OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

Independent Evaluation Report

Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening National and Institutional Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO EVALUATION GROUP

Independent Evaluation Report

Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening National and Institutional Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II

UNIDO Project TE/RAS/06/001

Funded by the

Norwegian Agency for Development Cooperation (NORAD)

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2011

Distr. GENERAL

ODG/EVA/11/R.48

November 2011

Original: English

Contents

Acknowledgements

We would like to express our gratitude to all persons met. Our special thanks go to the National Project Coordinators (NPCs), the Project Manager, the UNIDO Representative and his staff in Viet Nam, and the Head of UNIDO Operations in Cambodia for the excellent support provided in preparing and conducting this evaluation.

We trust that the proposed recommendations will contribute to the continuous improvement of similar projects in the region and in other countries.

Abbreviations and acronyms

ADB	Asian Development Bank
BOA	Bureau of Accreditation (Viet Nam)
CAMCONTROL	Import Export Inspection and Fraud Repression Department (Cambodia)
CCC	Cambodian Chamber of Commerce and Industry
CE	CE Marking - mandatory conformance mark on many products placed on the market in the European Economic Area (EEA)
CPC	Cleaner Production Center
CRRI	Cambodian Rubber Research Institute
CTA	Chief Technical Adviser
DOM	Department of Metrology (Cambodia)
DISM	Department of Standards, Metrology and Intellectual Property (Lao PDR)
DSQ	Division of Standards & Quality (Lao PDR)
FDD	Department of Food and Drugs (Lao PDR)
FDQCC	Food and Drug Quality Control Center (Lao PDR)
GAP	Good Agricultural Practices
GLOBALGAP	Standard for Good Agricultural Practices
GVP	Good Veterinary Practices
HACCP	Hazard Analysis and Critical Control Points
IEC	International Electrotechnical Commission
IFC	International Finance Corporation (under World Bank)
ILCC	Industrial Laboratory Center of Cambodia
ISC	Department of Industrial Standards (Cambodia)
ISO9001	Norm for Quality Management System
ISO14001	Norm for Environmental Management System
ISO22001	Norm for Food Safety Management System
ITC	International Trade Center
LDC(s)	Least Developed Countries (e.g. Cambodia and Lao PDR)

MDG	Millennium Development Goal
MEKONG I	Project "Market Access and Trade Facilitation Support for Mekong Delta Countries"
MEKONG II	Project "Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II"
MPDF	Mekong Project Development Facility (IFC Advisory Services)
NAST	National Authority for Science and Technology (Lao PDR)
NEX	National Execution Mode
NMC	National Metrology Center (Cambodia)
NMI	National Metrology Institute (Lao PDR)
NORAD	Norwegian Agency for Development Cooperation
NPC	National Project Coordinator
NQI	National Quality Infrastructure
PPC	Plant Protection Center (Lao PDR)
PTB	Physikalisch-Technische Bundesanstalt (Germany)
QUATEST	Quality Testing Center (under STAMEQ)
QMS	Quality Management Systems
REACH	EC Regulation on Registration, Evaluation, Authorization of Chemicals
RoHS	EU Directive on Restriction of Hazardous Substances
SECO	The Swiss State Secretariat for Economic Affairs
SMTQ	Standards, Metrology, Testing and Quality
SPS	Sanitary and Phytosanitary Measures
SDMT	State Enterprise for Survey Design and Materials Testing (Laos)
STAMEQ	General Directorate of Standards, Metrology and Quality (Viet Nam)
TBT	Technical Barriers to Trade
TRTA	Trade Related Technical Assistance
UNDAF	United Nations Development Assistance Framework
UNIDO	The United Nations Industrial Development Organization
UNDP	United Nations Development Programme

UNCTAD	United Nations Conference on Trade and Development
VMC	Viet Nam Metrology Center
WERI	Water Resources and Environment Research Institute (Lao PDR)
WTO	World Trade Organization

Glossary of evaluation related terms

Term	Definition
Conclusions	Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Impacts	Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.
Indicator	Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.
Institutional development impact	The extent to which an intervention improves or weakens the ability of a country or region to make more efficient, equitable, and sustainable use of its human, financial, and natural resources, for example through: (a) better definition, stability, transparency, enforceability and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Such impacts can include intended and unintended effects of an action.
Lessons learned	Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.
Logframe	Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes,

	impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. Related term: results based management.
Outcome	The likely or achieved short-term and medium-term effects of an intervention's outputs. Related terms: result, outputs, impacts, effect.
Outputs	The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Recommendations	Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies. Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.
Results	The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention. Related terms: outcome, effect, impacts.
Sustainability	The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long term benefits. The resilience to risk of the net benefit flows over time.

Executive Summary

I. Project Description

The Project "Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II" (subsequently referred to as "MEKONG II") is fully funded by the Norwegian Agency for Development Cooperation (NORAD). Its overall budget of US$ 1,500,000 (including agency support cost) was increased by Euro 53,360 in July 2010. As per 30 April 2011, 99% of the total budget has been committed and/or spent.

Mekong II was designed as a follow-up to a first phase "Market Access and Trade Facilitation Support for Mekong Delta Countries" – "MEKONG I", implemented from January 2003 to December 2005 with a total budget of US$ 908,520. MEKONG I focused on building initial SMTQ capacity, raising awareness of the importance of SMTQ for industrial development, and upgrading some technical infrastructure. MEKONG I underwent evaluation in June 2005.

MEKONG II aimed at developing new and strengthening existing conformity infrastructure, developing national capabilities on different standards related to key export industries, ensuring regional and international credibility of the conformity infrastructure, and developing enquiry points for Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS) in each of the three countries. It started in April 2006 and the initially planned completion date of December 2008 was extended twice until June 2011.

The support to Viet Nam provided under MEKONG II links into projects "Market access support through the strengthening of capacities related to Standards, Metrology, Testing and Quality (SMTQ)" (US/VIE/03/083, evaluated in 2007) and "Post WTO accession support to Viet Nam - Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) compliance capacity development related to key export sectors (US/VIE/08/004, ongoing), both funded by the Swiss State Secretariat for Economic Affairs (SECO) and implemented with the same counterpart organizations.

For Cambodia, it was expected that the Department of Industrial Standards (ISC) would be operational in developing and disseminating standards and certifying products. The metrology laboratory at the NMC would be upgraded to fulfill the calibration needs of industry and to serve the country's legal metrology system (DOM). The export sectors related to food, agriculture, fisheries and rubber would be served by the developed testing capacities at CAMCONTROL, the CRRI and the ILC. The country would have an operational, accredited system certification mechanism for ISO 9000, ISO 14000, HACCP and SA 8000 in place.

In Lao PDR, MEKONG II aimed at strengthening the institutional structure for standards development and system certification. Basic metrology capacities would be in place and

operational, serving the needs of legal and industrial metrology. A medium size testing laboratory concentrating on food sector would be operational. These interventions would assist Laos in beginning WTO accession negotiations and meeting the TBT/SPS requirements.

In Viet Nam MEKONG II aimed at selectively strengthening specific aspects of the National Quality Infrastructure (NQI), including the textile laboratory in QUATEST 1, chemical metrology, capacities for CE-marking and EUREPGAP, the establishment of a proficiency scheme and support to the establishment of a HACCP accreditation body.

For the preparation of the follow-up phase, UNIDO fielded a project identification mission to Lao PDR and Cambodia in October 2010. This mission conducted a needs analysis and produced a draft project document for a future project in Lao PDR and Cambodia (without Viet Nam). At the time of the evaluation, this document had already passed the UNIDO approval process and NORAD had already released the project funding. Although not fully in line with UNIDO internal procedures, which foresee an independent evaluation before launching a follow-up project, the UNIDO Approval Committee had accepted this sequencing, under the condition that the recommendations of this independent evaluation will be duly considered during the inception of the third phase.

II. Scope, methodology and limitations to this evaluation

This independent final evaluation of MEKONG II was commissioned and conducted in line with the UNIDO evaluation policy. Its purpose was to assess the project in terms of relevance, effectiveness, efficiency, sustainability and impact; to examine and validate the findings and recommendations of the thematic evaluation of UNIDO's approach to SMTQ development ("thematic evaluation"), which was conducted in 2009 and 2010 and to develop lessons and recommendations for enhancing the design and implementation of similar future projects in Mekong countries and elsewhere.

The evaluation team was composed of the Senior Evaluation Officer of the UNIDO Evaluation Group, Mr. Peter Loewe (team leader) and an international evaluator appointed by UNIDO, Mr. Daniel Keller. Both evaluators were not involved in the preparation and/or implementation of the project.

Main limitations were the lack of a proper, result-based operational monitoring (using logical framework, reporting planned against achieved results, result-based financial reporting). The availability of data on services provided by beneficiary institutions is limited, which makes an assessment of outcomes and impact difficult.

III. Main findings and conclusions

Project preparation was based on a detailed needs assessment, however with a bias towards responding to a wish list of government institutions rather than considering the demand of

enterprises and consumers. Planned support was comprehensive, but focused mainly on strengthening supply than demand side of SMTQ services. Strengthening demand for SMTQ services in parallel would be particularly important in a LDC context (Lao PDR, Cambodia) with low quality awareness among consumers and enterprises. Technical support was insufficiently combined with institutional strengthening, which is important for the sustainability of service providers. Although UNIDO contributed to the development of a master plan for SMTQ development during Mekong I, the project document does not provide any longer-term strategy on what input would be needed to develop a NQI and how to contribute to it beyond the current funding cycle. Interventions of other donors were carefully taken into consideration, but cooperation with other projects was not formalized through agreements. The logical framework tool was not properly used; no risks and assumptions were defined. This might be one of the reasons why objectives were too ambitious/not feasible considering the limited time and budget available. The outline of governance and management structures is rudimentary, which partially contributed to overlaps and miscommunications during implementation.

