by including marketing related issues</td>
<td></td>
</tr>
<tr>
<td>7. UNIDO actively and successfully fostered local ownership through deeply</td>
<td></td>
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<tr>
<td>involving local partners, especially the civil society</td>
<td></td>
</tr>
<tr>
<td>8. UNIDO capitalized on results of its previous IP, other projects in the</td>
<td></td>
</tr>
<tr>
<td>region (ETRACE in Egypt), and opportunities to strengthen south-to-south</td>
<td></td>
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<tr>
<td>networks (Tunisian packaging centre)</td>
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</tbody>
</table>
Main recommendations

To SECO:
(1) Grant a non-cost extension of six months, until September 2010, in order to deliver remaining outputs, including support to accreditation, pilot traceability schemes, business plan and capacity building for LibanPack. An extension would also provide UNIDO with more time for fund mobilization. Continue facilitating fund-raising for a possible follow-up phase.

To UNIDO:
(1) Finalize activities - except the planned twinning arrangements with the Swiss Packaging Institute, further visits to international trade fares, and the “business plan” for the quality seal.
(2) Use the remaining time of the project to consolidate the capacity building at LibanPack. A comprehensive business plan should be prepared that could include the following services: Expand the scope of packaging services beyond paper (glass, metal, plastic, environmentally friendly packaging); continue awareness raising programmes; act as a resource centre for packaging and develop a portal for information on packaging/labeling requirements in different markets. Support in marketing related issues (beyond packaging) would also continue to be in high demand. The standard operation procedures of LibanPack should also be completed. Work closely with the counterparts in establishing a contingency plan for operating LibanPack, in case fund mobilization efforts should fail.

To the Government of Lebanon:
Approve the extension of MACLE and facilitate the approval of a second phase.

Design of MACLE II
(1) We recommend designing MACLE II as a focused but modular intervention in order to address the uncertainties of funds mobilization and to build upon the achievements of MACLE I along the following lines (in order of priority):
   a. Continue institutional and technical strengthening of LibanPack (not as a project operation, but as an independent institution).
   b. Expand traceability pilots to other regions and/or to higher value added products (processed food).
   c. Consider promoting the application of QMS in key service sectors. At this stage, support should be provided through strengthening the meso level, i.e. business service providers rather than direct interventions at the enterprise level.
   d. Leave further support to inspection/certification and metrology to the EU.
Lessons learned

For SECO:
(1) Enhance synergies within country programmes by designing interventions as synergetic from the beginning and formalizing linkages between projects through agreements.

For UNIDO:
(1) Further develop and possibly revisit the UNIDO “Three C” approach. Issues recommended for consideration are: strengthen the TCB approach by an integration of marketing related issues such as packaging and branding; enlarging the scope of TCB to the service sector, in particular for relatively advanced emerging countries with a strong potential for a service-driven economy; implementing the “Three C” approach through integrated projects jointly with other UN organizations in accordance with their mandates and include the promotion of access to finance for SMEs into the scope of the “Three C” approach, which might require working with external partners.

(2) Due consideration needs to be given not to distort the market for business development services but to address market failures by strengthening the existing providers of business development services, in particular those from the private sector.

(3) Look into the success factors of this project and whether lessons of wider applicability could be learned. These success factors were:
   a. The good coordination between project management and headquarter services (procurement, human resources and accounting);
   b. The selection of highly qualified local project management staff, taking into account not primarily technical qualifications, but management and leadership skills; result-orientation; interpersonal skills and the ability to work in a team; language skills and familiarity with the cultural and political context; and
   c. The efficient use of and delegation of decision power to the local project management staff.
Introduction

A. Background

This evaluation report covers the UNIDO project “Increase access to export markets for Lebanese products and improvement of its quality infrastructure to increase TBT/SPS compliance” (US/LEB/06/002), which is referred to in the following by its abbreviated name MACLE (Market Access & Compliance for Lebanese Exports).

MACLE was designed as the first phase of a stand-alone intervention and funded by the Swiss State Secretariat for Economic Affairs (SECO). The project document\(^1\) defines the development objective of MACLE as follows: “to facilitate industrial development (supply capacity) and trade (and consequently spurring economic growth and employment opportunities) by reducing technical barriers to trade through strengthening capacities of the Lebanese TBT/SPS infrastructure and capabilities”.

The three objectives of MACLE are:

1. Upgrading of laboratories, services for packaging and labeling for exports
2. Technical support, information for market access and consumer protection
3. Improving Lebanese quality chain of selected agro-based products

MACLE started in March 2007\(^2\) with a planned end date in March 2010. During the period of political instability between November 2007 and June 2008, which culminated in armed clashes in May 2008, project activities were temporarily suspended. The planned tri-partite mid-term review (GoL, SECO and UNIDO) was not conducted. At the time of this evaluation, some of the key activities were still ongoing, in particular the support to the packaging centre and the implementation of a pilot traceability scheme for food exporters.

Counterparts and direct beneficiaries of MACLE are:

- The Ministry of Economy and Trade (MoET) is the formal official counterpart and government coordinating agency - its Legal Metrology Division also received basic metrology equipment for market surveillance and staff training.

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\(^1\) Latest version of the Project Document dated 6 July 2006 (signed on 3 November 2006)

\(^2\) First reported activity; official starting date according to the Project Document: November 2006
• The Industrial Research Institute (IRI) and the Lebanese American University (LAU): Their packaging laboratories benefited from equipment provision and training. The planned support in obtaining accreditation and performing proficiency testing has not yet been provided.

• Lebanese Standards Body (LIBNOR): received support in reviewing and completing missing standards on packaging - LIBNOR is also responsible for the existing quality seal that was “revised” under the project.

• The Chamber of Commerce of Tripoli: is the key partner in establishing traceability software and database - it will host the database.

• Syndicate of Packaging and Syndicate of Food Industry: Their members benefited from various trainings and participated in study tours. The President of the Syndicate of Packaging is also the President of LibanPack.

• The Association of Lebanese Industrialists (ALI): Key stakeholder of the Lebanese Packaging Centre (LibanPack) established under the project - they currently host LibanPack in their premises free of charge.

• Lebanese companies and industrialists

B. Purpose and methodology of the evaluation

This independent final evaluation of the first phase of MACLE was carried out on the basis of the Terms of Reference (ToR) that is attached as Annex A and the UNEG evaluation norms and standards\(^3\). The evaluation aimed at the following purposes:

1. Evaluation of MACLE to assess the identification, formulation, design and management structure/processes of the project as well as its relevance, ownership, effectiveness, efficiency and sustainability of results.

2. Contribute to a larger thematic evaluation of UNIDO SMTQ projects (with a particular emphasis on packaging and interdependencies, synergies between the “Compliance” and “Compete” aspects of UNIDO TCB approach)\(^4\).

The evaluation team was composed of an international evaluator\(^5\) appointed by UNIDO (team leader) and a national evaluator\(^6\) appointed by the Government of Lebanon (GoL). Both evaluators were not involved in the preparation and/or implementation of MACLE.

The UNIDO Evaluation Group provided methodological guidance before and systematic feedback after the field work. During a one-week mission to Beirut, the evaluators interviewed counterparts, direct beneficiaries, enterprises, the UNIDO Representative in Beirut and the Embassy of Switzerland (responsible for monitoring the project on behalf of SECO)\(^7\). A telephone interview with the Project Manager at UNIDO Headquarters and a meeting with the

\(^3\) United Nations Evaluation Group (UNEG), Norms for Evaluations in the UN System, April 29, 2005

\(^4\) The team leader contributed as a team member to the thematic evaluation. The results of the MACLE evaluation were directly integrated into the thematic evaluation report.

\(^5\) Daniel P. Keller, Director, Swiss Consulting Co. Ltd., Hanoi - Vietnam

\(^6\) Fouad Mrad, PhD, Professor at the American University of Beirut

\(^7\) The Swiss Coordination Office in Beirut mentioned in the Project Document is not responsible for SECO projects.
Programme Manager at SECO Headquarters were arranged before the evaluation mission. The project office suggested stakeholders to be interviewed and prepared an updated activity report.

Comprehensive documentation for each activity was sent to the evaluation team in advance. An updated progress table comparing actual status of each activity with deadline and degree of implementation in percent was also made available\(^8\), but no systematic assessment of achievements against planned objectives. During the initial briefing the NPC provided additional information.

We applied an interactive, participatory evaluation approach, based on meetings and interviews with stakeholders. A detailed schedule of meetings is included as Annex B. We further reviewed a number of background papers and reports (see detailed list in Annex C) and validated them through interviews and qualitative assessments.

Findings, conclusions and recommendations were presented to the NPC, the UNIDO Regional Office, the Embassy of Switzerland in Beirut, and the President of LibanPack. Some minor factual errors were immediately corrected based on the feedback received, before circulating the preliminary evaluation results to UNIDO and the donor.

After the mission, a de-briefing meeting with the new SECO Programme Manager responsible for MACLE was conducted at SECO headquarters in Berne. The international evaluator also met the UNIDO Project Manager in Vienna. His substantive comments related to findings on project design were taken into account in this report.

Limitations to this evaluation were the following:

The project document does not include a logical framework but only a list of performance indicators (without baseline data). During the inception phase\(^9\) a logical framework was established, which is an improvement. However, the project progress report on activities conducted and outputs produced did not include an assessment of achievements against planned outputs and objectives. This shortcoming made an assessment of effectiveness and efficiency difficult.

Because most outputs were completed only recently or are still in process, a detailed assessment on possible impact would be premature. The project document includes two budget breakdowns, one by UN budget lines and one by outputs. The budgeting and financial reporting, although in line with UN norms, does not provide information on the planned and effective use of funds per category of expenditure for each activity. The Inception Report added an output-related budget detailing categories of expenses, but those are different from the UN-budget lines.

Two separate reports on expenses per objective/activity and expenditures per UN-budget line are available. While this is a significant step towards Result-Based Management (RBM), the two reports (output-based and according to budget lines) are not linked together. Thus, a detailed efficiency assessment is still not possible.

\(^8\) Monthly progress report April - September 2009 plus table progress activities against planning
Unfortunately, UN security regulations did not allow visits to the companies. An on-site assessment of the work done would certainly have provided an additional insight.

Despite these limitations, the factual information available provided sufficient basis for a well founded assessment.
II

Project planning and achievements

A. Project funding

MACLE is fully funded by SECO with an overall budget of USD 1,946,903 (plus USD 253’057 agency support cost), of which USD1,663,060 or 85% were disbursed or committed\textsuperscript{10}. At the moment of the evaluation, the uncommitted balance was USD283,843.

Table 2: Project budget and expenditures

<table>
<thead>
<tr>
<th>Expenditures by budget lines/type of input</th>
<th>Allotment</th>
<th>Total as at 01.06.09 in USD</th>
<th>Percentage of actual expenditure (rounded)</th>
<th>Percentage of budget spent (rounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-00 International Experts</td>
<td>506,000</td>
<td>480,944</td>
<td>29%</td>
<td>95%</td>
</tr>
<tr>
<td>13-00 Support Staff</td>
<td>45,800</td>
<td>31,769</td>
<td>2%</td>
<td>69%</td>
</tr>
<tr>
<td>15-00 Local Travel</td>
<td>52,000</td>
<td>42,115</td>
<td>3%</td>
<td>81%</td>
</tr>
<tr>
<td>16-00 Other personnel costs</td>
<td>24,000</td>
<td>11,532</td>
<td>1%</td>
<td>48%</td>
</tr>
<tr>
<td>17-00 National Experts</td>
<td>495,500</td>
<td>372,815</td>
<td>22%</td>
<td>75%</td>
</tr>
<tr>
<td>21-00 Sub-contract</td>
<td>96,000</td>
<td>52,550</td>
<td>3%</td>
<td>55%</td>
</tr>
<tr>
<td>32-00 Study tours</td>
<td>140,000</td>
<td>116,030</td>
<td>7%</td>
<td>83%</td>
</tr>
<tr>
<td>33-00 In service training</td>
<td>65,500</td>
<td>54,663</td>
<td>3%</td>
<td>83%</td>
</tr>
<tr>
<td>45-00 Equipment</td>
<td>448,000</td>
<td>436,508</td>
<td>26%</td>
<td>97%</td>
</tr>
<tr>
<td>51-00 Miscellaneous</td>
<td>74,103</td>
<td>64,134</td>
<td>4%</td>
<td>87%</td>
</tr>
<tr>
<td><strong>99-99 Total</strong></td>
<td><strong>1,946,903</strong></td>
<td><strong>1,663,060</strong></td>
<td><strong>85%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Project document, InfoBase, UNIDO (based on uncommitted amount, calculated by evaluators)

\textsuperscript{10} Financial status based on On-line Project Detail Report as per 20 September 2009, provided by the project - see detailed table reproduced in section II.C below.
Table 3: Expenditures by objectives

<table>
<thead>
<tr>
<th>Expenditures by objectives (in USD)</th>
<th>Total Expenditures</th>
<th>Percent of expenditures</th>
<th>Percent of total Project Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Objective A: Upgrading of laboratories and services for packaging and Services for Packaging &amp; Labeling for Export</td>
<td>801,551</td>
<td>48%</td>
<td>41.2%</td>
</tr>
<tr>
<td>2 Objective B: Technical support and Information for market access</td>
<td>83,815</td>
<td>5%</td>
<td>4.3%</td>
</tr>
<tr>
<td>3 Objective C: Upgrading the Lebanese Quality Chain for selected agro-based products</td>
<td>241,997</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>4 Not allocated (CTA, NPC, mission costs, evaluation, transportation, sundries, accommodation etc.)</td>
<td>535,697</td>
<td>32%</td>
<td>25.2%</td>
</tr>
<tr>
<td><strong>Total (excl. UNIDO support)</strong></td>
<td><strong>1,663,060</strong></td>
<td><strong>100%</strong></td>
<td><strong>85.5%</strong></td>
</tr>
<tr>
<td><strong>Total budget (excl. UNIDO support)</strong></td>
<td><strong>1,946,903</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td><strong>Remaining</strong></td>
<td><strong>283,843</strong></td>
<td></td>
<td><strong>14.5%</strong></td>
</tr>
</tbody>
</table>

Source: Project reporting, evaluation team based on information provided by the project

B. Project planning

Identification

MACLE addressed issues related to Sanitary and Phytosanitary Measures (SPS), to Technical Barriers to Trade (TBT) and to strengthening the competitiveness of Lebanese enterprises. In 2004 a survey among 100 Lebanese exporters revealed the major challenges for Lebanese food exporters, such as difficulties to proof conformity of products with mandatory standards of importing countries and a large number of rejections due to wrong labeling and deficient packaging. Non-compliance with quality management standards related to food safety was identified as another problem.