Project management: Partners positively noted UNIDO's flexibility to adapt the project content to their changed needs. Day-to-day management of the project however leaves significant room for improvement. Operational planning (including financial planning) was weak and not properly communicated to partners. Some of the progress reports were not accurate and merely list "activities" rather than comparing achievements against objectives. Monitoring of progress towards achieving results is an important basis for well-informed decision making and should be prioritized during the regular of the CTA and the Project Manager. The lack of a systematic coordination is one of the reasons for delays in implementation. Part of it is due to UNIDO's centralized approach to management that concentrates decision making power even on minor issues in the hands of overloaded project managers at Headquarters. Considering the CTA's important role to move the project forward and the various tasks he was absorbed with, his technical input was too limited. The low baseline in the two LDCs would have required an allocation of more resources for regular technical input and follow-up. Procurement of equipment was poorly sequenced and implemented. Most equipment was only delivered in 2008 and 2009.

Project implementation: Progress of implementation was slow. Despite two extensions, large parts of planned outputs could not be completed as planned. Lack of funds, coordination problems, slow progress of work to be undertaken by counterpart institutions and low frequency and quantity of UNIDO expert input were the key factors that contributed to the delays.

Relevance: MEKONG II was highly relevant in terms of international priorities, national policies and the expressed demands of direct beneficiaries (government institutions) covered. Objectives are well aligned to UNIDO's core mandates and competencies. The mix of strengthening different "conform" aspects was well selected. Relevance for enterprises would have been increased through including "compete" aspects along the supply chain and for some sectors "connect" aspects.

Ownership of counterparts and direct beneficiaries was mixed. Positively, ownership is evidenced by significant staff input to implementing activities, contributions to building infrastructure, a relationship of trust with UNIDO experts and the initiative to request changes to the project plan, where the originally planned outputs were not relevant anymore. Some institutions were rather passive. The fact that technical meetings for standard formulation in Cambodia seem to depend on the willingness of donors to pay for meeting expenses is rather disappointing.

Effectiveness: MEKONG II made significant contributions to improving the capacities of most of the targeted testing laboratories. The international accreditations of the ILCC and CRII laboratories in Cambodia are a remarkable achievement and the right mix of capacity building (training combined with equipment provision) contributed to the effectiveness of implementation. In the area of metrology the project support has been less effective. Many of the other planned outputs besides laboratory development (ISO; HACCP; quality marks) were not fully achieved, partially as a result of overambitious objectives. Due to the very limited resources allocated to Viet Nam, the value added in this country was only marginal.

Efficiency: Overall, MEKONG II was at the technical level efficiently implemented, with the exception of procurement. In general, the project provided the right type of support. A significant amount of funds for expertise were channeled into praxis-oriented activities that directly benefited stakeholders. On the other hand, a weak assessment of demand and supply of testing services resulted in some duplication of support in Cambodia. While MEKONG II was coordinated well with other SMTQ projects all three countries, the project missed the opportunity for synergies in implementing company level work with the two UNIDO Cleaner Production Centers in Lao PDR and Cambodia. Better management and coordination would have further enhanced efficiency.

Impact: Overall, the impact of MEKONG II on export development was insignificant. The case of the Cambodian garment industry shows that the development of a huge export oriented garment sector is not dependant on the availability of a public textile laboratory. Building SMTQ capacity is however a long-term effort, which is justified in sectors with significant export potential (e.g. rice and rubber industries in Cambodia, handicraft in Laos). The domestic impact is increasing but hampered by shortcomings of the inspection and market surveillance system combined with limited consumer awareness. Through testing of drinking water, environmental testing, verification of gas stations and electricity meters, there is also some evidence for a social and poverty impact.

Sustainability: The expertise built within the laboratories seems to be sustainable, with a rather limited risk to be lost through staff turnover. Without further donor support however, laboratories are unlikely to maintain expensive international accreditation. With the exception of Viet Nam, significant concerns that laboratories

are unable to cover the cost of maintenance and replacement of testing equipment procured remain. In some cases, it might even be challenging for them to cover the cost of material/media needed for operating the equipment. The same applies for more the more sophisticated calibration/verification services. Quality marks are likely to continue to be granted, but an expansion of their application and a renewal of accreditation would require additional donor funding. Standard formulation requires further highly specialized expertise and as it seems also support to cover the cost for organizing technical committee meetings

IV. Recommendations

To the TCB Branch for Lao PDR and Cambodia

(a) Complement project planning during inception: Revisit priorities and consider focusing. Establish results based budget and a detailed description of the organizational structure with clear responsibilities and accountabilities (decentralization of management to the field in line with current UNIDO change management). Responsibilities should match decision making power (competence to decide).

(b) Quality marks: Besides the criteria of availability of standards and testing facilities, the selection of products for voluntary certification (quality marks) should take into account aspects of potential social and/or economic impact. Sufficient funds need to be allocated to promote voluntary quality marks. Otherwise, their impact will remain limited.

(c) Leave the further strengthening to the TBT enquiry points in Laos and Cambodia to ongoing support by other donors (ADB, United States)

(d) Metrology: Further support to the NMC in Cambodia should be suspended until (a) the new facilities currently under construction are completed, (b) sufficient staff is available and (c) NMC clarifies how and for what purpose the equipment to be procured will be used. Bottlenecks of outreach of legal metrology to provinces to be identified and addressed before further delivery of equipment. The need for international accreditation should be carefully assessed.

(e) Formalize coordination with other relevant projects, such as the UN CEB Inter-Agency Cluster on Trade and Productive Capacity in Lao PDR, the ADB project, the French/German rubber project in Cambodia, the French coffee project and the German SME projects in Lao PDR

(f) Rubber: support to the CRRI in Cambodia should include addressing quality problems of rubber from smallholder production in addition to the proposed technical upgrading, in close coordination with French/German rubber project and other donors.

(g) Coffee: Support to the coffee sector in Laos should be closely coordinate with the French coffee project aiming to strengthen coffee quality and support the establishment of protected geographical indications for the coffee sector. Support to establishing a coffee laboratory should be conditional to a clear agreement on how the facilities will be operated, including a business plan that provides evidence for financial and technical sustainability.

(h) Rice: If support to rice testing is provided, avoid duplicating other donors.

LDC specific recommendations to the TCB Branch

(i) SMTQ projects in LDCs should not only focus on export but give specific consideration to developing SMTQ services for the national market (reinforcing standards; quality marks; testing services) and for improving national consumer safety (water and food products; building material; environment)

(j) SMTQ projects in LDCs should include a strong awareness building component addressing firms and consumers. Awareness raising activities should be professionally planned and implemented by a communication specialist. UNIDO should consider developing a customizable modular communication package for replication in other projects.

(k) Complement technical capacity building with institution building, including management capacities that laboratories and institutions need to operate as service providers on a commercial basis.

General recommendations to the TCB Branch

(l) Continue implementing the recommendations of the thematic evaluation of SMTQ activities into new projects and monitor the status of their implementation for all ongoing projects.

(m) For efficiency reasons, TCB projects in a given country should be managed by the same project manager.

(n) Transfer more systematically innovations that were successfully developed and applied in some of its projects to projects in other countries. Examples are the quality mark for hotels and restaurants developed in Sri Lanka and the focus on packaging in the Lebanese food industry. Both are potentially relevant in all three Mekong countries.

General recommendations to UNIDO

(o) Together with the TCB Branch, carefully analyze the procurement problems encountered in this project and establish an action plan on how to avoid similar problems in the future

(p) In countries with a UNIDO field office, the UNIDO representative or head of operations should be given responsibility for day-to-day project management.

(q) Formalize links between projects of different UNIDO branches through agreements, set cooperation targets and ensure a formal coordination mechanism.

(r) Make result-based financial reporting mandatory for all projects. Data could be used to systematically benchmark projects and made available within UNIDO for the planning of new projects.

(s) Wherever practical, UNIDO should contribute to building human capacity by twinning international experts with local experts.

Table 1: Summary of key strengths and weaknesses of the project

Main strengths	Main weaknesses
1. **Modified form of regional approach** allowed synergies (economies of scale and scope), while tailoring support to specific needs of beneficiary countries. 2. **High relevance for direct beneficiaries (government institutions, laboratories)**, but at this stage, less so for enterprises. 3. **Right type and high quality of expert input**, including attachment training. 4. **Project actively capitalized on synergies with other projects** – although not formalized. Initiative to source services from other projects at not cost. 5. **Flexibility of management** to respond to changed needs.	1. **Needs assessment,** although detailed is biased towards government institutions rather than their clients. 2. **Project Document:** Log-frame as standard project management tool not properly applied and not updated during implementation of the project. Project document does not clearly define management and governance structure. 3. **Institutional strengthening only marginally covered,** although considered essential for the sustainability of result. 4. **Strengthening export capabilities was key objective** – elements other than upgrading NQI would be important, but were not covered. 5. **Strengthening the "demand side" of SMTQ services** (promoting quality, awareness rising) would be important, but was only marginally covered. 6. **Monitoring & Reporting:** Activity- rather than result-based reporting (although reporting is updated and informative). Financial report does not link expenditures according to UN-budget lines to outputs. 7. **Management:** Sequencing and operational planning in practice, communication with partners weak. 8. **Procurement:** Planning and implementation.