With its focus on the improvement of packaging testing, advisory services for packaging and labeling and on compliance with food safety requirements of key export markets (in particular traceability), MACLE was designed as a complementary effort to the more comprehensive EU quality programme (QUALEB). UNIDO identified the appropriate partners responsible for the various fields of the intervention. Taking into account the important role of the civil society in Lebanon, the project worked closely with private sector associations, industrialists and chambers of commerce.

The intervention was timely and synchronized with the implementation of other donor-funded initiatives, which cover various aspects of strengthening the NQI and competitiveness of Lebanese enterprises, in particular, QUALEB, the Euro-Lebanese Centre for Industrial Modernization (ELCIM) and the UNIDO LAISER Project (Lebanese Agro-Industry Support and Economic Recovery).

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11 Compliance with the SPS and the TBT Agreement is compulsory for all WTO members. Lebanon is observer to the WTO and currently in the process of joining WTO, but not yet a member. However, the Free-Trade Agreement signed between EFTA and Lebanon (in particular Art. 12 and 13) refers explicitly to TBT and SPS.

12 Barrier to Trade Report, UNIDO - INFOPRO Research, May 2004. Results were confirmed by additional research done under QUALEB. The INFOPRO report was recently updated (draft version October 2010).
UNIDO capitalized on the earlier Integrated Programme (IP) in Lebanon, under which a comprehensive assessment of the National Quality Infrastructure (NQI) with focus on standardization and testing was conducted. The IP had also included a component on “Strengthening human and institutional capacity for upgrading safety, quality and standards of Lebanese SMEs - pilot application to Tahineh and Halawa manufacturers”. The detailed needs assessment at institutional and enterprise levels and the practical experience in working with Lebanese enterprises were benefits of this IP. Main activities conducted under the IP are summarized in the MACLE Inception Report.

MACLE was developed in the context of the Free Trade Agreement (FTA) between the EFTA Countries and Lebanon signed in 2004, under which Switzerland and Lebanon agreed on a bilateral technical assistance programme.

At the national level, MACLE is well aligned with Lebanon’s trade facilitation strategies and policies endorsed by the government.

Assistance to increasing competitiveness of enterprises, enhancing trade infrastructure, the reduction of technical barriers to trade, improvement of market access and integration into the world economy are among the core areas of SECO’s support to developing and transition countries. Lebanon is not a priority country of Switzerland’s development cooperation but benefited from a technical cooperation programme under the EFTA-FTA.

The project matches perfectly the mandate and the core competencies of UNIDO, which is to alleviate poverty and promote social advance, by supporting developing and transition countries to participate in the world production system by helping them to raise productivity and to develop competitive economies.

Beyond the boundaries of Lebanon, UNIDO also identified the opportunity for possible synergies with the E-Trace project in Egypt (supported by UNIDO).

**Formulation**

The project document includes a comprehensive analysis of the challenges of Lebanese exporters. It is remarkable that the problem analysis of MACLE started with the needs of enterprises and not with a wish list of official counterparts. The relevance of SMTQ capacities as a mechanism for trade facilitation is also well explained.

Against this background, MACLE addresses primarily “conform” aspects (improving availability of recognized testing results) and “compete” aspects (improving productivity and product quality) but also some “connect” aspects (information on packaging requirements and labeling) - all key drivers of opening export markets for developing countries. All stakeholders interviewed by the mission confirmed that MACLE was the right type of intervention at the right time. We received a
particularly strong affirmation of MACLE’s importance from the private sector. This is clear evidence that the project’s objectives met expressed needs of end-users of quality services.

Considering the specific challenges in Lebanon (in terms of rejections of Lebanese exports by importing countries) and the donor context, the project focused on two key thematic areas: compliance with labeling and packaging standards and food quality management systems required by importing countries (including traceability). It should be noted that the importance of packaging goes beyond mere compliance issues. Packaging is an important tool to increase value to and increase competitiveness of products. This is particularly important for Lebanon, where production costs (salaries, energy) are higher than in other countries in the region. Rather than competing by price, Lebanese enterprises must be able to offer superior quality and to convey this to customers. Thus, packaging and the implementation of quality management systems are also a way of strengthening competitiveness of businesses - not only a compliance issue. Creating brand value through strong and internationally protected brands (trademarks, geographical indications or collective marks) is another important aspect.20 In the relatively advanced economic context of Lebanon, UNIDO made the right choices on the scope of the intervention and on delivering in-depth instead of generic technical assistance.

Good packaging contributes to improved marketability for many different consumer goods. Relatively minor improvements in packaging can add significant value to products, and this with a comparatively small investment.

Current and planned activities of other donors were taken into account at the design stage. In cognizance of the broad cooperation between the MoET and the European Union, it was appropriate to design the intervention as complementary (filling gaps) of existing donor interventions. The project document also provides for a formal, although unilateral, coordination mechanism with key projects through including representatives of ELCIM and QUALEB into the Steering Committee.

Explicitly mentioned but not specified in the project document were synergies with SECO-funded projects in the country and the possibility to include relating Swiss organizations into the cooperation.21 While expected cooperation within the SECO portfolio seems not to have materialized, there were also no significant overlaps.

The project is reasonably well structured - with the exception of the local consumer protection element (inspection, quality seal, basic metrology services through a mobile metrology laboratory), which does not really fit into the overall intervention logic that is tailored towards improving access to international markets.

During implementation, the key focus of the project shifted towards packaging and food safety. In particular, the Steering Committee decided not to procure a mobile calibration unit but to purchase of some simple metrology equipment for the use in local markets instead. This was however more a result of practical reasons (staffing problems within the Legal Metrology Department) rather than based on strategic considerations.

Instead of a complete logical framework, the project document includes a list of objectives, required outputs and performance indicators. However, some of the performance indicators are either (a) not clearly measurable and/or (b) no causal links exist between the performance

20 This was partially covered by a SECO-funded project strengthening Geographical Indications in Lebanon that has ended in early 2009.

21 Mentioned are the Swiss Accreditation System (SAS), the Schweizerische Normenvereinigung (SNV, the Swiss Standardization Association and the Swiss Import Promotion Programme (SIPPO) funded by SECO.
indicators and the objectives. Some of the links between project inputs and outputs are not exclusive (defined outputs are only one among many factors to reach the objective). Parts of the “outputs” defined are in fact “outcomes” (for instance accreditation of laboratories, a condition to provide recognized certification services for packaging in output 1.2, is not a direct output of the project). Moreover, a number of “sources of verification” for success indicators are not clear. Baseline indicators (status at the beginning of the project) are not available, which makes it difficult to measure impact.

The identification of risks and assumptions is rudimentary and generic (availability of staff, willingness to use assistance rendered to beneficiaries, willingness of laboratories to maintain accreditation). A plan how to address risks is missing.

The project document includes an estimated budget using the standard UNIDO format by UN-budget lines\(^{22}\), but not allocated to outputs.

While this fulfills the requirements of UNIDO Technical Cooperation Guidelines, it does not show (a) the amount allocated to each of the outputs and (b) how the funds will be used to deliver the expected results (e.g. for equipment, expert input, study visits)\(^{23}\).

A budget per budget lines allocated to each output would give project management a better basis to systematically consider different options for implementing a certain task, in order to identify the most cost efficient solution. The donor and the government would also be better able to appraise efficiency and effectiveness of funds use prior to approving the project. Subsequently comparing budgets with actual expenses per budget line and output would provide UNIDO with a sound basis to more accurately plan future interventions in other countries. Taken a step further, it would allow UNIDO to systematically benchmark its projects within and across different branches and to strengthen organizational learning.

There is further room for improvement in defining a clear management structure and specific responsibilities, both of which are only marginally mentioned in the Project Document, although in this particular project, this did not lead to any problems.

The development objective is broken down into three immediate objectives with one to four outputs and the respective activities. A logical vertical link exists for most outputs from the overall objective down to the activity level, with the exception of output 2.4 (mobile metrology laboratory for market surveillance with the objective to improve consumer protection), which aims to serve the domestic market and is therefore not directly related to the overall development objective. The second output of a “business plan” for a national quality seal (2.2) also relates to consumer protection, but is better linked to the overall objective in terms of strengthening the “quality culture”, which might lead to an impact on product quality (including for exported products). It is not clear why the procurement of a mobile metrology laboratory was included in the original project plan, other than the general reference made to Mozambique and Tanzania, where a mobile metrology laboratory was procured, and the need expressed by MOET to strengthen domestic market surveillance.

The project duration of three years was commensurate for achieving the planned results.

\(^{22}\) Annex 1 to the project document presents a yearly budget with some useful explanation on what type of expenses are included in each budget line.

\(^{23}\) The project document includes a very rough breakdown according to objectives (page 16), but without any details on assumptions and not broken down to the task level. Subsequently, the project office established a budget per activity, yet without specifying the type of planned expenditures according to UN-budget lines. This is a significant step into the right direction.
As discussed in greater depth in section C (implementation), minor delays in delivering expected results were mainly due to external conditions rather than to over-ambitious plans.

Conclusion:

Identification and design of the project were well done, with the exception of applying good practices in strategic, operational and financial planning, including the logical framework. As shown in section D below - the shortcomings in applying project planning tools at the design stage did not have a negative impact on the implementation of MACLE.

C. Project management

MACLE is implemented under the same rules and regulations as other UNIDO interventions under the responsibility of a Project Manager based in Vienna. However, in practice, implementation was clearly driven by the field and in close coordination with partners.

Successful delegation of day-to-day management to the field

The Project Manager delegated de facto most of the day-to-day management to the field. Day-to-day coordination with partners took place in the field, specifically by the NPC who obtained instructions and support from the Project Manager when needed. The NPC - who seems to be exceptionally well in control and “on top of things” - fulfilled a key role in moving the project forward. Delegation of day-to-day management to the field seems to have succeeded, because (a) UNIDO appointed the right staff with complementary skills to the project team (Project Manager, CTA, NPC, and Project Assistant) and (b) because of the way the Project Manager led his team.

UNIDO used the right approach to building and managing the project team

This included firstly the selection of the right NPC. Unlike in other projects, the NPC was selected based on her management skills, an existing local network, familiarity with the local context, as well as experience to work with a wide range of different stakeholders rather than her technical skills, prior UN-experience or political considerations. Strong interpersonal skills, commitment to results and ability to move things forward seem to be her key strengths.

Secondly, the Project Manager empowered the NPC, but still actively coached her together with the CTA. She was granted with a wide autonomy, empowered to take initiative, and enabled to use her technical and managerial capacities. This created the necessary conditions for the NPC to bring her strengths into play. At the same time, the Project Manager and the CTA supported her whenever needed, in particular also in coping with the UNIDO administrative rules. Both the Project Manager and the CTA applied the right mix of supervision and hands-on-support whenever needed, rather than micromanaging the project.

The excellent day-to-day coordination by the NPC freed up time of the part-time CTA and the Project Manager in Vienna. This again allowed them to focus key strategic and technical problems of MACLE that really mattered. An assessment of mission reports showed that the visits of the

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24 Reflected for example in SECO’s manual on logical frameworks published on www.seco.admin.ch or UNIDO new Technical Cooperation Guidelines.
25 Project Manager with overall management responsibility based at UNIDO HQ, part-time CTA, NPC and Project Assistant; external PMU at UNIDO Office in Beirut.
CTA and the Project Manager were used efficiently and included extensive networking with partners.

The UNIDO Representative fulfilled an important role in day-to-day coordination at a more political level, including cooperation with other donors.

Project Manager coordinated effectively with UNIDO support services

The effective provision of UNIDO support services (accounting, human resources and procurement) was another crucial factor that contributed to the smooth implementation of the project. Headquarters and the local UNIDO Office delivered all services on time and as requested. Recruiting national and international consultants took, on average, only two weeks to as compared to up to six months in other UNIDO projects we have evaluated. International procurement required three to six months, which is reasonable considering the many steps involved. The Project Manager seems to have played a key coordination role between MACLE in the field and UNIDO Headquarters.

Steering Committee with focus on strategic matters and stakeholder involvement

The Steering Committee met twice and focused on strategic matters and stakeholder involvement. The presence of representatives of QUALEB and ELCIM in the Steering Committee facilitated donor coordination in the field of SMTQ. MACLE and QUALEB also shared the same National Project Director, which was a distinctive advantage.