I

Evaluation objectives, methodology and process

This independent final evaluation of the Project "Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II" ("MEKONG II") was carried out on the basis of the Terms of Reference (ToRs) attached in Annex A, the UNIDO Evaluation Policy and the UNEG Evaluation Norms and Standards[1].

The purpose of this evaluation was threefold:

- Assess the project in terms of relevance, effectiveness, efficiency, sustainability and impact;
- Examine and validate the findings and recommendations of the thematic evaluation of UNIDO's approach to SMTQ development ("thematic evaluation"), which was conducted in 2009 and 2010[2];
- Develop lessons and recommendations for enhancing the design and implementation of similar future projects in Mekong countries and elsewhere.

The evaluation team was composed of the Senior Evaluation Officer of the UNIDO Evaluation Group (team leader)[3] and an international evaluator[4] appointed by UNIDO. Both evaluators were not involved in the preparation and/or implementation of the project[5]. The international evaluator participated in the evaluation of the first phase of the project (MEKONG I) and conducted an intermediate assessment of MEKONG II in February 2009 under the above mentioned thematic evaluation of UNIDO's SMTQ related activities.

During the field mission to Phnom Penh, Vientiane and Hanoi, the team conducted extensive interviews with counterparts, other projects, direct beneficiaries, enterprises, the UNIDO Representative in Phnom Penh and the UNIDO Country Director in Hanoi.

---

[1] United Nations Evaluation Group (UNEG), Norms for Evaluations in the UN System, April 29, 2005
[2] Thematic Evaluation of UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), co-funded by the Swiss State Secretariat for Economic Affairs (SECO), Final Report, Volume 1, April 2010 (based on the work of BENNET, Ben; LOEWE, Peter; KELLER Daniel).
[3] Peter Loewe, Senior Evaluator, UNIDO Evaluation Group
[4] Daniel P. Keller, Director, Swiss Consulting Co. Ltd., Hanoi - Viet Nam
[5] This principle is underlined in the UNIDO Evaluation Policy: "For independent evaluations, the members of an evaluation team must not have been directly responsible for the policy-setting, design or overall management of the subject of evaluation (nor expect to be so in the near future)". The international consultant has signed a declaration that none of the above situations existed and that he would not seek assignments with the managers in charge of the project before the completion of his contract with the Evaluation Group.

Prior to the mission, the team was briefed by the Project Manager at UNIDO Headquarters. The CTA was interviewed by telephone after the field mission.

The National Project Coordinators (NPC) in all three countries submitted lists of stakeholders to be interviewed and prepared an updated activity report. Comprehensive documentation was made available to the evaluation team in advance. An updated progress table comparing the status of each activity with the planning was also made available[6], but UNIDO did not conduct systematic self-assessments of achievements against planned objectives.

As the project document does not contain a fully fledged logical framework, the evaluation team decided to adopt the generic intervention logic for SMTQ projects developed under the thematic evaluation of UNIDO's SMTQ projects (see Figure 1 next page).

The evaluation used an interactive, participatory evaluation approach, based on meetings and discussions with stakeholders, including enterprises and other development partners. Interviews with beneficiary laboratories and companies were based on a questionnaire that incorporated questions to validate the key success factors identified in the thematic evaluation. A detailed schedule of meetings is included in Annex B.

The evaluators 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 counterparts in the target countries at the end of the respective missions and to the TCB Branch for factual verification. Feed-back received was directly integrated into the final report.

Limitations to this evaluation were the following:

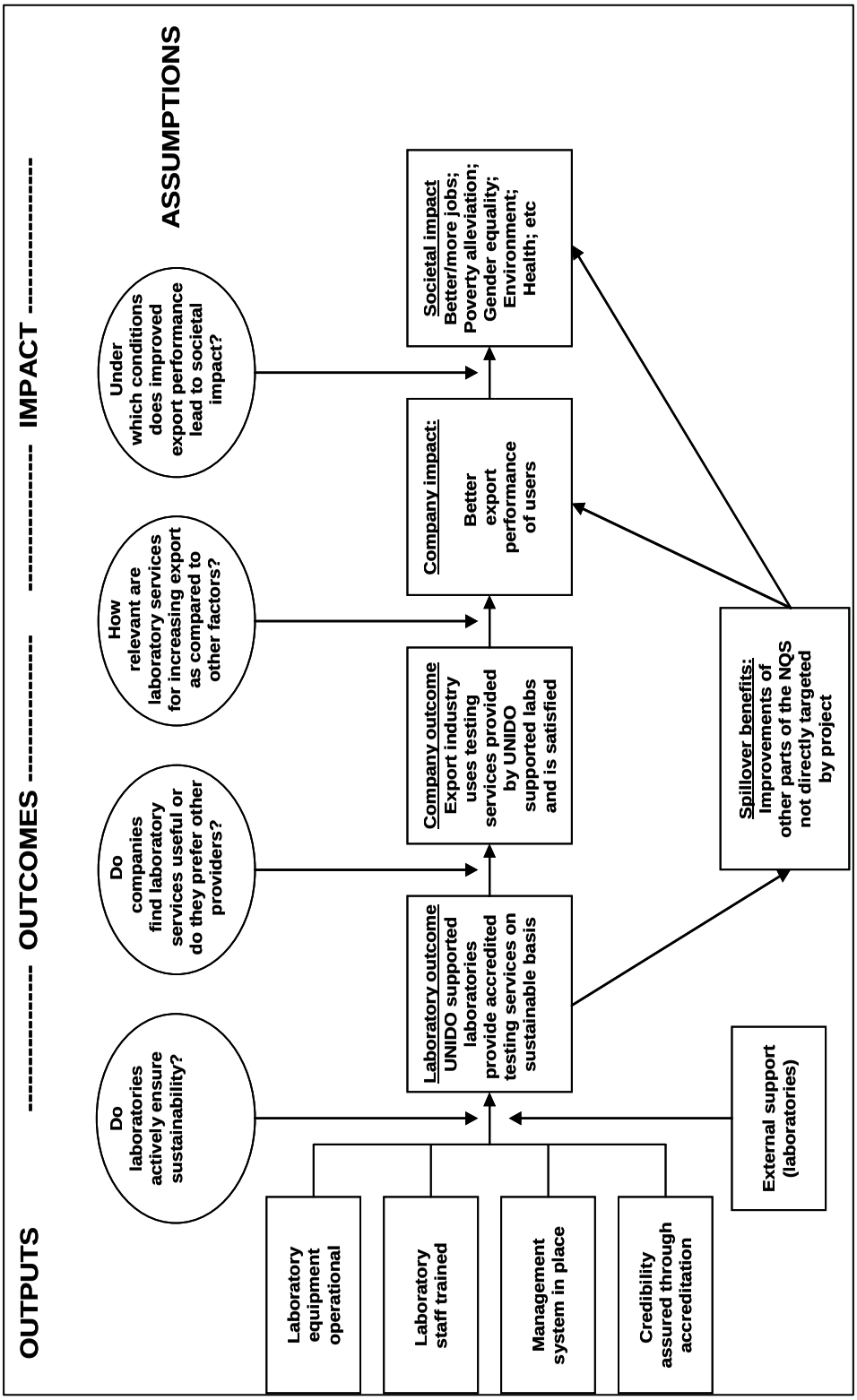
Firstly, planning and reporting does not provide a clear picture of the baseline situation at project start. A number of targets set in the project document in terms of outputs and expected outcomes are (a) not clearly measurable and (b) in some cases the causal links between activities and expected outputs/outcomes are unclear. The adoption of the generic intervention logic from the thematic evaluation is an auxiliary tool, which is not perfect. Planning and reporting is very much activity- rather than result-based, which makes the assessment of results and effectiveness difficult. The availability of monitoring data for the assessment of outcomes (e.g. number and type of tests) is limited. No monitoring or baseline data exist for project impact (e.g. export performances).

Secondly, financial reporting, although in line with UNIDO standards, does not link budget lines to outputs. As it is not known how much funding was employed to achieve a certain output, it was not possible to assess efficiency of implementation in regards to individual outputs.

---

[6] Latest version covering October 2010 until February 2011, prepared by the Project Manager

Figure 1: Generic intervention logic of UNIDO's SMTQ-Projects



II

Project background and overview

The UNIDO Project entitled "*Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II"* (subsequently referred to as "MEKONG II") is funded by the Norwegian Agency for Development Cooperation (NORAD).

MEKONG II started in April 2006 and the initially planned completion date of December 2008 was extended twice until June 2011. The initial project budget of US$ 1,500,000 (including agency support cost) was increased by Euro 53,360 in July 2010. As per 30 April 2011, 99% of the total budget has been committed and/or spent.

MEKONG II was a follow-up of the project "Market Access and Trade Facilitation Support for Mekong Delta Countries" (MEKONG I), implemented from January 2003 to December 2005 with a total budget of US$ 908,520. MEKONG I was evaluated in June 2005. It focused on building initial SMTQ capacity, raising awareness of the importance of SMTQ for industrial development, and upgrading some technical infrastructure.