External PMU based at UNIDO Office, but still close coordination with partners

While the “PMU” was based at the UNIDO Office, the actual implementation of the project happened within or in close cooperation with partner institutions. The NPC spent a significant part of her time directly with partner institutions. The key added value of the PMU was coordination between UNIDO Headquarters and beneficiaries, support and trouble shooting. While external PMUs are strictly speaking not in line with the Paris Declaration on Aid Harmonization and Effectiveness, the fact that the PMU was not embedded in one of the partner institutions had no negative impact on the implementation of MACLE. Because the project worked with multiple partners in different fields, it might have been difficult to find an appropriate institutional base for the PMU.

Coordination with SECO

Coordination between UNIDO and SECO at Headquarters and in the field went smoothly. In the field, the Embassy of Switzerland monitored the project through participation in Steering Committee meetings and certain project events. It should also be highlighted that the Embassy and the Ambassador in person actively lobbied for the interests of the project. For instance, the Ambassador personally liaised actively with other potential donors in order to identify alternative funding opportunities for a continuation of MACLE.

Conclusion:
The technical and administrative management of the project were excellent. This is even more remarkable considering the difficult context the project was working in. Many beneficiaries compared MACLE positively with other projects, which according to them, showed only mixed results. Key to success was the selection of the right NPC, the delegation of day-to-day management to the project combined with the right degree of technical and administrative support. The Project Manager and the CTA used their time effectively by focusing on issues that really mattered for the success of the project, including coordination with different service departments at UNIDO headquarters. Room for improvement exists in consistently applying RBM.
Coordination between SECO and UNIDO went smoothly, both in the field and at Headquarters. The Embassy of Switzerland\textsuperscript{26} monitored the project through participation in Steering Committee Meetings and selected project events and also provided political support on a demand basis.

D. Project implementation

The following paragraph compares planned with achieved activities based on a validation of progress reports\textsuperscript{27} in the light of the evaluation findings on the ground. Amendments of the planning basis have been integrated that were made during the inception phase and at a later stage by the Steering Committee. Information provided by the NPC was also taken into consideration. Because not all outputs are already delivered, we included an assessment on what is likely to be achieved by the end of March 2010 and how much time would be needed to complete remaining tasks.

Development Objective:

Facilitate industrial development (supply capacity) and trade (and consequently spurring economic growth and employment opportunities) by reducing technical barriers to trade through strengthening capacities of the Lebanese TBT/SPS infrastructure and capabilities.

Immediate Objective 1: Upgrade laboratories, services for packaging and labeling for export.

<table>
<thead>
<tr>
<th>Output 1.1</th>
<th>Planned/Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAP analysis of packaging and labeling requirements and available services and capabilities</td>
<td>Planned activities (P.1 - P.5)</td>
</tr>
<tr>
<td></td>
<td>1. In-depth assessment of the packaging industry capability and demand by updating previous studies, carrying out a market analysis and SWTO analysis to develop the sector</td>
</tr>
<tr>
<td></td>
<td>2. Review and carry out a feasibility study for a packaging centre and identification of gaps in the supporting infrastructure</td>
</tr>
<tr>
<td></td>
<td>3. Assessment of national, regional and international requirements (key export markets) in terms of standards, labeling and testing to identify gaps, barriers to trade and investment requirements</td>
</tr>
<tr>
<td></td>
<td>4. Assessment and review of public/private laboratories involved into R &amp; D, testing and certification for packaging</td>
</tr>
<tr>
<td></td>
<td>5. National seminar on packaging and labeling: Barriers to Trade and Opportunities</td>
</tr>
<tr>
<td></td>
<td>Realized activities</td>
</tr>
<tr>
<td></td>
<td>• Established report on assessment of packaging industry</td>
</tr>
<tr>
<td></td>
<td>• Prior feasibility study done under ELCIM updated, which includes “business plan”. Done with the view of assessing feasibility - not applicable to current model of LibanPack</td>
</tr>
<tr>
<td></td>
<td>• Assessment report on local laboratories proving testing in packaging and some packaging producers</td>
</tr>
<tr>
<td></td>
<td>• National seminar on packaging was conducted in conjunction with the launch of LibanPack in April 2009</td>
</tr>
<tr>
<td></td>
<td>No outstanding activities</td>
</tr>
</tbody>
</table>

\textsuperscript{26} The Embassy represented SECO directly. The Swiss Coordination Office in Beirut is only responsible for Humanitarian Aid provided by the Swiss Organization of Development and Cooperation, which is different from the approach used in other countries covered by SECO.

\textsuperscript{27} Progress Reports dated September 2009 (covering April - September 2009), 6 November 2008 (covering November 2007 - October 2008) and minutes of the Steering Committee.
Output 1.2

Planned/Realized

Up to two laboratories able to provide testing and certification for packaging

**Planned activities (P.6 - P.14)**

1. Gap analysis and identification of needs and weaknesses in consumer packaging (standards, testing, physical infrastructure, equipment and skills)
2. Market survey of needs for consumer packaging
3. Assess packaging and labeling requirements for the selected food products
4. Review LIBNOR standards and work related to packaging and labeling
5. Upgrade packaging laboratories (equipment and skills required to carry out testing on consumer packaging
6. Identification of priority tests based on the market analysis and requirements
7. Promote use of Lebanese capacity for packaging in the country and in the region
8. Support in accreditation including proficiency testing of the packaging division in the relating laboratories
9. Establish twinning arrangements with packaging testing laboratories in Switzerland or in other countries

**Realized activities:**
- Report on gap analysis on packaging sector
- Market survey conducted (report available)
- List of selected products and status of compliance to requirements completed
- LIBNOR standards on packaging were reviewed and updated in 2008 - as an additional activity, a local expert is currently supporting the technical committees and LIBNOR to draft the missing standards on packaging - not yet completed and outcome (publishing standards) too early to assess
- Based on a list of needed tests, characteristics of equipment needed to conduct those tests have been defined and the equipment to be procured identified. Equipment procurement and installation is completed (IRI and LAI). Trainings were conducted in both Lebanon and Tunis
- The project produced 3 promotion boxes to show solutions and capabilities using local packaging facilities. Packaging industry participated in international fairs and exhibitions (funded by the project). The NPC visited the Pack & Gift exhibition in Paris. Also, a study visit was arranged to the IPACK-IMA exhibition in Milan
- Training on fundamentals on packaging and packaging design was conducted in Beirut
- Study tour to Switzerland was conducted but the Swiss Packaging Institute did not show any interest for a twinning agreement. Subsequently, a twinning agreement was signed with PACKTEC (Tunisian packaging centre)

**Outstanding activities:**
- Support laboratories in obtaining accreditation and proficiency testing not yet completed (P. 13)

**Comment**
- It seems unlikely that activity P. 13 (support to accreditation and proficiency testing) will be completed by March 2010. September 2010 seems more realistic. The twinning arrangement with Switzerland will not be further pursued - activity P. 14 to be considered as completed and not 60% completed as reported

Output 1.3

Planned/Realized

Up to 20 exporters assisted in implementing packaging and labeling requirements in export markets (pilot)

**Planned activities (P.15 - P.17)**

1. Increase awareness on the importance of packaging regarding to export markets
2. Assist up to 20 processors/exporters in improving packaging and labeling
3. Participation in international fairs
4. Develop good practices, guidelines for exporters

**Realized activities**
- A total of 15 trainings and workshops on packaging and labeling have been organized. 9 study visits were conducted to exhibitions on packaging technology and packaging centers (Tunisia, France, Italy, Germany and Switzerland) - participants include mostly representatives of packaging companies and some exporters
- The project produced new packaging designs and labels for 40 Lebanese companies. Companies provide feedback on the impact of those efforts (detailed list of services provided is available and was selectively cross-checked with companies and samples presented by MACLE. The limited time of the evaluation mission did not allow a more in-depth assessment).
- Participation of companies in several international fairs (Italy, Germany, Jordan, Dubai, France and Switzerland)

**Outstanding activities (as planned by project)**
- Budget for trade fairs has not been entirely used (activity reported 90% complete)

**Comments**
- Considering the financial situation of the project and the extensive exposure to trade fairs already provided, funds might be reallocated (see recommendations below)

### Output 1.4

**Planned**
- Design institutional scheme for a technical centre on packaging and labeling
- Support the establishment of a technical centre for packaging and labeling
- Development of Standard Operation Procedures for the technical centre on packaging and labeling

**Realized activities**
- Feasibility study for packaging centre with analysis of the involved legal aspects completed
- Centre established, equipment bought and one director selected and contracted. Centre is operational and had 30 members by October 2009
- Trainings and technical assistance were provided both in Lebanon and Tunis (under cooperation agreement)

**Outstanding activities**
- Standard operation procedures have not been completed
- No meaningful and updated business plan is available for the centre. Available is a general concept (established under P.2) plus an Excel table with estimated revenues and expenses. A business plan that is useful as a basis for mid- and long-term planning would be much more comprehensive and specific

### Immediate Objective 2: Technical support and information for market access and consumer protection.

### Output 2.1

**Planned activities (C.1 - C.6)**
1. Assessment and gap analysis on private/public certification and inspection systems
2. Training on ISO standards for certification and inspection (ISO 17020 on Inspection and ISO guide 62, 65 on certification and on ISO/IEC 17050 general criteria for a supplier’s declaration of conformity
3. Market analysis of certification services and demand
4. Review existing quality seal (LIBNOR and other schemes including proposals by other institutions and consumer associations
5. Development of a proposal on how to improve certification capacity in Lebanon
6. National validation seminar on certification

**Realized activities**
- Report on availability of and demand for certification services completed
- Review existing quality seal (LIBNOR) and other schemes, including proposals conducted

**Comments**
- C.1 Gap Analysis will be carried out by QUALEB project (and not by MACLE). This has been officially agreed and approved by the Steering Committee
- C.2 Training on ISO standards: idem
- C.5 - C.6: idem
  There is a new National Body for Accreditation and Certification appointed by the Council of Ministers (COLIBAC). This body is in charge of this task and MACLE does not need to do anything further in this domain

<table>
<thead>
<tr>
<th>Output 2.2</th>
<th>Planned/Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business plan for national certification and quality seal</td>
<td>Planned activities (C.7 - C.10)</td>
</tr>
<tr>
<td>1. Review the results of the national validation seminar</td>
<td></td>
</tr>
<tr>
<td>2. Develop a business plan for national certification including quality seal</td>
<td></td>
</tr>
<tr>
<td>3. Development of the certification system complying with international standards and guides</td>
<td></td>
</tr>
<tr>
<td>4. Training of assessors in certification and carry out mock-certification</td>
<td></td>
</tr>
<tr>
<td><strong>Realized activities</strong></td>
<td></td>
</tr>
<tr>
<td>- Detailed, in-depth assessment of current situation, demand and, concept for quality seal established, but not summarized in an actual business plan</td>
<td></td>
</tr>
<tr>
<td>- <strong>No outstanding activities</strong> (unclear whether it is still planned to establish business plan)</td>
<td></td>
</tr>
<tr>
<td><strong>Comments</strong></td>
<td></td>
</tr>
<tr>
<td>- The implementation of a national quality seal seems highly unlikely. Stakeholders unanimously expressed a high degree of skepticism. Considering the lack of feasibility, it does not make sense to further pursue this activity under this and a possible next project phase. A business plan would not be useful until a specific project for a national quality seal is agreed on</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 2.3</th>
<th>Planned/realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile calibration and metrology laboratory for market surveillance</td>
<td>Planned activities (M.1 - small equipment - rest cancelled)</td>
</tr>
<tr>
<td>1. Identify the demand for calibrations in the field and define equipment needs</td>
<td></td>
</tr>
<tr>
<td>2. Design a mobile calibration unit</td>
<td></td>
</tr>
<tr>
<td>3. Procure a mobile calibration facility and equipment</td>
<td></td>
</tr>
<tr>
<td>4. Train staff on mobile calibration and verification</td>
<td></td>
</tr>
<tr>
<td>5. Develop procedures for conducting testing</td>
<td></td>
</tr>
<tr>
<td>6. Training of technicians</td>
<td></td>
</tr>
<tr>
<td>7. Launch the calibration service</td>
<td></td>
</tr>
</tbody>
</table>
The Steering Committee agreed not to proceed with the procurement of a mobile calibration unit, but to purchase a number of small calibration equipment for market surveillance officials instead. This has been fully completed in the second half of October 2009 (delivery of equipment during the mission).

### Immediate Objective 3: Improving Lebanese quality chain of selected agro-based products in order to increase market access.

<table>
<thead>
<tr>
<th>Output 3.1</th>
<th>Planned/Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 20 exporters assisted to meet SPS/TBT market requirements (pilot)</td>
<td><strong>Planned activities (F.1 - F.6)</strong></td>
</tr>
<tr>
<td></td>
<td>1. Continue the technical study on quality and safety level in the not yet assessed factories in order to assess the particular needs to meet GHP/GMP</td>
</tr>
<tr>
<td></td>
<td>2. Carry out an investment profiles/cost-benefit analysis of the Tahineh and Halawa factories in Lebanon to identify housekeeping and technology upgrading requirements to conform to standards</td>
</tr>
<tr>
<td></td>
<td>3. Carry out sampling and testing of selected products at different stages of the supply chain using local and foreign laboratories</td>
</tr>
<tr>
<td></td>
<td>4. Enhancing the GHP/GMP/GAP level through providing consulting and upgrading technology</td>
</tr>
<tr>
<td></td>
<td>5. Training, awareness and implementation on a pilot basis on safety and sanitation programs, such as GHP/GMP/GAP and ISO22000/HACCP</td>
</tr>
<tr>
<td></td>
<td>6. Control of raw material (sesame) through proper certificates from country origin (especially Sudan - main source for sesame seeds in Lebanon)</td>
</tr>
<tr>
<td><strong>Realized activities</strong></td>
<td></td>
</tr>
<tr>
<td>• 17 Tahineh factories visited and assessed on implementation of GMP and GHP guidelines</td>
<td></td>
</tr>
<tr>
<td>• Cost-/benefit analysis of the Tahineh and Halawa factories established</td>
<td></td>
</tr>
<tr>
<td>• 40 samples of sesame and end products (Tahineh) conducted</td>
<td></td>
</tr>
<tr>
<td>• Consultation and training at factories, procurement of small equipment for factories</td>
<td></td>
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<tr>
<td>• GMP/GHP training modules organized in Saida, Zahle, Beirut and Tripoli (with a reported total of 120 participants, mainly from the food industry)</td>
<td></td>
</tr>
<tr>
<td><strong>No outstanding activities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
</tr>
<tr>
<td>Equipment provided to factories was of small value and directly served the purpose of complying with the above mentioned food quality management standards</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3.2</th>
<th>Planned/Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness created (200 food producers, exporters and local institutions on traceability and other food export requirements for exporters)</td>
<td><strong>Planned activities (F.7 - F.8)</strong></td>
</tr>
<tr>
<td></td>
<td>1. Organization of up to three seminars situated in the main Lebanese Regions (Beirut, South, North and Bekaa) in cooperation with Lebanese authorities and other projects on traceability systems and the related TBT/SPS in the light of the new EU regulation 178/2002 [on food safety] and the new ISO 22000 and ISO 22005</td>
</tr>
<tr>
<td></td>
<td>2. Study tour abroad to learn experience in addressing food traceability and other SPS-related requirements</td>
</tr>
<tr>
<td>Implemented activities</td>
<td>Planned/realized</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Seminars on Traceability in olive oil supply chain in Tripoli,</td>
<td>Planned activities (F.9 - F.14) - F.12 - F.14 are additional activities not included in the project plan.</td>
</tr>
<tr>
<td>traceability on apple supply chain in Jounieh, seminar on traceability on agricultural</td>
<td>1. Initial value chain analysis related to the key exported food products, which are economically and socially considerable for Lebanese trade</td>
</tr>
<tr>
<td>products in Beirut and participation of MACLE in the National Awareness Day for Food</td>
<td>2. Choosing a small number of target products jointly with Lebanese counterparts</td>
</tr>
<tr>
<td>Safety, training on understanding food safety standards &amp; GFSI in Beirut.</td>
<td>3. Development of a single pilot-case based on a Lebanese agro-industrial product supply-chain, selected by the relevance in terms of tons traded and revenues generated</td>
</tr>
<tr>
<td>• Study tour to visit traceability centre in Egypt (June 08)</td>
<td>4. Elaboration of traceability scheme models and manuals</td>
</tr>
<tr>
<td>No outstanding activities</td>
<td>5. Carry out physical training (farm to fork) of a selected product from Lebanon to Europe</td>
</tr>
<tr>
<td></td>
<td>6. Development of documentation for training and implementation modalities</td>
</tr>
</tbody>
</table>

**Output 3.3**

Implementation of food traceability system in up to 20 food pilot enterprises

**Realized:**

- Apple and olive oil identified as products for initial value chain analysis - based on expert assessment and stakeholder meetings
- Additional: local IT experts of the Chamber of Commerce in Tripoli are currently developing software for traceability (this software will be provided to members of the chamber - it features the possibility to establish a central database). Software will be piloted in 6 companies
- UNIDO ETRACE (Egypt) project has provided training materials and documentation

**Outstanding:**

- Elaboration of traceability scheme and models
- Finalizing the pilot of the traceability software
- Carry out physical tracing (farm to fork)

**Comment:**

The completion of F.11, F.12 and F.13 require at least an additional 8 - 12 months. An extension of the project until end of September 2010 is likely to provide sufficient time to achieve the planned results

**Conclusions:**

Most outputs were completed as planned, with the following comments:

- **Output 1.2:** Support to laboratories in obtaining accreditation and proficiency testing is not yet completed (P. 13). Preparation for accreditation would take at least until summer 2010 - an extension of the project would be needed. We assume that the twinning arrangement with Switzerland will not be further pursued, meaning that activity P. 14 can be considered as completed.

- **Output 1.3:** Budget for trade fares (P.17) has not been entirely used (activity reported 90% completed). There is no urgent need for additional visits to trade fares.
Output 1.4: Standard operation procedures for LibanPack have not yet been drafted. No meaningful and updated business plan is available for the centre. The general concept (established under P.2, which needs to be updated) plus an Excel table with estimated revenues and expenses does not provide a useful strategic guidance.

Output 2.1: Parts of the activities relating to certification and inspection were not further pursued, as these are being covered by QUALEG. This has been approved by the Steering Committee.

Output 2.2: Detailed and excellent expert assessments of the current situation and recommendations what needs to be done are available. As an agreement on the specifics of the national quality seal has not been reached, combining the information retrieved into a business plan is meaningless and should not be further pursued.

Output 2.3: UNIDO and MoET agreed to not further pursue the purchase of a mobile metrology unit, but to buy small metrology equipment for market surveillance instead, which has been delivered during the evaluation mission. The reason given for the change was a shortage of qualified staff to operate the mobile laboratory at the MoET.28

Output 3.3: Still outstanding but well on track are the traceability software to be developed for the Chamber of Commerce in Tripoli and the physical training “farm to fork”, unclear whether for one or both of the selected focus products (apple, olive oil).

Finalizing outputs 1.2 (preparation of accreditation for two packaging laboratories), 1.4 standard operation procedures for LibanPack and 3.3 traceability are crucial for the success of the project, but are unlikely to be achieved by March 2010. A non-cost extension until September 2010 is likely to be sufficient to complete the ongoing work.

Case Study

One of the companies supported produces mainly tahina (mulled sesame seeds), keshek, pickles, olives, bourghol and other middle-eastern specialities. About 70% of the production is exported, mainly to Lebanese expatriate communities in Europe, America, Africa and the Gulf Region. They operate a factory in Bekaa and a warehouse in Beirut with 90 employees in total.

The company benefited from UNIDO assistance in improving compliance with food safety standards. The main problems identified by UNIDO experts were old machines, poor infrastructure, unsuitable location of the factory and unskilled staff. UNIDO assistance comprised mainly on-site training/consulting, supervision of the design and construction of a new factory and support to prepare for ISO22000 certification (HACCP and GMP). UNIDO also provided some small toolkits for onsite laboratory testing of raw material and final products.

As a result of its efforts, the company reported 20% more exports, increased volumes, higher quality of production and a more products sold under its own label (rather than bulk).

Their next step will be to prepare for ISO22000 certification. While the main objective is to meet future requirements of importing countries, management also considers ISO22000 as comparative advantage – a way to increase their reputation, broaden the customer base and to achieve a higher sales price.

(Source: interview with management)

28 Minutes of the Third Steering Committee Meeting held on 1 April 2009, (C) (ix)
Assessment of project results

A. Relevance

International priorities:

The overall objective of MACLE reflects the priorities of the internationally agreed framework of Trade Related Technical Assistance (TRTA) and of the UNIDO-WTO framework. It also contributes to the achievement of the Millennium Development Goal 1 (Eradicate extreme poverty and hunger) by creating more jobs through facilitating export-oriented industrial development. It also contributes to poverty alleviation and improved living standards of the population not only through facilitating trade and spurring economic development because substandard products threaten public health, safety and welfare and undermine the limited purchasing power of poor consumers.

National policies, WTO accession, other bilateral and multilateral trade agreements:

Over the past decade, the GoL focused on reestablishing the country’s traditional comparative advantage as a leading business centre in the region by reinforcing the competitiveness of its industry, creating a conducive business environment for sustainable economic growth and further integrating Lebanon into the global economy. Free Trade Agreements were signed with Lebanon’s major trading partners; namely the European Union (EU)\(^29\), the EFTA States (Switzerland, Lichtenstein, Norway, and Iceland)\(^30\) and the Gulf Cooperation Countries (GCC)\(^31\). Lebanon has become part of the Greater Arab Free Trade Area (GAFTA)\(^32\) in January 2005 and is also actively pursuing its adherence to the World Trade Organization (WTO)\(^33\).

MACLE’s objectives match these government strategies. Productivity and product quality are crucial for developing a globally competitive export sector in Lebanon, which will contribute to industrial and agricultural growth, employment and incomes. This is particular important for Lebanon, as the country’s cost structure (in particular salaries, energy costs) are relatively high. Improving packaging\(^34\) adds value and increases competitiveness of products. Lebanese exporters have to meet international standards related to health and food safety requirements (including

\(^{29}\) The EU-Lebanon Association Agreement covers - as one of three components - procedures applicable to imports of agricultural products and processed agricultural products originating from Lebanon into the EU.

\(^{30}\) The agreement signed in 2003 includes trade in marine and agricultural products. It provides for asymmetric tariff dismantling (from 2008 - 2015) and also has substantive provisions relating to intellectual property, competition investment, government procurement and certain aspects of services. Trade in basic agricultural products will be part of bilateral agreements between EFTA member states and Lebanon.

\(^{31}\) The GCC established in 1981 comprises the Persian Gulf states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

\(^{32}\) GAFTA members are 18 out of 22 Arab League Countries: Bahrain, Egypt, Iraq, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, the United Arab Emirates and Yemen - with other countries in the process of joining. The agreement provides for a gradual reduction of tariffs and elimination of trade barriers.

\(^{33}\) Lebanon has observer status to the WTO since 1999.

\(^{34}\) Packaging is part of a comprehensive branding strategy that also calls for strong and internationally protected trademarks. Famous trademarks have a value of billions of dollars.
traceability) as well as packaging and labeling standards that are all covered under the project. The establishment of a national quality would create demand for higher quality products, at least for consumers who are able to afford them. Strengthening consumer protection and surveillance of the domestic market, which are part of MACLE’s objectives, contribute to improving the “quality culture” or “quality awareness”.

The relevance of MACLE was explicitly reiterated by a MoU signed between the Director General of UNIDO and the Minister of Industry on 23 August 2009, in which the Government of Lebanon, inter alia, identifies the following priorities for UNIDO support: “(...) 10. Continue supporting the National Quality and Conformity System to ensure increased market access and protection of consumers and of the environment through assistance and cooperation with the key national institutions such as IRI, LIBNOR, COLIBAC, focusing on packaging and a national Quality Seal, consumer protection, food traceability and safety, laboratory accreditation, TBT and SPS. The trade capacity building programme will also cover the strengthening and promotion of Lebanese traditional products (such as Honey, Kechek) in the national, regional and international markets. (...)”

In conclusion, MACLE is highly relevant and fully in line with the strategies, plans and policies of the GoL and its international commitments. It also links well into the international development agenda in the area of trade facilitation.

Relevance to target groups:

All stakeholders, such as industry syndicates, associations and the individual enterprises interviewed confirmed that MACLE objectives were well aligned with their priorities. The project was particularly relevant for enterprises. Some of them explicitly confirmed that MACLE provided the right type of support and that this type of support resulted in significantly increased revenues35. A high degree of relevance was also confirmed by laboratories (IRI, LAU) that received equipment and by LIBNOR with regard to support in reviewing packaging standards and formulation. MoET confirmed that the metrology equipment procured for market surveillance was identified based on their needs.

Relevance to the donor and to UNIDO:

The project matches the operational mandate, core competencies, expertise and experience in trade capacity building of SECO and UNIDO. SECO’s trade cooperation aims at increasing competitiveness of enterprises, enhancing trade infrastructure, the reduction of technical barriers to trade, improvement of market access and integration into the world economy.

Relevance to the strategy of UNIDO Trade Capacity Building Branch:

UNIDO trade capacity building programme is based on a three-pronged approach that aims at strengthening compete, conform and connect aspects, also referred to as the “3 Cs”.

- The “compete” element means competitive manufacturing capability, removing supply side constraints and to increase value addition with the aim to make the industrial sector more competitive

35 Confirmed by various interviews with direct beneficiaries - mainly relating to packaging improvements and to implementation of different food-safety related quality management systems in their companies.
• The “conform” element relates to the ability of exporters to prove compliance of products to market requirements. Strengthening standard infrastructure enables exporters to meet market requirements (standards, technical regulations and conformity assessment procedures) and to overcome technical barriers to trade.

• The connect element enables sellers to be connected with the market and to foster their integration into multinational supply chains.

As also discussed in the section on project planning (II.B) above, the project covered all three areas with a focus on the “conform” and “compete” aspects.

Relevance of UNIDO 3C approach to Trade Capacity Building for Lebanon:

• Packaging services are relevant in terms of both improving competitiveness of products (“compete”) and ensuring conformity (“conform”): LibanPack’s services to enterprises include a wide range of marketing related aspects (for instance packaging design, aspects of branding). Enterprises confirmed that support in enhancing product packaging was a crucial element for improving competitiveness of their products. The value added of LibanPack is not merely to help companies to conform with standards of importers/importing countries. Most of them confirmed the relationship between attractive packaging, marketability and sales price of their products.