The Viet Nam component of MEKONG II is linked to the projects "Market access support through the strengthening of capacities related to Standards, Metrology, Testing and Quality (SMTQ)" (US/VIE/03/083, evaluated in 2007) and "Post WTO accession support to Viet Nam - Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) compliance capacity development related to key export sectors"[7] (US/VIE/08/004, ongoing), both funded by the Swiss State Secretariat for Economic Affairs (SECO) and implemented with the same counterpart organizations as MEKONG II.

The project document for MEKONG II refers to recommendations and lessons learned from the evaluation of phase I, although some recommendations were not taken up, e.g. those relating to properly applying the logical framework and other project planning and management tools.

The project document defines the development objective of MEKONG II as follows: *"Facilitation of industrial development, consumer protection and export capabilities through the strengthening of standards, metrology, testing and quality institutional infrastructure and national capacities".*

Under this overall objective, the project aimed more specifically at developing new and strengthening existing conformity infrastructure, developing national capabilities on different standards related to key export industries, ensuring regional and international

[7] See Project Document dated 29 July 2008

credibility of the conformity infrastructure, and developing enquiry points for Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Measures (SPS) in each of the three countries.

Between July and October 2010 UNIDO fielded a project identification mission to Lao PDR and Cambodia to design the next phase. This mission conducted a needs analysis for the next steps of SMTQ capacity building and produced two reports and a preliminary draft project document for the follow-up phase in Lao PDR and Cambodia (without Viet Nam). At the time of the evaluation, the UNIDO TCB Branch had already introduced a project document into the UNIDO approval process and NORAD had already released the project funding. Although not fully in line with UNIDO internal procedures, which foresee an independent evaluation before launching a follow-up project, the UNIDO Approval Committee had accepted the project documented, under the condition that the recommendations of this independent evaluation will be duly considered during the inception of the third phase.

The following briefly summarizes the main features and work undertaken by MEKONG II:

Cambodia

The main direct beneficiaries of MEKONG II in Cambodia were:

- **The Industrial Laboratory Center Cambodia (ILCC):** Benefitted from training, upgrading of chemical and microbiology testing capacities, including support to obtain international accreditation for their microbiology laboratory.
- **CAMCONTROL:** Market surveillance and import control body that received equipment and training for its food, chemical and microbiology testing laboratories.
- **Department of Industrial Standards Cambodia (ISC):** Support to ISC included assistance on standard formulation, the strengthening of the TBT enquiry point through provision of equipment, the establishment of an accredited product certification scheme and the development of accredited certification capacities for quality management systems (QMS).
- **The Cambodian Rubber Research Institute (CRRI):** Received assistance to obtain and maintain international accreditation as well as staff training. Due to budget constraints, the planned procurement of equipment was postponed.
- **National Metrology Center (NMC) and Department of Metrology (DOM):** MEKONG II procured metrology equipment and provided some staff training.

For Cambodia, it was expected that, at the end of the project, the standards function and the National Product Certification scheme would be operational at ISC. The metrology laboratory at the NMC would satisfy the calibration needs of industry and serve the country's legal metrology system. Exporters of agriculture, fisheries and food products as well as rubber would be served by the testing laboratories at CAMCONTROL, the CRRI and the ILCC. And the certification body for ISO 9000, ISO 14000, HACCP and SA 8000 would de operational and accredited.

Lao PDR

In Lao PDR, Mekong II supported the following main beneficiaries:

- **The Division of Standards and Quality (DSQ)** under the Department of Intellectual Property, Standards and Metrology and Intellectual Property (DISM) of the National Authority for Science and Technology (NAST) received support in standards formulation, upgrading the TBT enquiry point and QMS auditor training. The Division of Metrology (responsible for legal metrology) received expert advice and support in the field of legal metrology.
- **The Department of Food and Drugs (FDD), Ministry of Health** participated in awareness raising activities and training on HACCP.
- **The Food & Drugs Quality Control Center (FDQCC) laboratory** was provided equipment and training of staff to prepare itself for accreditation.
- **The National Metrology Institute (NMI) (industrial metrology)** was provided with equipment and training.

In Lao PDR, MEKONG II aimed at strengthening the institutional structure for standards development and system certification. Basic metrology capacities would be in place and operational, serving the needs of legal and industrial metrology. A medium size testing laboratory concentrating on food sector would be operational. These interventions would assist Lao PDR in meeting the TBT/SPS requirements and launching the negotiations for WTO accession.

Viet Nam

MEKONG II aimed at complementing the SECO funded SMTQ project in Viet Nam by selectively strengthening specific aspects of the National Quality Infrastructure (NQI). The key direct beneficiary of both projects was the General Department of Standards, Metrology and Quality (STAMEQ) and the Bureau of Accreditation (BOA). The following NQI functions would be strengthened:

- The textile testing laboratory of QUATEST 1 would be upgraded to better meet the needs of the garment industry.[8]
- The chemical metrology capacities of the Viet Nam Metrology Center (VMC) and the legal metrology facilities of QUATEST 2 and QUATEST 3 would be improved through equipment procurement and training.
- Furthermore, the project aimed at building capacities for product certification schemes (CE-marking), requirements of the International Electrotechnical Commission (IEC-EE requirements) and in EU traceability (EUREPGAG, GVP and GAP).
- Mekong II also planned to strengthen the capability of the BOA as a HACCP inspection body and to launch a national proficiency scheme in specialized areas.

---

[8] This was subsequently covered by the phase I of the SECO-funded project.

III

Country context

A. Cambodia

The former French colony gained independence in 1953. Between 1975 and 1978, at least 1.5 million Cambodians died from execution, forced hardships, or starvation during the communist Khmer Rouge regime under Pol Pot. A Vietnamese invasion in 1978 drove the Khmer Rouge into the country side. After 10 years of occupation by Viet Nam, the 1991 Paris Peace Accords mandated democratic elections and a ceasefire, which was however not fully respected by the Khmer Rouge. UN-sponsored elections in 1993 restored some normality to the country. In 1999, the remaining elements of the Khmer Rouge surrendered. Political stability was repeatedly challenged by the difficulties of contending political parties to form a coalition government. The most recent local and national elections in 2007/2008 were relatively peaceful.

After the Asian crisis in 1997/1998, Cambodia's economic growth resumed. From 2004 to 2007, the economy grew about 10% per year, driven largely by an expansion in the garment sector, construction, agriculture, and tourism. GDP contracted by 2% in 2009 as a result of the global economic slowdown, but climbed more than 4% in 2010, mainly driven by renewed exports. The garment industry currently employs more than 280,000 people - about 5% of the work force - and contributes more than 70% of Cambodia's exports. With the expiration of a WTO Agreement on Textiles and Clothing at the end of 2004, Cambodian textile producers were forced to compete directly with lower-wage countries such as China, India, Viet Nam and Bangladesh. Rubber exports increased about 25% in 2009 due to rising global demand. The tourism industry has continued to grow rapidly, with foreign arrivals exceeding 2 million per year in 2007 - 2008; however, the recession in key export markets dampened growth in 2009. Agriculture contributes 33.4% to the economy and employs 57.6% of the workforce. The share of industry in Cambodia's GDP is 21.4% (employing 15.9% of the workforce), while services contribute 45.2% (share of the workforce estimated 26.5%). Key agricultural products are rice, rubber, corn, vegetables, cashews, tapioca, and silk. The most important economic sectors are tourism, garments, construction, rice milling, fishing, wood and wood products, rubber, cement, gem mining, and textiles.

Key export markets in 2009 were the United States (45.32%), Singapore (9.46%), Germany (7.52%), the UK (7.07%), Canada (6.31%), and Viet Nam (4.15%). Main export commodities included clothing, timber, rubber, rice, fish, tobacco, and footwear.
Despite the impressive growth recorded in the past decade, an estimated 31% of the population still lives below the poverty line. With a GDP of US$700 per capita (official exchange rate), Cambodia remains among the poorest countries in the region.

The major economic challenge for Cambodia over the next decade will be create an economic environment in which the private sector can create enough jobs to handle Cambodia's demographic imbalance and to reduce widespread poverty, especially in the countryside, where basic infrastructure is still lacking. Due to the limited domestic purchasing power, developing export sectors including tourism will be of crucial importance for the economic development of the country.

B. Lao PDR

After a long period of war, the Communist Pathet Lao established a strict socialist regime closely aligned to Viet Nam. With the introduction of the New Economic Mechanism (NEM) in 1988, the government embarked on a reform programme designed to shift from a centrally planned towards a market-oriented economy. A gradual, limited return to private enterprise and the liberalization of foreign investment laws lead to a surprising revival of the economy. Starting from a very low base, GDP growth averaged 6% per year from 1988-2008 except a drop caused by the Asian financial crisis that in 1997/1998. Despite this high growth rate, Laos remains a country with an underdeveloped infrastructure, particularly in rural areas. Nevertheless, economic growth has reduced official poverty rates from 46% in 1992 to 26% in 2010. This year, China will start to build a high speed railway system, which is expected to be completed in 2016.

Subsistence agriculture, mainly rice cultivation in lowland areas, accounts for about 30% of GDP and 75% of total employment. Industry (31.7%) and services (38.5%) employ the rest of the labor force. Laos main strengths relate to the country's not yet fully exploited potential to generate hydroelectric power, its promising tourism industry and favorable conditions for a number of agricultural products, such as timber and coffee.

Key export commodities include wood products, coffee, electricity, tin, copper, and gold. Main export partners in 2009 were Thailand (29.8%), China (15.4%), Viet Nam (14.96% and the U.K (4.29%).

C. Viet Nam

After years of war followed by the legacy of a centrally planned economy, the ruling Communist Party embarked on a comprehensive social and economic reform agenda in Viet Nam. The "Doi Moi" or renewal policy launched in 1986 resulted in a gradual transition towards a market economy with socialist orientation in combination with economic liberalization and integration into the global economy.

Since then, the deregulation of domestic markets, the liberalization of trade and an enabling framework for domestic and foreign investments have successfully transformed the economy. The end of the US embargo in 1994, Viet Nam's accession to the Association of South East Asian Nations (ASEAN) in 1995 and to the World Trade Organization (WTO) in 2007 further accelerated and deepened reforms. Meanwhile, the private sector has become an important engine for growth and job creation. Today, Viet Nam stands out as one of the fastest growing economies with an unprecedented record in poverty alleviation. Between 1993 and 2010, the poverty rate declined from 58% to less than 17%.

Viet Nam is on track to achieve most Millennium Development Goals ahead of schedule and reached middle-income status in 2010.

Agriculture's share of economic output has continued to shrink from about 25% in 2000 to about 20% in 2010, while still employing 53.9% of the population. Industry's share increased from 36% to 41% in the same period. Services employ 25.8% of the population (2009) and contribute 38.3% to the GDP. Viet Nam's key export commodities are clothes, shoes, marine products, crude oil, electronics, wooden products, rice, and machinery.

Viet Nam's key export markets are the US 20%, Japan 10.7%, China 9.8%, and South Korea 4.3%. The global recession has hurt Viet Nam's export-oriented economy, with GDP in 2009-10 growing less than the 7% per annum average achieved during the last decade.[9]

Export growth, foreign investment and the strong development of the private sector are the key drivers of Viet Nam's economic growth. Nevertheless, in order to reach its target to become an industrialized country by 2020, the Government needs to address important challenges. Sustainable growth requires firstly that the structural reform agenda is completed. This includes improvements in the regulatory framework, better macro-economic management, reform of state-owned enterprises, strengthening of financial services and more effective management of natural resources. Secondly, public administration reforms towards efficiency, accountability and transparency needs to be accelerated. While Viet Nam's economy remains dominated by state-owned enterprises (SOEs), which still produce about 40% of GDP, Vietnamese authorities have reaffirmed their commitment to economic liberalization and international integration.

More recently, the strong growth-oriented policies combined with an increasing trade deficit resulted in pressure on the Vietnamese currency. Inflation might considerably exceed the 11.8% recorded in 2010. This has caused the government to impose a number of stringent measures, including non-tariff trade barriers and a strong control of the foreign exchange-rate market, to control inflation and narrow the trade gap.

The Vietnamese government seems to increasingly emphasize on the quality rather than on quantitative growth only. A key element is to shift from exporting raw commodities to more internationally competitive, value added products and services.

---

[9] Retrieved from CIA World Fact Book www.cia.gov on 30 June 2011

IV

Project planning and achievements

A. Project funding and financial implementation

MEKONG II is fully funded by NORAD with an overall budget of US$ 1,500,000 (excluding 13% or US$ 195,000 agency support cost). In July 2010, the overall budget was increased by Euro 53,360, which resulted in a total allotment of US$ 1,532,848. As per 28 February 2011[10], the uncommitted balance was US$ 81,025 (5.3% of the budget).

Table 1: Structure of Expenditures according to main UN-budget lines

Expenditures by budget lines/type of input		Allotment in US$	Total expenditure as of 28.02.11 in US$	Balance in US$	Percentage of budget spent
11-00	International Experts	374,236	334,560	39,676	89.3%
13-00	Support Staff	39,802	37,060	2,742	93.1%
15-00	Local Travel	5,036	4,407	629	87.5%
16-00	Other Personnel Costs	71,461	59,622	11,839	83.4%
17-00	National Experts	66,268	63,501	2,767	95.8%
21-00	Sub-contract	298,034	294,225	3,809	98.7%
32-00	Study Tours	42,820	42,833	-13	100.1%
33-00	In-Service Training	16,214	14,959	1,255	92.3%
34-00	Non-UNDP Group Training	18,035	17,986	49	99.7%
49-00	Equipment	515,262	507,127	8,135	98.3%
51-00	Miscellaneous/Sundries	85,861	75,543	10,318	87.9%
99-99	**Total**	**1,532,848**	**1,451,823**	**81,025**	**94,7%**

Source: Progress report 28 February 2011, prepared by the Project Manager (all amounts rounded, percentages calculated by evaluators)

A result-based budget linked to key UN budget lines is available in Annex H of the project document, which is a good start to applying result-based financial *planning*. Including assumptions in addition would allow recapitulating the basis for the calculation. The financial *reporting* however fails to allocate expenditures to specific outputs. Thus, an analysis of type of expenditures by objectives and countries is not possible. The project reported a lack of budget to complete outputs as planned, but the report does not reveal the reasons why the project ran out of funds.

[10] Financial status based on Report as per 28 February 2011, provided by the project

It should further be noted that one output (D1.3.1.1 Output 1, upgraded textile testing laboratory of QUATEST 1) was entirely funded by SECO[11].

B. Project preparation

Revised regional approach combining three interlinked country components was appropriate.

MEKONG I was designed under a „regional approach" but the evaluation of this project found that a regional SMTQ system did not exist and thus recommended three interlinked country components for phase II. MEKONG II was designed along these lines, allowing for a better tailoring of the support towards specific country needs, while still creating favorable conditions for economies of scale (sharing resources) and scope (exchange of experience).

MEKONG II was designed based on a detailed needs assessment, however with a bias towards requirements of government service providers rather than those of their clients.

MEKONG II was formulated based on a detailed needs assessment of the country context in general (e.g. key industry sectors and export commodities) and the direct beneficiaries (NQI institutions), less however based on a survey of existing demand/supply of SMTQ services. Other stakeholders, such as enterprises, seem to have been only marginally consulted during the needs assessment. As a consequence, assistance provided is mainly centered on expressed needs of government institutions rather than those of their clients. This bias towards satisfying equipment and training needs of STMQ institutions is also reflected by the choice of performance indicators in the project document. Most of them relate to the "upgrading" of SMTQ infrastructure (e.g. staff training, equipment procurement, number of standards formulated) as opposed to how they benefit users (e.g. how many enterprises used testing services and their satisfaction with the services received). The assumption was apparently that supply (the availability of SMTQ services) would automatically generate demand by potential users.

The selection of counterparts seems to have been determined by the need to complement support to the institutions covered by phase I rather than by redefining priorities based on a new, more global gap analysis at the macro level. In consequence, Mekong II continued to support all institutions that had already benefitted from phase I, apparently with the intention to complete "work in progress".

Contribution of UNIDO to longer-term development of the NQI not clearly outlined

The two subsequent projects seem to be self-contained rather than following a systematic long-term strategy how UNIDO intends to contribute to the overall development of the National Quality Infrastructure (NQI) in a way that is aligned to national plans and supported by other donors. For the beneficiary governments, this would have had the advantage to better coordinate UNIDO's support into their national plans and to call on support from other donors at an earlier stage. This was also one of the key findings of the thematic evaluation.

---

[11] Unlike before, the SECO-funding for completing this output is disclosed in the latest progress reports.

"Demand side" for quality only marginally covered

UNIDO's Thematic Evaluation of SMTQ projects stressed the importance of fostering a "quality culture". This is of particular importance in LDCs, where consumers and enterprises are often not very much aware of quality issues. However, the design of Mekong II did not cover the demand side. While it is true that Cambodia and Lao PDR do not yet have strong consumer associations to work with, NGOs could have been possible partners for developing consumer awareness. Media coverage would be relatively cheap and could provide considerable reach to a wider general public, also in the provinces. On the other hand, both countries are endowed with relatively strong, active Chambers of Commerce and sector associations with a broad membership base that could have been partners for awareness raising activities for enterprises. Last but not least, both countries have a reasonably well developed tertiary education system and integrating SMTQ issues into the curricula of technical universities could have been another way of building awareness for SMTQ.

Technical strengthening insufficiently combined with institutional strengthening

UNIDO assumed that service providers would be financially sustainable by generating sufficient revenues to cover their expenditures (see section F of the project document). This obviously requires a wide range of business-related capacities to successfully operate as a service provider on commercial terms. Planned outputs however focus to a large degree on technical upgrading and training. Technical upgrading alone leaves the beneficiary institutions with a good physical infrastructure, but not with the necessary institutional capacities to commercialize it. There is a clear need to further support institutional capacities, similar to what was done in the SECO-funded SMTQ project in Viet Nam, where UNIDO commissioned a management consultant to assess institutional capacities and provide hands-on advice to STAMEQ.

Linkages to similar projects identified but not formalized

The project document includes a detailed overview of other interventions for each country was analyzed in detail (table D project document). This indicates that UNIDO has put significant efforts into designing a project that is complementary to interventions of other donors. Nevertheless, the linkages were not formalized and specific. The good, informal coordination achieved in practice was mainly a merit of the CTA's efforts and most other donors' willingness to cooperate with UNIDO. In Viet Nam, the project was explicitly designed as complementary to the SECO-funded SMTQ project (phase I) in Viet Nam and the European Technical Assistance Programme for Viet Nam (ETV 2). Not identified were possible linkages to the SECO-funded Cleaner Production Centers. Synergies with UNIDO CPC's (funded by SECO) in Lao PDR and Cambodia (the project office in Phnom Penh was located in same building!) could have been envisaged in conducting pilot projects at the enterprise level (Quality Management Systems). Many aspects of ISO9000, ISO14000 are closely linked to the approach used by the CPCs.