• Relevance of the connect element to companies: Funding of participation in trade fares was used to support enterprises to find buyers. This would typically fall into the domain of other UN agencies (UNCTAD and ITC). Enterprises did however not benefit from support from other projects. The idea that different UN agencies would coordinate among each other in order to jointly work with the same enterprises under different projects is not always realistic. More effective would be for UNIDO to maintain the overall lead of implementing more comprehensive “TCB” projects, but selectively call for input of other organizations under sub-contracting arrangements, including UN agencies that are able to add value. This would ensure that all aspects that are relevant to TCB for enterprises are comprehensively and consistently covered.

• UNIDO 3C Approach would also be relevant to Lebanon’s service sector: Targeting the primary and secondary sectors only seems too narrow for an emerging country with a traditionally strong service sector, such as Lebanon. As economies get to a more advanced stage of development, new needs evolve. The service sector becomes increasingly more sophisticated and often faces similar market access challenges than industry. Furthermore, many companies sell a combination of products and services. Service provision is often used as a way to increase and diversify revenues. An example mentioned during our mission was the hospitality industry and Business Process- or Software Outsourcing. Deciding on specific sectors to target and how to support them would need further research.

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36 Not the international trade system as for instance mentioned in UNIDO brochure of the MACLE project. The international trade system is about bilateral and multilateral relationships among countries and organizations, not about commercial relationships between companies.

37 Gross domestic product (according to purchase power parity) in 2008 estimated at 11,100 USD, with the service sector accounting for 76.1% of GDP (source: CIA World Factbook).

38 This is based on the experience of the international evaluator as a management consultant. Top hotels are increasingly required to establish food safety systems, business processing outsourcing companies must comply with standards on IT security and so on.
Relevance of access to finance as an element to increase competitiveness: Access to finance is a major challenge for Lebanese companies, especially for SMEs with no collateral to secure loans\textsuperscript{39}. Access to finance is crucial to modernize production and to increase product quality. While this does not fall into the mandate of the TCB branch, UNIDO Investment Promotion Branch may be able to make a contribution or otherwise, UNIDO could coordinate with organizations specialized in SME Finance\textsuperscript{40}.

MACLE did a good job in broadening company level assistance aiming at increasing productivity and product quality beyond the traditional elements of UNIDO TCB approach.

The work done at the enterprises level (relating to food safety standards) used a comprehensive approach to strengthen competitiveness, including productivity and product quality improvements (see however our critical comments on the effectiveness of this approach in section III.C below).

In conclusion, MACLE is highly relevant in terms of international priorities, national policies, the needs of enterprises, and the expressed demands of laboratories and market surveillance. It is well aligned to UNIDO and SECO’s core mandates and competencies. The mix of strengthening trade capacity was well selected and included new aspects of high relevance to beneficiaries, such as for example marketing-related aspects of packaging as a means to improve competitiveness of products.

B. Ownership

Partners have been actively involved into the process of identification, formulation and implementation of the project, including the private sector and actors of the civil society.

UNIDO did an excellent job in actively strengthening the ownership of local stakeholders by enrolling them into the strategic and operational management of MACLE. Regular updates (including on the financial implementation of the project) enabled the Steering Committee to fulfill its steering function. Political influence of Steering Committee members was used in an intelligent way to lobby for the interests of MACLE, including the establishment of LibanPack. UNIDO managed to develop a real partnership on equal level with local stakeholders. Interview partners showed enthusiasm and pride to be a part of the MACLE project.

This also shows that the agency execution mode is not necessarily in contradiction to the principles of mutual accountability and ownership in delivering aid. The NPC played an important role as an interface and facilitator between UNIDO, SECO and contributed significantly to strengthening ownership.

We found that all beneficiaries and the counterpart actively supported the implementation of the project, including:

- Significant financial contributions and a high degree of personal support of key actors of the civil society: the Association of Lebanese Industrialists (ALI) is currently hosting LibanPack in its premises (free of charge, estimated value of rent around USD6,000 per year). Board members (President, Vice-Presidents) of the Syndicates of the Food Industry, the Packaging Industry and the Federation of Chambers of Commerce, who are all owners of large companies, are also members of the Steering Committee of MACLE and of the

\textsuperscript{39} This was highlighted as one of the key challenges by companies that have upgraded their production in order to meet GMP/GHP requirements under the project.

\textsuperscript{40} Organizations specialized in SME financing include for instance FMO (Netherlands), FINFUND (Finland), NORFUND (Norway), SIFEM (Switzerland) and others.
Board of LibanPack. This high degree of involvement by the private sector into the strategic management of a technical cooperation project is exceptional.

- The Syndicates expressed a strong commitment to keep LibanPack running, even if new donor funding would be delayed or end.
- Enterprises made considerable own investments in order to implement food safety systems, in one specific case EURO 2 million to refurbish an entire factory.
- Active contributions of laboratories to work towards accreditation (personnel input).

**Conclusion:**

We found an exceptionally high degree of ownership by all stakeholders, expressed by involvement into planning and implementation of the project, active support of implementation and intensive use of outputs produced. UNIDO played an important role in building this ownership by actively enrolling and empowering local counterparts.

**C. Effectiveness**

As explained in the introduction, a systematic assessment of achievements against objectives is not possible because objectively verifiable performance indicators are lacking.

The following is an attempt to assess achievements in relation to the three objectives:

**Objective 1:** Upgrading of laboratories and services for packaging and labeling for exports

The project improved packaging testing capabilities in IRI and LAU, although at the time of the evaluation, parts of the equipment had not yet been commissioned. In particular IRI reported on a number of additional testing capabilities using the newly procured equipment. Equipment in both laboratories is apparently also used for research and development (R & D) in the field of packaging. This might contribute to the improvement of packaging in Lebanon in general - an unplanned positive outcome of the project.

Accreditation of those two packaging laboratories within LAU and IRI against ISO 17025 - an important condition for international recognition of testing results - has not yet been achieved. Work is progressing, but since proficiency testing and preparation of the documentation for accreditation has not yet been completed by October 2009, it is not expected to be finished by the end of the project in March 2010. Finalizing all preparations for accreditation is likely to take until at least mid-2010.

LibanPack is operational and provides services to the local industry. The beneficiaries interviewed expressed satisfaction with the services received. MACLE reported that by October 2009, a total of 42 enterprises benefited from direct hands-on support by MACLE. According to this report, services provided by the project included redesigning packaging, improving branding,

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41 Report of IRI on package testing conducted (received during the mission).
42 See detailed list of MACLE beneficiaries included in implementation report as per April 1, 2009 and September 30, 2009 - parts of the services mentioned in this list were provided before LibanPack was established (directly by MACLE). The list provides information on beneficiaries, products, MACLE experts used, services requested, "outputs - i.e. expert work" and the outcomes of this work.
and advice on how to adapt packaging to requirements of export markets. The mission conducted in-depth interviews with a sample of beneficiaries selected by MACLE. Those enterprises reported that better packaging lead to increased sales revenues, enhanced value perception of customers and subsequently higher prices. Furthermore, advice provided on packaging/labeling regulations allowed some companies to gain new export markets (in particular the U.S.) or to shift from bulk sales through intermediaries to direct exports.

An analysis of a number of products exhibited at LibanPack (situation before and after improvement) showed that the advice and support provided by the project did make a significant difference. Most improvements relate to packaging design and labeling while testing was apparently less of a problem for client companies. LibanPack responded also to other marketing-related requests, such as improving catalogues and establishing websites.

A business plan that provides strategic guidance for the further development of LibanPack and goes beyond mere financial forecasts is still missing. Such a business plan would typically include a vision, a mission statement, objectives, a strategy and an organizational structure. Typically, business plans are prepared by management and endorsed by the Board of Directors. Local expertise for business planning seems to be available in Lebanon.

Also not yet established are the Standard Operation Procedures for the centre.

The planned “twinning” with the Swiss Packaging Institute (SVI) did not materialize. Although the Swiss packaging centre received a delegation of LibanPack, the Swiss side subsequently showed little interest. The project successfully arranged for a partnership agreement with the packaging centre in Tunisia.

Overall, LibanPack seems to be serving the needs of the local industry. Stabilizing operations, completing training, and finalize strategic and operation planning is unlikely to be achieved by March 2010. An extension of the project would also give time to accompany IRI and LAU towards accreditation for the packaging laboratories.

**Objective 2: Technical support and information for market access and consumer protection**

Considering support received from other donors and the lack of qualified staff the planned outputs of MACLE related to the mobile metrology laboratory were scaled down significantly (see details under II.C above). The project purchased some small calibration equipment for market surveillance authorities responsible for the domestic market. Even assuming that this equipment will be used, it is unlikely to make a real difference in improving consumer protection.

The input for a possible quality seal is reported as completed - the business plan was however not yet available for review. Based on the results of interviews with several stakeholders, it appears rather unlikely that the planned quality seal will be established in the near future. Discussions on practical details of the quality seal seem to be far from a conclusion. Until an agreement on a basic concept is reached, it does not make much sense to provide further technical assistance.

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43 The project established a comprehensive set of packaging samples, which is exhibited at LibanPack and at the UNIDO Office in Beirut. A comprehensive collection of photos is available as well.
44 Available is a financial plan (“reevaluated budget”) included into the minutes of meetings of the Board of LibanPack (board workshop on August 21, 2009 - obviously, no agreement was reached.
45 Namely QUALEB in regards to inspection and certification services
Overall, planned outputs have been delivered, but they are unlikely to lead to significant improvements of market access and consumer protection. The EU is preparing a comprehensive large-scale intervention that will, among other areas, cover market surveillance and inspection.

**Objective 3:** Improving Lebanese quality chain of selected agro-based products to increase market access

MACLE successfully raised awareness on the importance of food safety issues through seminars and indirectly through the media (reflected by impressive media coverage on MACLE’s activities).

As an additional output that was not planned and a follow-up to the 2004 assessment of the Lebanese food industry by UNIDO/INFOPRO, MACLE published a comprehensive report on TBT and their impact on the food manufacturing industry in Lebanon (October 2010).

This useful report also contains a list of rejections (FDA list May 2008 - April 2009) and summaries of regulations on traceability, EU Health and Consumer safety and Lebanon’s foreign trade status and policies.

Direct hands-on support was provided to 17 factories to move towards compliance with GMP practices and other operational improvements. Work done consisted of a gap analysis on GMP/GHP standards for 17 Tahina and Halawa factories. For four of those companies, MACLE provided onsite training and consulting to implement GMP/GHP and for two additional companies towards ISO22000 certification⁴⁶. Beneficiaries confirmed that the implementation of recommendations from the project resulted in better product quality. Some companies also reported significantly increased sales. Improved access to European markets would require certification, namely in HACCP and/or ISO22000 but none of the pilot factories has been certified yet. MACLE also granted some small equipment to them, which most companies would have been able to fund the equipment by themselves. The small equipment seems to have been mainly provided as an incentive for companies to join the project and providing this free of charge was not crucial to achieving the objectives. The objective in terms of “improvements” within the quality chain of those companies seems to have been achieved.

The pilot traceability systems at the producer level (apples and olive oil - output 3.3) are not yet completed but on track. The traceability system will be hosted by the local Chamber of Commerce. Considering that the software is currently being programmed, it seems unlikely that the traceability scheme will be fully implemented within the next four to five months. A few more months would also be needed to fine-tune the software, to follow-up on practical problems and to implement the planned pilot scheme “from farm to fork”.

The following factors contributed to effectiveness of MACLE:

- UNIDO retained the right experts. This resulted in high quality of expertise provided. Trainers were enthusiastic, experienced and able to convey their knowledge. Trainings provided the right mix between theory and practice. A high percentage of local experts were used. Selecting international experts from Arab speaking countries rather than from Europe was an advantage in terms of reducing language barriers and strengthening south-to-south networks. International experts worked in close coordination with Lebanese experts, which is a good practice of local capacity building.

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⁴⁶ See also detailed, illustrated case study on Khater Bros Est & Co. SARL
MACLE capitalized on the opportunity of strengthening-south-to-south networks. Examples are the twinning with the Tunisian packaging center (after the cooperation with the Swiss Packaging Institute did not materialize), and the use of material/experience gained by the E-Trace project supported by UNIDO in Egypt.

MACLE selected appropriate pilot enterprises for implementing food safety systems: A systematic and transparent scoring system was applied to select participant enterprises for pilot projects. The assessment criteria included a gap analysis and specific needs of customers of pilot companies. This allowed for a targeted assistance in those areas that really needed support. The careful selection process also contributed to a high number of companies completing the support programme.

MACLE used a comprehensive approach to productivity/quality improvements of work at enterprise level: The approach used by experts went beyond merely addressing food safety aspects and included advice and support on productivity/quality improvements in general. This is the right way to ensure that Lebanese products are internationally competitive. A number of companies interviewed during the mission expressed a strong will to continuing improvements and to work towards certification (ISO22000 or at least HACCP).

MACLE made the right choice for processing traceability data. Locally developed software to be provided by the chambers of commerce to individual producers comes at an affordable cost, is adapted to the local context and can be further adapted to evolving needs. That would not be the case for software packages available in the market that cost up to USD50'000 per company plus regular maintenance cost.

UNIDO selected the right packaging testing equipment and procured all equipment to the full satisfaction of beneficiaries and on time. All beneficiaries were actively involved into (a) identifying what was needed to fill gaps and (b) the drafting of technical descriptions for procurement.

MACLE achieved the envisaged high visibility for UNIDO and the donor. The project used a good mix of different communication tools (media, workshops, lobbying) to systematically promote the mission and the achievements of MACLE to a wide range of stakeholders, including the donor community in Lebanon. MACLE provided an excellent visibility to both the donor and UNIDO. It enjoys an excellent reputation and can be expected to contribute to increasing UNIDO and SECO’s standing within the country and beyond.

Less effective (in terms of achieving a sustainable impact on the Lebanese food industry) was to directly intervene at enterprises to provide support in the area of food safety systems.

While for a first phase of an intervention, direct support to enterprises to implement food safety standards for demonstration purposes might be justified, achieving a sustainable long-term impact on the Lebanese industry would require institutionalizing business support services rather than providing free, donor-funded consultancy services under a project set-up.

Free consulting service provision by donors is also problematic because it is detrimental to the development of a local consulting sector. There is a risk of market distortion and crowding out of local consultancy providers. Unlike in some Least Developed Countries that benefit from UNIDO projects, Lebanon has already a well developed local consulting sector. Services of local consultancy providers are crucial for SMEs, which do not have the means to hire large international consulting firms. Strengthening of those would be a more effective approach.
Effectiveness of providing small equipment to the companies is in our view also questionable. A company that is not able to pay a few hundred dollars for simple measurement equipment would also not have the resources to obtain and maintain ISO22000 or HACCP certification. Although providing equipment to companies was foreseen in the project document, it does not really fit into the overall objective of the project, which is not an industrial upgrading.

We had initially similar concerns regarding packaging design services and marketing-related support provided by LibanPack, where there is a risk of competing with already existing private sector advertising companies and the in-house design services of the packaging industry. However, the packaging factories visited said clearly that they were not worried about this potential competition. They see the packaging centre as a benefit, as it creates demand for the high-quality packaging they produce. Furthermore, the customer segment targeted by LibanPack seems to be different from those that would typically buy packaging design services from commercial advertisement companies. It should also be highlighted that, LibanPack did charge for services, although at subsidized rates, while the companies benefiting from consultancy on food safety were not required to make a contribution. They apparently even needed an incentive in form of free equipment!

**Conclusion:**

Overall, the implementation of the project was effective. Most objectives (as defined by outputs and activities planned) have so far been achieved. The remaining outputs are likely to be completed within 12 months and within the existing budget. The approach used to achieve the expected results was appropriate, with the exception of direct consultancy provision to companies in the area of food safety. The right mix of capacity building (training combined with equipment provision) as well as the excellent quality of technical input contributed to the effectiveness of implementation. Synergies and complementarities with other SMTQ projects (mainly QUALEB and ELCIM) were successfully exploited. UNIDO also capitalized on the opportunity of economies of scale and scope through exchanges with ETRACE, which is also a good example of fostering south-to-south cooperation. Envisaged linkages within the SECO programme however (SIPPO, project on Geographical Indications implemented by AGRIDEA) and with the Swiss institutions mentioned in the project document have not materialized.

**D. Efficiency**

Data for a detailed assessment of efficiency in terms of comparing inputs by output produced is not available. The analysis of the use of funds by budget lines and by objectives (tables 1 and 2 above) indicates that:

- **MACLE** was well managed: Key features of efficient management included the selection of the right project team (Project Manager, NPC and CTA), de-facto delegation of day-to-day management to the NPC combined with coaching/support, and good coordination between the Project Manager and UNIDO support services. The part-time CTA focused on technical coordination and backstopping. His degree and the modalities of involvement (30%, home-based with occasional field missions) were appropriate for a more advanced country such as Lebanon, which is located within a short distance flight from his home base. See detailed comments under II.C above.
MACLE used expert resources efficiently: Highly specialized international experts were commissioned for specific short-term assignments, limited to areas where local expertise was not available, as opposed to using them to provide generic advice. A significant amount of funds for expertise were channeled into praxis-oriented activities that directly benefited stakeholders.

MACLE used funds for trainings and study visits efficiently: The project invited the right participants to study visits and trade fairs. We found no evidence that study visits were used as an incentive for people who would subsequently not be able to apply what they have learned in practice. We found however that MACLE funded the visit of the NPC to the Packaging Fare in Paris as a project activity. While this mission was as such justified (familiarizing the NPC in latest trends of packaging), we find it problematic to use project funds dedicated to capacity building of project beneficiaries for training and professional development of UN-staff and experts.

MACLE avoided duplication of packaging testing infrastructure: The concept for the packaging centre took into account the existing testing capacities in the country. Upgrading laboratories within LAU and IRI rather than duplicating the testing infrastructure for packaging was a cost efficient solution. Clients with testing needs are referred to LAU and IRI. LibanPack rightly focuses on advice and technical support rather than offering in-house testing services. The role of LibanPack is therefore different from government-run and -subsidized packaging centers in other countries (e.g. Tunisia), which typically offer a full range of services (including testing). Also, the number of staff is kept at the necessary minimum. In case in-house capacity is not sufficient, LibanPack sources services from specialized subcontractors.

MACLE capitalized on synergies with other projects covering SMTQ, but synergies with projects outside this field were only marginally exploited. This relates to shared events with QUALEB and ELCIM. Good coordination is evidenced by a systematic approach to divide inputs to the NQI between QUALEB and MACLE - namely the decision not to further cover inspection and certification - and through co-organizing project events. Synergies were also achieved with initiatives of local NGOs, such as for instance with the Georges N. FREM foundation on working on traceability schemes for apple producers. Beyond this, the project used material of the traceability system in Egypt (E-Trace). Apart from one jointly organized seminar with the UNIDO-executed LAISER project, other expected synergies, in particular those with the SECO projects highlighted in the project document, have not materialized. It is regrettable that the opportunity to work with the apple and olive oil producers supported by MACLE towards establishing Geographical Indications (GIs) or internationally protected collective marks has not been seized. Also, olive oil and maybe also the apples might have been an interesting product to be promoted by SIPPO in Switzerland. One reason why this did not materialize was that the SECO project on GIs implemented by AGRIDEA (Switzerland) ended before the work done under MACLE gained momentum and that Lebanon is not a priority country for SIPPO. Also, the SECO portfolio was not designed as synergetic with specific linkages. “Cooperation” was defined ex post, not specific and not formally agreed on. This is again strong evidence for the challenges in synchronizing and coordinating projects with similar objectives but working with different implementing agencies and counterparts.

Conclusion:
Overall, MACLE was efficiently implemented both at the technical and administrative levels. The set-up of LibanPack as a one-stop-shop for packaging needs that uses external resources for testing
rather than duplicating infrastructure is efficient. While MACLE used synergies with other SMTQ projects in Lebanon and Egypt, opportunities to achieve economies of scale and scope with other SECO-funded projects in the area of export promotion (SIPPO) and Geographical Indications (AGRIDEA) were not exploited.

E. Impact

As most outputs are not yet fully completed it is quite early to assess the likelihood of impact at this stage. Nevertheless, the following conclusions can be drawn based on the assessment of results and perspectives of sustainability:

Objective 1: Impact of upgrading packaging laboratories and services

Provided that the packaging laboratories supported by MACLE achieve and maintain accreditation, internationally recognized testing results are likely to improve the market access of Lebanese companies. Admittedly, this would even be the case without the existence of LibanPack, but the packaging services of LibanPack are likely to contribute to higher competitiveness of Lebanese products (in terms of better marketability, the potential of achieving higher prices, and reduced likelihood of rejections at the border due to non-compliance with packaging standards. As an additional impact, a strong packaging centre with state-of-the-art know-how is also likely to contribute to the development of an internationally competitive Lebanese packaging industry in general. Overall, it seems likely that the upgrading of packaging laboratories and LibanPack will result in a significant impact on the Lebanese packaging industry and on the ability of Lebanese exporters to compete internationally.

Objective 2: Impact of technical support and information for market access and consumer protection

At this stage it seems to be unlikely that the metrology equipment purchased and the work done in preparation of a quality seal will lead to significant impact in terms of improving consumer protection. The intervention was too limited to make a significant change at the impact level. It should be noted that this is expected to be one of the key areas addressed by QUALEB 3.

Objective 3: Impact of improving Lebanese quality chain of selected agro-based products to increase market access

A broader impact of direct support in quality/productivity improvements provided to companies would require institutionalizing business development services able to cover quality management systems in the field of food safety. Otherwise, the expected impact beyond the pilot companies covered by MACLE is unlikely to be achieved.

The pilot traceability systems are likely to help beneficiary companies to comply with food safety requirements necessary for successfully exporting their products. In order to achieve this impact however, the other criteria must be in place as well (e.g. marketing, competitiveness in terms of price and quality). The Chamber of Commerce of Tripoli expressed interest to replicate the system and apply it to other products, which would broaden the impact.
F. Sustainability

The following section assesses the likelihood of continuation of MACLE’s benefits beyond the end of the project.

Packaging testing services provided by IRI and LAU: Both beneficiary institutions have long track-records in operating testing laboratories. Testing of packaging is only one of many services they provide. Although state-institutions, they benefit from a semi-autonomous status with a high degree of operational and financial autonomy. They are allowed to use income to cover cost of operating, maintaining, repairing and replacing equipment rather than applying for funding from the treasury. An internal maintenance service is available at IRI. Facilities seem to be well maintained. Both institutions also confirmed that a budget for obtaining and maintaining accreditation was available. Therefore, it seems likely that (a) the necessary conditions are in place to keep the equipment operational and (b) both IRI and LAU have the budget to obtain and maintain accreditation. Testing capabilities and accreditation achieved through MACLE’s support are likely to be sustained without additional support.

LibanPack: Financial and technical sustainability of the packaging centre was not an objective of this phase of MACLE. After less than 6 months of operations, it is too early to make an assessment on whether LibanPack is likely to fulfill its role in the long-term future. Nevertheless, the following considerations lead us to a rather positive conclusion:

- **Institutional sustainability of LibanPack**: We positively noted that MACLE resisted to the temptation to create a large, donor-driven operation under UNIDO auspices and chose to gradually build up a service centre as an independent non-profit organization. LibanPack has been officially established as an own legal entity (not a project operation hosted by a government office or an university). A Board of Directors was appointed and has met three times so far, which indicates that a functioning governance structure is in place. LibanPack is a win-win-situation for the local packaging industry. Packaging services are likely to increase demand for high-quality packaging produced by local companies represented on the Board of LibanPack. They have therefore also a commercial interest to keep the centre running. Missing is at this stage a clear concept on where to go after the end of MACLE, which is endorsed by all key stakeholders. This would also be an important element of institutional sustainability.

- **Financial sustainability of LibanPack**: The demand for the services provided by LibanPack is evidenced by the large numbers of customers served\(^{47}\), although at subsidized rates (around 50% of the market price). Because LibanPack focuses on technical support and does not operate costly equipment requiring large premises, overhead cost can be kept relatively low. Also, ALI confirmed that LibanPack would be allowed to continue using their premises at no cost beyond the duration of the project. We also believe that financial sustainability should be understood as the ability to source the necessary funding, not necessarily only through service provision, but also through capturing other sources (membership fees, sponsoring, etc.). The strong network LibanPack is embedded in increases perspectives to benefit from sponsoring and other support. The fact that ALI was ready to sponsor the offices for LibanPack indicates that there are good chances for obtaining financial support from the local industry, if needed.

\(^{47}\) A detailed list was provided to the evaluators, and selectively cross-checked through interviews.
• Technical sustainability of LibanPack: At this stage, LibanPack seems to have sufficient technical capacities to provide basic consulting and design services relating to packaging. In order to become technically sustainable in terms of providing “cutting-edge” advice and support, further capacity building would be needed. The cooperation agreement with Tunis will certainly be one way to source expertise even without further donor support.

Pilot traceability systems: The electronic traceability system that is about to be established by the project and is expected to be operated by the Chamber of Commerce of Tripoli are likely to be sustainable, once it is functioning. Because hosting a traceability database potentially creates revenues for a Chamber of Commerce and is a good way to add value for member companies, perspectives that the traceability database will be continue to be offered beyond donor support seem to be good. Maintenance costs of the system used (local software) is low, so cost covering fees to be paid by enterprises would be minimal. Expanding traceability schemes to other products would increase sustainability (overhead cost of running the database could be better amortized), but implementing this would probably require initial technical and financial support from outside sources.

LIBNOR Quality Seal: The question of sustainability is not relevant, as the project has so far not materialized - financial sustainability depends very much on how far civil society actors and enterprises are willing and able to contribute.

LIBNOR standards on packaging: Packaging standards developed as output 1.2 of the project are likely to be sustainable, after publication. Also, the institutional framework for technical committees to work in seems to be in place, which is a pre-condition to further adapt those standards to international developments.

Inspection services: The simple metrology equipment for use for inspection on local markets does not cost much to operate and maintain. Also, its use is quite straightforward and does not require any particular skills. The key concern is whether and how the equipment will be used. We have no concerns on technical and financial sustainability.

Direct support to enterprises in establishing food quality systems: The results achieved in terms of improvements in product quality and productivity within the pilot enterprises are likely to be sustained. The awareness raised has certainly contributed to increasing the benchmark for good practices in the production sector. It seems likely that these standards that other companies will follow in order to maintain their ability to compete. Sustainable long-term impact on the industry would however require institutionalizing business support services (meso level) rather than direct, donor-funded service provision through a project (see detailed comments under effectiveness above).