No formal mechanism is foreseen to coordinate the two UNIDO SMTQ projects implemented with the same counterparts in Viet Nam. Implementing two separate SMTQ projects with two different CTAs[12] in the same country in parallel is not a very effective approach[13]. Calling on

[12] Phase I of the SECO-funded project shared the CTA with Mekong I and II.

co-funding[14] of the two donors for *one* project would facilitate coordination significantly and also reduce the management input needed. Practical constraints and some "historical" factors might have been the reason for not selecting a co-funding approach. While in practice, informal coordination seems to have worked well for Mekong I and II, this might not be the case in another context.

Need to strengthen the role of partners in project governance, management and implementation

The project is designed for implementation under the traditional "agency execution mode", but unlike under phase I, the PMUs in all three countries are now integrated into counterpart structures (no separate units run by UNIDO). While this is a significant step towards implementing the principles of the Paris Declaration (no parallel PMUs), the NPCs are still funded by the project (thus receive a top-up on their salaries as government officials).

While the traditional agency mode is not in line with recent trends of delivering development cooperation projects, most donors have not yet moved significantly towards national execution mode (NEX), especially in Laos and Cambodia, taking into account the still limited absorption capacities of counterpart institutions. Furthermore, in a technically complex field such as SMTQ, it would be a challenge for counterparts to source equipment and technical support on their own.

Even in Viet Nam, where major donors (and the UNDP) implement their projects through NEX, the counterpart (STAMEQ) explicitly highlighted the advantages of expertise and equipment being provided directly by UNIDO. While full NEX might be not an effective way of aid delivery for technically complex projects or for projects in LDCs with limited absorption capacities, increased involvement, responsibility and accountability of counterparts would contribute to a higher degree of participation, ownership and to the strengthening of institutional capabilities of counterparts.

The best way would probably be to gradually shift towards a "mixed" form of execution with delegating the implementation of some activities to local beneficiaries under subcontracting arrangements. Such a "mixed" form of execution would require a strengthening of UNIDO's project management capabilities (in particular coordination and monitoring) in the field.

Definition of project management and governance structure is incomplete

This might be one of the reasons for some of the confusions and miscommunications that occurred during implementation (see section IV.C below on management mechanism applied in practice). According to Annex F of the Project Document, the Steering Committee has merely an advisory function (strategic guidance, providing comments, reviewing results and recommending changes). It is unclear who would make strategic decisions, e.g. changes to the project content and budget. As the project document is an agreement between NORAD, UNIDO and the beneficiary governments, changes would require a unanimous decision. However, no mechanism is provided for managing change in a timely manner. Also, specific

---

[13] The situation was similar in Cambodia with a stand-alone project funded by Austria and MEKONG I.
[14] NORAD and SECO would certainly be open to this, as they have co-funded projects before.

competences, responsibilities and accountabilities of each of the persons involved into *operational* management are not defined.

Logical framework tool not properly used

Instead of a complete logical framework, the project document includes a list of outputs that were expected to directly contribute to the overall objective. Outputs are broken down into activities and linked to success indicators, some of which are however not objectively verifiable. Activities are only roughly defined. Baseline indicators (status at the beginning of the project) are not available, which makes it difficult to measure impact. Parts of the "outputs" defined are in fact "outcomes" (e.g. standard formulation, accreditation of product certification scheme). Some of the links between project inputs and outputs are not exclusive (defined outputs are only one among many factors to reach the objective). Also, no specific risks/assumptions and a plan how to mitigate them were defined. As a result, some of the risks that could have been identified were not addressed (e.g. on support to the establishment of accredited certification capacities). Despite those shortcomings, the vertical logic of the project, i.e. the outputs contribute to the overall objective, is clearly explained.

Result-based budgeting in the project document is a considerable step towards result-based management. Beyond the minimum requirements of the UNIDO technical cooperation guidelines, Annex H to the project document includes a table that allocates expenditures to outputs and countries. This overview provides a significant value added, because it shows how (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). If used in practice, this would be a valuable tool for the Project Manager to systematically consider different options for implementing a certain activity, in order to identify the most cost efficient solution. The donor and the government are 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, this would allow UNIDO to systematically benchmark its projects within and across different branches and to strengthen organizational learning. Best practices would in addition require (a) adding a section for fixed overhead cost not allocated to objectives (e.g. for CTA), (b) providing detailed assumptions to the budget and – most importantly - (c) complementing result-based budgeting by result-based financial reporting.

The flipside of a broad, comprehensive approach within a relatively small project was a rather superficial coverage of some important intervention areas:

The project continued to apply a comprehensive approach to the strengthening SMTQ in the two LDCs, by covering a wide array of aspects of a functioning NQI. While a comprehensive approach is certainly needed where NQI development is at an initial stage, intervening in a large number of fields within a rather small project came at the price of a certain fragmentation of support that sometimes lacked the necessary depth. For instance, while the project document rightly identified consumer protection, public awareness rising, and institution building as important elements of strengthening the NQI, the scope of the project did not allow for providing the appropriate degree of support. Another example is the lack of funding for the sustained support needed to achieve international accreditation of ILCC and FDQCC.

Objectives defined in the Project Document were overambitious and not commensurate with the limited scope of the project (budget and duration)

Resources and time available are clearly too limited to make a significant difference towards a well functioning NQI in the two LDC countries, even considering the groundwork laid under MEKONG I. The failure to reach expected results is mainly a result of underestimating the input needed to achieve objectives at the planning stage and of risks/assumptions not properly taken into consideration. Moreover, it is also a partially a problem of poor planning at the implementation stage (see comments in section IV.C. below).

Conclusions

Project preparation was based on a detailed needs assessment, however with a bias towards responding to a wish list of government institutions rather than considering the demand of enterprises and consumers. Planned support was comprehensive, but focused mainly on strengthening supply than demand side of SMTQ services. Technical support was insufficiently combined with institutional strengthening, which is important for the sustainability of service providers. The project does not provide any longer-term strategy on what would be needed to develop a NQI and how to contribute to it beyond the current funding cycle. Interventions of other donors were carefully taken into consideration, but cooperation with other projects was not formalized through agreements. The logical framework tool was not properly used; no risks and assumptions were defined. This might be one of the reasons why objectives were too ambitious/not feasible considering the limited time and budget available. The outline of governance and management structures is rudimentary, which partially contributed to overlaps and miscommunications during implementation.

C. Project implementation

The following chapter compares planned with achieved outputs and activities based on progress reports[15] and evaluation findings on the ground.

Development objective:

"Facilitation of industrial development, consumer protection and export capabilities of Cambodia, Lao PDR and Viet Nam through the strengthening of standards, metrology, testing and quality management institutional infrastructure and national capacities"

Cambodia

Outputs (Cambodia)	Planned/realized
Output D.1.1.1.1	**Planned activities** 1. Identification of priority products 2. Provide hands-on training 3. Preparation and review of draft standards 4. Approve and publish Cambodian standards. **Realized activities**
Formulation and publication of Cambodian national standards for domestic and export	

[15] Progress Report dated 28 February 2011 (covering October 2010 - February 2011)

Outputs (Cambodia)	Planned/realized
products **Performance indicator:** 40 standards prepared	1. Priority project identified based according to two criteria: relevance for domestic market (safety) and key export products. 2. Hands-on training for formulation of 10 new draft standards provided. Training was of good quality. However, ISC wishes to receive more specialized advise (consultant should be familiar with specific sector, e.g. coffee) and updated standards from different countries). Expert should be more "hands-on" and have practical experience in several countries. 3. 9 new draft standards prepared; 5 standards under review by the technical committee (Steel Roofing Sheets, Cement, Drinking water bottles, laundry soap and coffee). **Comment:** • Objective of preparing 40 standards not fully achieved.
Output D.1.1.1.2 Development of ISO 9001, ISO 14001 and HACCP certification services, reinforcing the ISC Performance indicator: Commencement of auditor training and other services from ISC for ISO 9001, ISO 14001 and HACCP certification.	**Planned activities** 1. Training of trainers for lead and internal auditor training programmes 2. Conduct internal and lead auditor training programs for industrial personnel 3. Preparation of documentation for obtaining accreditation for ISO 9001, ISO 14001 and ISO 22000 (HACCP) certification. **Realized activities:** • Training of lead auditors completed (8 for ISO 9001, 3 for ISO 14001). HACCP not covered, but apparently now covered under the project of the Asian Development Bank (ADB). • ISC conducted survey to identify potential candidate companies for ISO 9001 and HACCP certification; four companies for ISO 9001 and six companies for HACCP identified. • Existing Quality Manual revised to conform to the new ISO 17021:2006 standard.
Output D.1.1.1.3 Accredited Product Certification scheme established at ISC Success indicators: 1. Fully operational Product Certification scheme 2. Certification of 40 product categories.	**Planned activities:** 1. Call on bids from accreditation bodies 2. Application to selected accreditation bodies 3. Assessment and receipt of accreditation 4. Awareness seminars for promotion of product certification scheme 5. Aggressive marketing of the product certification scheme. **Realized activities – outcomes:** • With assistance from the project, the ISC's Product Certification Scheme was accredited by Norwegian Accreditation in November 2008 (for drinking water). Accreditation was extended until September 2011 and expanded to fish sauce and soy sauce.
Output D.1.1.1.4 Food, chemical and microbiology-testing laboratories established at the Industrial Laboratory Centre of Cambodia (ILCC) and staff trained. **Success indicator:** 1. Fully operational test laboratory 2. Trained staff (not measurable, not clear baseline – laboratory operated already before project started)	**Planned activities:** 1. Identification of equipment 2. Order, install and test laboratory equipment 3. Provide in-house training for laboratory staff 4. Plan and organize study/fellowship training overseas for key laboratory staff 5. Assist in preparing for and obtaining international accreditation of food and microbiology laboratories. **Realized activities:** • Laboratory designed and set-up under the UNIDO project. • Equipment identified, ordered and delivered (see comments below) – some of it rather late (2009) • Some training provided: AAS training provided by equipment supplier; Training of four persons (2 for food/chemicals and 2 for microbiology) in QUATEST 3, Viet Nam completed – 2 – 3 days were considered as rather short. • Support to the preparation of accreditation, final stage (assessment) was completed with the assistance of ADB expert (Dr. Upali) who had been working for UNIDO before.