Conclusions:

Packaging testing services within IRI and LAU are likely to continue to be offered beyond the project and without additional donor funding. Those institutions have sufficient budget to maintain the equipment and accreditation. Institutional, technical and financial sustainability of LibanPack is too early to be assessed, but perspectives that sustainability can be achieved with limited additional support seem to be good. Results achieved through consultancy on food safety in those enterprises that benefited from support are sustainable. However, a sustainable long-term impact on the Lebanese food industry would require institutionalizing business development services (meso level) rather than continuing direct intervention at the enterprise level.

A MACLE II designed along the recommendations provided by this report would add significant value in terms of (1) enabling LibanPack to further improve the quality of its services (2)
broadening the application of traceability to other products. It would increase that key achievements of the project continue beyond donor support.
IV
Recommendations and lessons learned

A. Recommendations to SECO

1. Grant non-cost extension of project until September 2010
   This extension is required in order to complete remaining outputs, notably:
   (a) Technical support to the accreditation of packaging laboratories within IRI and LAU
   (b) Pilot traceability schemes for olive oil and apple producers
   (c) Establish a full business plan for LibanPack, which is endorsed by the Board of Directors and continue technical capacity building for staff
   An extension would also provide UNIDO with more time for fund raising, while maintaining the momentum of the project and increase chances of sustainability of achievements.

2. Enhance synergies within SECO country programmes
   Designing interventions as synergetic from the beginning and formalizing linkages among project through agreements would improve coordination. Specific outputs could be subcontracted among projects, for instance AGRIDEA would implement a component within a UNIDO-project to assist the olive oil producers under the traceability component in establishing GIs for their products. UNIDO would retain overall responsibility. Another way would be to design comprehensive trade capacity building projects as a sector-wide approach (SWAP) under the responsibility of one lead agency.

3. Continue facilitating fund-raising for a possible follow-up phase
   Continue to actively support UNIDO in fund mobilization for a follow-up phase.

B. Recommendations to UNIDO

4. Continue implementation of remaining activities along the lines of recommendation 1 and discontinue the following activities
   (a) The planned twinning arrangement with the Swiss Packaging Institute (due to a lack of interest of the Swiss side and since a MoU with the packaging centre in Tunis has been signed)
   (b) The visits to international fares - considering the wide exposure achieved and that the remaining limited funds would be better channeled into other activities with a higher priority
   (c) The business plan for a national quality seal
5. Use the remaining time of the project to consolidate LibanPack Prepare a clear, realistic business plan that could include:

(a) Expansion of packaging services to other materials (beyond paper; including glass, metal, plastic etc.). Environmentally friendly packaging might be another area to look into;
(b) Continuation of awareness raising and labeling requirements for exporters;
(c) Developing capacities as a resource centre for packaging technology;
(d) Developing a portal for information on packaging/labeling requirements of export markets;
(e) Covering marketing related issues that are closely linked to packaging (e.g. brochures, websites), product branding (including aspects of corporate image).

Consider external assistance by a management consultant with experience in business planning rather than by a packaging specialist. The Packaging Center in Tunisia might be able to help with Standard Operation Procedures. The business plan should be endorsed by the Board.

UNIDO should also support LibanPack in:

(a) Drafting Standard Operation Procedures
(b) Establishing a contingency plan for maintaining operations, in case mobilization of follow-up funding is not successful

6. Identify why UNIDO management and provision of internal services worked well in MACLE and apply lessons organization wide

Of particular importance would be to explore the reasons why MACLE was able to source services from UNIDO Headquarters more effectively and efficiently provided than other projects. Lessons should be systematically collected and applied across the TCB programme.

7. Further develop the TCB approach and enlarge its scope to the service sector

(a) Consider broadening the focus of TCB beyond “industry” (secondary sector) to the tertiary sector (services). Key areas could in particular be the hospitality sector (tourism, hotels, restaurants, and catering) and business process outsourcing.
(b) Strengthening competitiveness of enterprises should not be limited to product quality, but also include marketing-related elements such as packaging and branding, which are equally important to compete.
(c) Upgrading technology requires also better access to finance by enterprises. This would require cooperation with UNIDO investment promotion branch or with specialized SME equity investment or credit funds.
(d) UNIDO as a competence centre of Trade Capacity Building should take the lead in ensuring that all three elements (conform, compete and connect) are addressed in a comprehensive way, where needed in coordination with other specialized agencies (e.g. ITC and UNCTAD for connect elements). If possible, support outside the
core areas of UNIDO (conform, compete) should be integrated into one project rather than “delegating” critical aspects to other interventions.

(e) Except for demonstration purposes at the very initial stage of support in countries with no functioning consulting sector, shift decisively from direct intervention at the enterprise level to institutionalizing business support services (meso level). This would broaden the impact and chances for sustainability of results.

C. Recommendation to the Government

Extension of MACLE:

We respectfully recommend to the Government of Lebanon to approve the extension of the project until September 2010 and to favorably receive a possible proposal for MACLE II.

D. Recommendations for design of MACLE II

It is recommended to design MACLE II as a focused follow-up intervention. MACLE II should consolidate and deepen the results of MACLE I in the view of achieving a sustainable long-term impact.

Considering the planned comprehensive support of the Lebanese trade infrastructure by the EU, MACLE II should be designed to build upon past achievements in order to broaden, deepen and consolidate results achieved under MACLE I along the following lines (in order of priority):

(a) Remain involved in “steering” and uplifting LibanPack - through technical and institutional strengthening with the view to obtain sustainability within the next 3 - 5 years. Rather than establishing in-house testing capacities, continue strengthening accredited testing capacities within LAU and IRI to be used by LibanPack’s clients

(b) In order to strengthen institutional capabilities and thus sustainability of LibanPack, discontinue direct subsidies (paying staff salaries and operating expenses, provide equipment etc), but use LibanPack as a subcontractor for implementing packaging-related aspects of a possible MACLE II. This would allow LibanPack to gain experience in operating independently and avoid that a “modus operandi” as component of a UNIDO project is “institutionalized”. LibanPack could also expand its scope of service provision to other Arab countries (the potential would be here, the Arab world likes Lebanese taste)

(c) Expand traceability pilots to other regions or more sophisticated, higher value added products (e.g. processed food). Examples: Juices, molasses, syrups, jam, keshik, etc.

(d) Consider promoting the application of quality management systems in key service sectors (in particular the hospitality sector) - in the form of support at the meso level. Discontinue direct consultancy interventions at the enterprise level and focus on strengthening the meso level instead.

(e) Leave further support to inspection/certification and metrology to the European Union.

Due to uncertainties relating to fund mobilization for Lebanon, a “modular approach” for project proposals to donors might increase chances of successfully mobilizing funds. Donors might be interested to fund specific areas only that fit within their overall strategy (e.g. the packaging centre or traceability) rather than a comprehensive package of proposed interventions. Also, in an
emerging country context, donors might find it more appropriate to gradually phase out ODA rather than to scale it up. The proposal should take into consideration that the available budgets might be limited.

E. Lessons learned

MACLE successfully capitalized on a niche that was only marginally covered by other donors and where UNIDO benefited from significant comparative advantages. The focus of MACLE on three high impact areas and a limited number of agricultural products enabled UNIDO to cover those areas thoroughly and to tailor assistance to individual needs of beneficiaries. This would not have been possible with a generic “SMTQ strengthening approach”. This niche approach was particularly appropriate in the context of an advanced country with a strong presence of other donors delivering comprehensive trade infrastructure building and enterprise upgrading programmes. Where a minimum basic SMTQ infrastructure is lacking and where enterprises are at the initial stage of their development, a comprehensive approach towards SMTQ infrastructure development (legal/institutional framework, infrastructure, training etc.) would be needed.

UNIDO used the right approach to decentralizing day-to-day management to the project: UNIDO HQ rightly focused on monitoring, technical back-stopping, providing expertise and coordinating central services. The part-time CTA added significant value as a high level expert and technical coordinator. His input was demand-driven and he did not get tied up in nitty-gritty issues. Meanwhile, the Project Manager concentrated on overall coordination, backstopping, strategic “steering”, sourcing UNIDO services and other key areas of crucial importance to the success of this project. Both of them empowered the NPC to take initiative, combined with the right degree of supervision and coaching. This formula worked well in a more advanced development context with the active support of the UNIDO Representative. If day-to-day management is delegated to the field, project staff needs to be selected accordingly. Training in Project Cycle Management for local project staff (NPCs) should be institutionalized, so NPCs are able to actively contribute to RMB/MBO.

Selection of the right project management staff was key to the success of MACLE. This evaluation confirmed that management and leadership skills are crucial requirements for staff involved in project management. Skills needed to successfully manage projects in developing countries include result-orientation, ability to move things forward, interpersonal skills and the ability to work in a team. Knowledge of the local language and familiarity with the cultural and political context in the country of intervention is of high importance. Of lesser importance are the job requirements that are often found in job descriptions for UNIDO staff, such as age, number of years worked in related areas, a technical university degree, in-depth knowledge on one of the SMTQ fields, prior experience in working with UN agencies. This is not to pretend that managers do not need to understand the field they are working in. But highly specialized expertise might better be obtained by hiring short-term experts, or through the CTA, where appropriate. No one is able to cover all technical fields of such a project in any case. A systematic professional assessment of candidates for key positions would increase chances of identifying staff with the right profile. Project teams should be set up in a way that skills and abilities of team members are complemented in order to achieve synergies.
Annex A: Terms of Reference

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE

Independent Evaluation
Of the UNIDO Project in Lebanon

“INCREASE ACCESS TO EXPORT MARKETS FOR LEBANESE PRODUCTS AND IMPROVEMENT OF ITS QUALITY INFRASTRUCTURE TO INCREASE TBT/SPS COMPLIANCE”

I. BACKGROUND

The project aims to facilitate exports from selected sectors with important trade potential by enhancing compliance with TBT/SPS systems requirements and improving the National Quality Infrastructure of Lebanon. To this end the project focuses on testing and conformity assessment for packaging, on legal metrology services, on advisory services for packaging and labeling and on assuring adequate consumer protection.

In this perspective, the project aims to improve the quality chain for selected food products. The project applies UNIDO trade-capacity building approach similar to the SECO funded projects implemented by UNIDO in Tanzania, Mozambique and Vietnam which consist in institution building, equipment and training. Under this project, it is planned to improve up to two laboratories and other institutions of the Lebanese quality infrastructure providing certification and testing services to institutional and private sector customers. Actions to quickly achieve international recognition of products will be pursued to ensure access to export markets of Lebanese goods and overcome potential barriers to trade.

Focusing on the needs of producers and exporters, the project should strengthen certification capability to provide services to exporters (related to standards and conformity assessment procedure, market information and technology solutions focusing on labeling and packaging and quality markets) and assist a group of
producers on a pilot-basis with implementing GHP/GMP and quality systems as well as food traceability.

The project started in November 2006 and its planned end date is 31 December 2009.

II. BUDGET INFORMATION

The overall budget of the project (excluding support cost) is 1,946,903 USD funded by SECO. 80% of the budget has been spent as by the end of June 2009.

III. PURPOSE OF THE EVALUATION

The purpose of this independent terminal evaluation is twofold. Firstly the evaluation shall focus on the project and assess
(a) the identification, formulation and design of the project
(b) the project management structure/processes
(c) the relevance of the project with regard to the priorities and policies of the Government of Lebanon and the companies targeted by the project
(d) the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact and sustainability, with specific reference to the indicators listing in Chapter 5 and Annex II of the project document
(e) the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities (versus budget in Annex I of the project document)
(f) the prospects for development impact
(g) the long-term sustainability of the results and benefits
(h) as well as draw lessons of wider application for the replication of the experience gained in this project in other projects/countries

Secondly, this evaluation shall also contribute to a larger thematic evaluation of a number of UNIDO projects and initiatives in the area of Standards, Metrology, Testing and Quality (SMTQ) with particular emphasis on the interdependencies and synergies between the Compliance and Compete aspects of UNIDO trade-capacity building approach.

IV. METHODOLOGY

The evaluation is conducted in compliance with the UNIDO Evaluation Policy as an Independent Terminal Evaluation.

An Independent terminal evaluation is carried out at the end of the project cycle and attempts to determine, as systematically and objectively as possible, the relevance, efficiency, achievements (outputs, outcomes and impact) and sustainability of the project.

The evaluation assesses the achievements of the project against its key objectives, as set out in the project document, including re-examination of the relevance of the objectives and of the design. It also identifies factors that have facilitated or impeded the achievement of the objectives.
The evaluation will be carried out through analyses of various sources of information including desk analysis of the project document and implementation reports, interviews with counterparts, direct/indirect beneficiaries, partner agencies, donor representatives, programme managers and through the cross-validation of data. The analysis includes the review of inputs, activities, management mechanisms (in particular planning, monitoring and self assessment) and project specific framework conditions (in particular policy environment, counterpart capacities, related initiatives of Government, donors and the private sector).

While maintaining independence, the evaluation will be carried out based on a participatory approach taking into account the views of all parties.