Outputs (Cambodia)	Planned/realized
	Comments to equipment provided: All equipment delivered (list provided by ILCC). But, at the time of the evaluation, four testing equipments were not operational. • Photo spectrometer THERMO SPECTRONIC (No. 11) purchased in 2006 but broken end of 2010 – laboratory has another photo spectrometer sponsored by USAID; • MANESTY Water Still 4 liter (No 15) controller broken 1 year ago; • Autoclave 80 liters (No. 6); • Coli form water bath, high precision (no cover ordered), not operational, cover will be produced locally.
Output D.1.1.1.5 Upgrade food, chemical and microbiological testing laboratories at Department of CAMCONTROL; trained staff. **Output indicator:** Laboratory fully operational, trained staff. (not measurable, not clear baseline – laboratory already operated before project started)	**Planned activities:** 1. Identification of defective equipment 2. Provide in-house training for laboratory staff 3. Plan and organize study/fellowship training overseas for key laboratory staff **Realized activities:** • The funds identified for the repair of defective equipment were utilized for purchase of accessories and additional equipment. One balance arrived defective, but receipt was still signed by UNDP. Apparently, some equipment was first misdirected to Lao PDR and then forwarded to Cambodia. • FAO experts repaired equipment free of charge (according to the CTA, he arranged this pragmatic solution). **Comment:** • According to CAMCONTROL, the FAO experts did not provide training (deviation to implementation report).
Output D.1.1.1.6 TBT enquiry point, standards library and documentation center with facilities for acquisition and dissemination of information established at ISC **Output indicator:** Fully operational standards library, documentation center and TBT inquiry point. (not measurable, not clear baseline)	**Planned activities:** 1. Identify and purchase national and international standards and other documents. 2. Prepare electronic databases for the acquired standards and documents. 3. Order office equipment for the TBT enquiry point. 4. Establish links to regional and international databases. **Realized activities** • ISO standards foreign national standards and other documents (Approximately 600) identified, ordered and supplied. • Database: implemented by ISC • Office equipment for TBT enquiry point consisting of a server computer and library furniture were supplied. • No evidence found for the reported links to international databases.
Output D.1.1.1.7 Enhanced and strengthened rubber testing laboratory at the Cambodian Rubber Research Institute (CRRI). **Output indicator:** Fully operational laboratory, trained staff. Comment: not measurable, laboratory was already fully operational before UNIDO support.	**Planned activities:** 1. Identify, order and install equipment 2. Provide in-house training for laboratory staff 3. Assist in preparing for and obtaining international accreditation. **Realized activities:** • Equipment not procured due to budget constraints. UNIDO considered the equipment as not essential for the operations of the laboratory. According to CRRI, essential for operations. One rubber mill is over 20 years old, no replacement parts are available. If this mill breaks down, CRRI would not be functional. VALAPLASTIMETER has only capacity of 40 samples per day. Peak load: 60 • Support to preparing for accreditation and training completed and accreditation obtained/extended. In house training completed. In addition overseas training on the management of certification system for technically specified rubber (TSR) was provided at the

Outputs (Cambodia)	Planned/realized
	Malaysian Rubber Board.
Output D.1.1.2.1 The industrial metrology laboratories for temperature, pressure and electrical measurement fields established, national measurements standards produced and staff trained. **Success indicators:** 1. Fully operational industrial metrology laboratories for temperature, pressure and electronic measurement field. 2. Trained staff.	**Planned activities:** 1. Identify, order and install equipment 2. Provide in-house training for staff 3. Plan and organize study/fellowships training overseas for key laboratory staff 4. Assist in the development of a laboratory QMS. 5. Assist in inter-laboratory comparisons. **Realized activities:** • Equipment ordered, installed and operational, except pressure gauge balance purchased in 2007 but not used. • Some assistance in establishing a QMS, but it is highly unlikely that this will be sufficient for preparing for accreditation without further sustained expert support. • A staff member of NMC participated in a workshop conducted in Viet Nam by PTB/APMP for evaluation of the inter-comparison results. NMC performed reasonably well.
Output D.1.1.2.2 Enhanced legal metrology laboratory of the Dept. of Metrology in Phnom Penh **Success indicator:** Fully operational legal metrology laboratory (not measurable)	**Planned activities:** 1. Identify, order and install equipment 2. Provide in-house training for staff. **Realized activities:** • Equipment delivered (according to list DOM – inventory control record, checked on a sampling basis) • Mass and temperature metrology training completed. • Two sets of weights of the NMC were calibrated at NIMT, Thailand and National Metrology Laboratory, Singapore to maintain international traceability. **Comments:** Important parts of legal metrology not "fully operational", e.g. for legal metrology in a LDC context, it would also be important to verify pressure (e.g. gas bottles) etc.

Lao PDR

Outputs (Lao PDR)	Planned/realized
Output D 1.2.1.1 Formulation and publication of Lao national standards for domestic and export products **Success indicator:** 20 Lao (new) national standards published.	**Planned activities:** 1. Identification of priority products for formulation of Lao national standards 2. Provide hands-on training in standards development 3. Preparation and review of draft standards 4. Approval and publication of Lao standards. **Realized activities:** • 24 standards have been identified; 7 standards prepared/reviewed (oxygen for medical use, toilet soap, salt, orange juice, noodles, helmets, pre-stressed concrete poles for transmission of electrical power); 2 new standards were published (Portland Cement LS 04-2010, Green Coffee Bean LS 01-2010). **Comment:** The total number of published national standards in Lao PDR is currently 73. 18 new standards drafted under the project but only 2 published (instead of 20 planned).
Output D.1.2.1.2 Enhanced and accredited	**Planned activities:** 1. Review of current product certification procedures

Outputs (Lao PDR)	Planned/realized
product certification scheme at Lao DSQ **Success indicator:** Fully operational product certification scheme.	2. Preparation of documents in accordance with ISO/IEC 17021 3. Launch of enhanced scheme; accreditation of product certification scheme (by external body). **Realized activities:** • Accreditation documents completed • JAS-ANZ conducted final assessment in February 2011, four major and several minor non-conformities identified. DSQ is taking action to address those. **Comment:** Under the existing system, 2 licenses have been granted for steel reinforcement bars, 2 licenses for cement, 1 license for roofing tiles and 1 license for roofing sheets. "Output" not achieved.
Output D.1.2.1.3 Development of ISO 9001 and ISO 14001 certification services, reinforcing the Division of Standards & Quality (DSQ). **Success indicator:** 1. Trained staff 2. Auditor training and other services (from DSQ) initiated.	**Planned activities:** 1. Training of trainers for lead and internal auditor training programs 2. Conduct internal and lead auditor training programs for industrial personnel 3. Preparation of documentation for obtaining accreditation for ISO 9001 and ISO 14001. **Realized activities:** • ISO 9001 and ISO 14001 Lead Auditor courses were held and 6 persons for ISO 9001 and 5 persons for ISO 14001 have passed the examinations. Meanwhile, their license has expired. **Comments:** • Lead auditor courses not conducted, due to a lack of staff at DSQ; according to DSQ, QMS documents not completed (deviation to report). • "Output" not achieved. DSQ does currently not provide any training or services. • Staff trained does not have the opportunity to apply their skills in practice.
Output D.1.2.1.4 Development of HACCP certification services, reinforcing the Dept. of Food and Drugs, Ministry of Health (FDD) **Performance indicator:** 1. Trained staff 2. Auditor training and HACCP certification services (from FDD) initiated.	**Planned activities:** 1. Training of trainers for HACCP assessor training 2. Conduct awareness raising programs for food industry personnel 3. Preparation of documentation for obtaining accreditation for HACCP certification. **Realized activities:** • Training completed • Support to establishment of quality manuals provided (Dr. Upali – last mission in 2009) • Quality manual has been approved and issued. **Comment:** No evidence that FDD provides auditor training. It should also be noted that FDD is not accredited to certify HACCP. Output not achieved.
Output D.1.2.1.5 Upgraded food and microbiology testing laboratories at the Food & Drugs Quality Control Center (FDQCC) **Performance indicator:** 1. Fully operational testing laboratory 2. Trained staff (The indicators are not measurable and no	**Planned activities:** 1. Identification, purchase, order and install laboratory testing equipment 2. Provide in-house training for staff 3. Plan and organize study/fellowship training courses overseas for key laboratory staff 4. Assist in preparing for and obtaining international accreditation. **Realized activities:** • Equipment purchased and delivered. Two of the key equipments needed to obtain accreditation had been damaged during shipping. FDQCC signed receipt with indication of damage (checked). Some other small equipment is also broken and some supplies were