**Project identification, formulation and design**

The evaluation will in assess the extent to which:

(a) the project was formulated based on a detailed assessment of the needs and the gaps in the market for SMTQ services with participation of the key government and private sector partners (under particular consideration of an assessment of the demand and supply of the SMTQ services strengthened by the project)

(b) the formulation process defined problem areas, stakeholders, project outcome, outputs

(c) the logical framework in the project document or other documentation provides a logically valid and realistic causal chain from country level objectives to project objectives, outcomes and outputs, objectively verifiable indicators and sources of verification at all levels, assumptions and risks and how risks will be addressed

(d) the project budget is broken down by outputs/outcomes/activities to allow effective Results Based Management

**Project coordination and management**

The evaluation will in assess:

(a) The national management and overall field coordination mechanisms of the project

(b) The UNIDO HQ based management, coordination, quality control and technical inputs

(c) Overall coordination with other relevant UNIDO branches (in particular cleaner branch for environmentally friendly packaging/recycling and agro-industry branch for applying a value chain approach)

(d) Relationships/coordination with other donors, in particular the EU

(e) Role/functioning of the Steering committee (clear ToRs)

(f) Selection and role of the Chief Technical Advisor (working part-time on this project)

(g) Monitoring, review and self-evaluation based on the logical framework

(h) Role of local COOF in Beirut (representing SECO) in monitoring the project and coordination with the donor on HQ level

(i) Responsiveness and adaptation of project logic resulting from management and stakeholder decisions

(j) Approved and documented changes in planning during implementation
(k) Whether monitoring and self-evaluation was carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management

(l) Whether coordination with any other development cooperation programs in the country has been realized and benefits achieved, including agency coordination

Ownership
The evaluation will in assess the extent to which the government, counterpart organizations, private sector and other stakeholders (in particular the consumer organizations supported by the project):

(a) Have been appropriately involved in the identification of key problem areas and factors constraining success during the formulation of the project
(b) Are actively supporting and contributing to the implementation of the project
(c) Are using the outputs of the project with a view to achieving the outcomes expected (or unexpected additional outcomes)

Relevance
The evaluation of project relevance shall assess the extent to which

(a) The project continues or not to be relevant to:
   - Priorities and policies of the Government of Lebanon (in particular economic development strategies)
   - Priorities of companies and sectors targeted
   - Priorities and policies of UNIDO including cognizance of the three C’s approach
   - Priorities of the donor (SECO)

(b) The design and execution of the project take into account the priorities of the different stakeholders/direct and indirect beneficiaries in a balanced manner

(c) The private sector is using the services provided by the various counterparts and finds these services in line with their needs and those of their buyers

(d) Each specific area covered by the project (e.g. packaging, labeling, food quality chains, consumer protection and SPS/TBT compliance) is relevant; and

(e) Relevance in regards to international priorities relating to the objectives/field of intervention (e.g. TRTA, EFTA framework, Millennium Goals)

Efficiency of implementation
The extent to which:

(a) UNIDO and Government/counterpart inputs have been provided as planned and were adequate to meet requirements

(b) The quality of UNIDO inputs and services (expertise, training, equipment selection and procurement, methodological input, etc.) was as planned, timely and led to the production of outputs

(c) Inputs let to planned and productive outputs

(d) Funds were economically used (resources, processes and methods used were the most cost effective option available
(e) Coordination with other interventions (e.g. EU-quality programme, QUALEG see Annex V Project Document, ELCIM, Lebanon CP Centre) contributed to synergies

(f) Partnering with other international packaging institutions (e.g. the Swiss packaging Institute (SVI) added value to the project

Effectiveness
Assessment of:
(a) The extent to which the expected outputs have been produced and how the target beneficiaries use these outputs
(b) The outcomes that have been or are likely to be realized through utilization of the project outputs

Basis for the assessment of effectiveness will be the indicators defined in chapter 5 and annex III of the project document.

Besides the standard evaluation methodology, this evaluation will also apply and test the thematic Key Success Factors being developed as part of the thematic evaluation process. It will – through an iterative process – also identify possible new Key Success Factors that might be of general relevance to UNIDO interventions in the field of SMTQ.

Impact
Assessment of the extent to which the project has contributed to reaching the development objectives or is likely to make such contributions in the foreseeable future. Issues to be considered include:
(a) Reduced technical barriers to trade particularly in the area of packaging and labeling
(b) Use of laboratory services for labeling and packaging of export products and their contribution to actually facilitating trade
(c) Exporters have used project assistance to meet the requirements of export markets
(d) The technology centre providing services on packaging and labeling (testing/certification) is beneficial for exporters
(e) National Quality Certificates are being adopted and protect consumers
(f) TBT/SPS information reaches and is used by target businesses
(g) The mobile metrology laboratory is used and benefits export businesses
(h) New exporters of agro-products have emerged and benefited from project activities
(i) Food exporters are aware of and have used training on traceability
(j) Regional impact (Lebanon as a regional hub for packaging in Arab Countries)
(k) The extent to which the project is likely to contribute to reaching wider aspects of impact, not necessarily planned for, such as poverty impact, gender issues, environmental impact, visibility, political buy-in etc
Sustainability
The extent to which:

(a) The Government of Lebanon has put in place the necessary arrangements to ensure sustainability of project outcomes
(b) Counterpart and private sector organization have reached technical and financial sustainability (including the ability to ensure maintenance and operation of equipment)
(c) Cost recovery of services is possible (look at business plan)
(d) Identify whether and how far long term developmental changes that occurred or are likely to occur as a result of the intervention are sustainable

Validate, further develop and refine Key Success Factors of the Thematic Evaluation

The evaluation shall contribute to the thematic evaluation of UNIDO projects in the area of SMTQ. It will therefore take into account the conceptual framework that has been developed under this thematic evaluation.

More specifically, research questions emerging from the thematic evaluation will be applied. The evaluation team will validate and/or further expand the Key Success Factors identified during the Thematic Evaluation and extract case studies for the Thematic Evaluation report.

The evaluation team will in particular attempt to identify and validate Key Success Factors relating to UNIDO support in the area of packaging.

V. EVALUATION TEAM

The evaluation team will be composed of the two international evaluation experts who are currently involved into the Thematic Evaluation together with a national evaluation consultant. The Team Leader of the Thematic Evaluation will also be the Team Leader for this evaluation.

The Government of Lebanon will submit a list of three candidates for the post of the national evaluator from which UNIDO will select and contract the candidate representing the best value for money.

The international and the national evaluators must be independent and not have been involved in the formulation, implementation or backstopping of the project.

The execution of the evaluation will require full command and control of the specific situation in Lebanon and full respect of the UN security rules. The evaluation team will maintain close contact with the UNIDO office in Lebanon and the concerned other relevant UN agencies, as well as with national and international project staff.

The evaluation team is free to discuss with all authorities concerned anything relevant to its assignment. However, it is not authorized to make any commitments on behalf of the Government of Lebanon, the donor or UNIDO.

The UNIDO Evaluation Group will be responsible for the quality control of the evaluation process and reports. It will provide inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, ensuring that the evaluation report is
useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and its compliance with UNIDO evaluation policy and these terms of reference.

The team leader will be contracted by SECO, while the international evaluation expert and the national evaluation expert will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions attached to these terms of reference.

The UNIDO Office in Beirut will support the evaluation team. Donor representatives will be briefed and debriefed.

VI. TIMING

The evaluation is scheduled to take place during the last quarter of 2009. The briefing will take place in September at UNIDO HQ. The field mission for the evaluation is planned for October 2009. After the field mission, the international evaluation consultants will come to UNIDO HQ for a debriefing. On request of SECO, an additional de-briefing could be arranged in Berne.

The evaluators will provide a draft evaluation report as well as a summary of main findings, conclusions and recommendations (in the form of slides) prior to the de-briefing.

The final version of the evaluation report will be submitted 6 - 8 weeks after the debriefing at the latest.

VII. REPORTING

An evaluation report will be prepared that shall follow the structure given in annex 1.

In addition, the evaluation team will establish a separate report that validates key findings and conclusion against the list of Key Success Factors identified in the Thematic Evaluation. This report also will extract specific case studies in regards to those Key Success Factors that will be used as an input to the Thematic Evaluation Report.

Reporting language will be English. The team leader will assure a thorough control of the linguistic and editing quality of the report.

Review of the Draft Reports: Draft reports submitted to UNIDO Evaluation Group are shared with the responsible UNIDO staff for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such errors in the conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report.

Quality Assessment of the Evaluation Report: All UNIDO evaluations are subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality (annex 2).
Annex B: List of organizations and persons met

<table>
<thead>
<tr>
<th>Organizations and persons met</th>
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</thead>
<tbody>
<tr>
<td>Ms. Deborah Schmidiger, Programme Manager, at SECO HQ</td>
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<tr>
<td>By phone with Mr. Gerardo Pataconni, Project Manager</td>
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<tr>
<td>Ms. Soha Atallah, National Project Coordinator</td>
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<tr>
<td>Mr. Khaled El Mekdad, UNIDO Representative</td>
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<tr>
<td>Mr. Francois Barras, Ambassador of Switzerland</td>
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<tr>
<td>Ms. Zeina Majdalani, National Packaging Designer</td>
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<tr>
<td>Mr. Fayssal Freym, Vice President of LibanPack, Managing Director Indevco</td>
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<tr>
<td>Dr. Bassam Freym Director General of IRI</td>
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<tr>
<td>Ms. Nadia Khoury, Director Laboratories at IRI</td>
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<tr>
<td>Mr. Raja Haber, Director ELCIM, Member of MACLE Steering Committee</td>
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<tr>
<td>Mr. Fadi Fayyad (National Expert on Packaging &amp; Labeling)</td>
</tr>
<tr>
<td>Desk study of documents, work with NPC, internal work evaluation team</td>
</tr>
<tr>
<td>Ms. Lena Dourgham, Director General of LIBNOR</td>
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<tr>
<td>Group meeting with beneficiaries (enterprises that benefited from company level support and clients of LibanPack)</td>
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<tr>
<td>Mr. George Nasrawi, President of the Syndicate of Food Industries</td>
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<tr>
<td>Mr. Mounir Bssat, Vice President of Chamber of Commerce, Member of Steering Committee</td>
</tr>
<tr>
<td>Dr. Fadi Gemayel, President of LibanPack, Syndicate of Packaging, Member of Steering Committee</td>
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<tr>
<td>Dr. Ali Berro, Director of QUALEB and National Focal Point at MOET</td>
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<tr>
<td>Mr. Amer Rassass, National Expert on Traceability</td>
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<tr>
<td>Dr. Toufic Rizk, National Expert on GMP-GHP</td>
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<tr>
<td>Mr. Khater, Managing Director of Khater SARL, (beneficiary for GMP)</td>
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<tr>
<td>Ms. Nell Abou Ghazale Manager, LibanPack</td>
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<tr>
<td>Mr. Fadi Abboud, President of ALI; Mr. Saad Oueini, DG of ALI</td>
</tr>
<tr>
<td>Ms. Vendela El Kareh, Project Manager, G. FREM Foundation</td>
</tr>
<tr>
<td>Dr. Gebran Karam, responsible for LAU Packaging Laboratories, Board Member of LibanPack</td>
</tr>
<tr>
<td>Debriefing at UNIDO Office (Embassy of Switzerland, UNIDO Representative, President of LibanPack, NPC)</td>
</tr>
<tr>
<td>De-briefing with Project Manager (UNIDO) in Vienna</td>
</tr>
<tr>
<td>Debriefing with Mr. Christian Robin, Programme Manager, at SECO HQ</td>
</tr>
</tbody>
</table>
Annex C: Reference documents

Project Document

US/LEB/06/002 Increase access to export markets for Lebanese products and improvement of its quality infrastructure to increase TBT/SPS compliance (November 2006)

UNIDO reports and material

- Inception Report for MACLE, prepared by the NPC and the CTA, May 2007
- Progress report of UNIDO to SECO covering November 2007 - October 2008, with Steering Committee Meeting Minutes dated May 6, 2008
- Minutes of Third Steering Committee Meeting for the MACLE Project, Beirut, 01/04/2009 and presentation of the Project Manager on implementation
- Monthly progress report MACLE April 2009 - September 2009
- Mission report of the CTA, 16 September 2008
- Overall progress report table on activities - used by MACLE as a basis for operational monitoring
- Presentation of the NPC to the Evaluation Mission, 19 October 2009
- Product Certification Systems, Application in LEBANON (LIBNOR), Future Management, Jan 2009
- Evaluation of Quality Seals in Lebanon, Mohammed AlSayyed, Expert on Certification, May 2009
- Market analysis of certification services/demand, Walid Haddad, Future Management, Feb 2009
- “Business Plan” for LibanPack, established by the National Project Manager, undated Excel Table
- Pre-requisite Program Checklist, Audit checklist with scoring for and Selection Criteria for choosing the Tahina & Halawa Factories to be supported by the MACLE Project (UNIDO, 2008)
- Minutes of Board Workshop, LibanPack, August 2009
- Working Agreement between MACLE and LAU (MoU established as a basis for providing equipment)
- Report on inter-project coordination between LAISER and MACLE, NPC, 23 October 2009
- Presentation Khater Bros Est & Company SARL on improvements in their factory, October 2009
- Detailed list of trainings conducted under MACLE for the years 2007, 2008 and 2009
- Detailed list of study visits conducted (with description, objectives and participants)
- List of tests for packaging and packaging material of IRI - including indication of tests that can be conducted by using equipment used by MACLE
- Actualized budget by outputs/activities and financial status as per October 1, 2009
- Brochure for MACLE (2009)
• Technical Barriers to Trade, Effects on the food manufacturing industry in Lebanon, October 2009 (prepared by UNIDO and INFOPRO - centre for economic information)

• MoU on the occasion of the visit of UNIDO DG to the Republic of Lebanon, 23 August 2008

Reference Documents:

• Final Report on QUALEB - the Quality Programme Phase I, October 2009 and QUALEB Quality Programme, Quality Info, Issue 11, May 2009 - selected other documents from QUALEB