Outputs (Lao PDR)	Planned/realized
baseline was retrieved; laboratory was already operational at the onset of the project).	delivered with specifications not in line with shipping documentation. • A number of training programs have been completed by the microbiology expert (Dr. Upali). • Training of two persons on ISO 17025 quality management systems at QUATEST 3 in Viet Nam completed. • Quality Manager was trained on ISO/IEC 17025 at the Industrial Technology Institute in Sri Lanka. • FDQCC staff in addition also participated in HACCP/ISO 22000 training in September/October 2008. • Support to accreditation provided – according to expert report, preparation of accreditation is at final stage and most of the non-conformities have been cleared. • FDQCC participated in proficiency testing scheme (Australia) and reported satisfying results.
Output D.1.2.1.5 Upgraded microbiology testing laboratory at the Plant Protection Centre, Department of Agriculture, Ministry of Agriculture & Forestry	**Planned activities:** 1. Identification, purchase, order and install laboratory testing equipment 2. Provide in-house training for staff 3. Plan and organize study/fellowship training courses overseas for key laboratory staff 4. Assist in preparing for and obtaining international accreditation. **Realized activities:** None, output has been cancelled – UNIDO reported limited interest and lack of absorption capacity of the laboratory.
Output D.1.2.1.7 TBT enquiry point, standards library and documentation centre with facilities for acquisition and dissemination of information established and staff trained at the Division of Standards & Quality (DSQ) **Success indicator:** Fully operational standards library, documentation center and TBT enquiry point.	**Planned activities:** 1. Identify and purchase national and international standards and other documents 2. Prepare electronic databases for the acquired standards and documents 3. Order office equipment for the TBT enquiry point 4. Establish links to regional and international databases. **Realized activities:** • Some standards purchased – according to DSQ, a number of them are of limited use, because they are outdated (20 – 50 years old). • UNIDO provided an illegal copy of FileMaker Pro to establish a standards library and briefly explained how to use it. A brief check showed that only Lao standards are included and no links to regional/international databases established. • Some computers and other office equipment were procured. • 2 persons trained at STAMEQ in Viet Nam. • The CTA conducted a seminar on standard formulation in PAKSE in June 2010 (not reported). **Comment:** Library and TBT inquiry point is established, but as it is now, of limited use for disseminating information.
Output D.1.2.2.1 Upgrading of the National Metrology Center including the procurement of national measurement standards for temperature and electrical measurement fields. **Success indicator:** Temperature and electrical metrology equipment delivered, installed and commissioned; staff	**Planned activities:** 1. Identify, order and install equipment 2. Provide in-house training for staff 3. Plan and organize study/fellowships training overseas for key laboratory staff. **Realized activities:** • Mass and temperature metrology equipment have been installed and commissioned. • Staff training on Training on mass, dimensional, volume metrology and determination of uncertainty completed. This included a training of provincial staff in PAKSE (June 2010) • No training overseas provided yet. • Support to printing marketing material (brochure). **Comment:**

Outputs (Lao PDR)	Planned/realized
trained.	NMC was awarded status as independent government institution with financial and organizational autonomy.
Output D.1.2.2.2 Upgrading the activities of the Division of Metrology (legal metrology) of DISM including provision of mass and volume standards **Success indicator:** Enhanced legal metrology service	**Planned activities:** 1. Identification, procurement, installation of legal metrology equipment for the provincial departments of metrology 2. Training of trainers for legal metrology work. **Realized activities:** • Electricity meter test equipment and 600 kg balance delivered • Training in pre-package verification (direct training to officials, so far no follow-up in practice). • The CTA provided some input to the new Metrology Law

Viet Nam

Outputs (Viet Nam)	Planned/Realized
D.1.3.1.1 Upgraded textile testing laboratory of QUATEST 1 **Success indicator:** Fully-operational textile testing laboratory (in QUATEST 1)	**Planned activities:** 1. Identify, order, install additional testing equipment 2. Provide in-house training for staff 3. Plan and organize study/fellowship training overseas for key laboratory staff 4. Assist in preparing for and obtaining international accreditation for laboratory. **Realized activities:** • MEKONG II did not provide any funding (funded by SECO) **Comment:** • QUATEST 1 decided to not further pursue accreditation, due to the high cost of maintaining it and low demand for textile testing.
D.1.3.1.2 Product certification scheme for CE marking and other IEC-EE requirements	**Planned activities:** 1. Awareness on EU traceability, EUREPGAP, GVP and GAP raised 2. Initiate pilot projects 3. Provide training on setting up of scheme. **Realized activities:** • Training at TUV SUD PSB, Singapore on GLOBALGAP competed. • Some companies in Hanoi, Bac Ninh and the former Ha Tay province visited to assess situation and raise awareness. • No actual training provided. **Comment:** • Deviation to report: no training provided. • Project input under NORAD-funding very limited. • IEC-EE scheme was not established due to the lack of interest of STAMEQ.
D.1.3.2.1 Upgraded Viet Nam Metrology Center **Performance Indicator:** Chemical metrology equipment provided and installed; staff trained.	**Planned activities:** 1. Identify, procure and install equipment for chemical metrology 2. Provide in-house training for staff 3. Study/fellowship training overseas for key laboratory staff. **Realized activities:** • Equipment identified and procured. **Comment:** • The inventory list "laboratory equipment supplied under TE/RAS/06/001 and SECO phase 1" checked during the field mission includes both equipment funded by SECO and NORAD.

Outputs (Viet Nam)	Planned/Realized
	Despite significant efforts, it was not possible to determine the source of funding for each piece of equipment.
D.1.3.2.2 Upgraded legal metrology facilities of QUATEST 2 and QUATEST 3 **Performance indicator:** Metrology equipment provided and staff trained.	**Planned activities:** 1. Identify, procure and install equipment for chemical metrology 2. Training of trainers for legal metrology work. **Realized activities:** • Equipment identified and procured. **Comment:** • The inventory list "laboratory equipment supplied under TE/RAS/06/001 and SECO phase 1" checked during the field mission includes both equipment funded by SECO and NORAD. Despite significant efforts, it was not possible to determine the source of funding for each piece of equipment. Staff training was not considered as necessary since the equipment is easy to use.
D.1.3.3.1 National proficiency scheme launched and BOA staff trained in specialized areas **Performance indicator:** National laboratories participate in proficiency testing scheme.	**Planned activities:** 1. Identify needs and priorities for proficiency testing 2. Develop a national programme for proficiency testing 3. Provide in-house training for staff 4. Provide overseas training/fellowships for key staff 5. Launch the national proficiency testing scheme. **Realized activities:** • All completed, except overseas training. National proficiency testing scheme was launched. **Comment:** • Some laboratories participate in the scheme (e.g. QUATEST 2)
D.1.3.3.2 Strengthened capability of BOA for HACCP and inspection body accreditation. **Performance indicator:** BOA able to perform HACCP inspection body accreditations.	**Planned activities:** • Upgrade BOA documentation for HACCP and Inspection Body accreditation. • In-house assessor training • Attachment training in a recognized accreditation body **Realized activities:** • 1 expert mission of accreditation expert (on HACCP) • Assessors for medical laboratory assessment against ISO/IEC 15189 trained (request by BOA, approved by Steering Committee)

Conclusions: Progress of implementation was slow. Despite two extensions, large parts of the planned outputs could not be completed as planned. Lack of funds, coordination problems, slow progress at the level of counterpart institutions as well as low frequency and too limited quantity of UNIDO expert input were among the reasons for this delay.

D. Project management

Similar to MEKONG I, the project management structure of MEKONG II was complex and involved a large number of actors:

- Project manager in TCB Branch at UNIDO HQ in Vienna;
- Part-time CTA covering all three countries but based in Sri Lanka;
- Three National Project Coordinators (NPC) – one in every country;
- Head of UNIDO country office in Viet Nam;

- Head of UNIDO Operations (HUO) in Lao PDR (vacant since November 2010)
- Head of UNIDO Operations (HUO) in Cambodia (operational from April 2009)
- UNIDO Regional Director based in Bangkok covering Lao PDR and Cambodia.

V

Assessment of project results

A. Relevance

Relevance to international and national priorities

By virtue of its development objective *"facilitation of industrial development, consumer protection and export capabilities through the strengthening of standards, metrology, testing and quality institutional infrastructure and national capacities"* the project is potentially relevant to Millennium Development Goal (MDG) 1 *"Eradicate extreme poverty and hunger and Partnership for development"* and to MDG 8 *"Partnership for Development"*.

As outlined in the generic intervention logic in Figure 1, the core logic of the project is to promote a well functioning, credible SMTQ infrastructure in order to increase exports, to spur economic development, create new jobs and, ultimately, to improve the living standards of the population and to reduce poverty.

This intervention logic focusing on the supply of SMTQ services and on implementing WTO rules, in particular the TBT and SPS agreements is relevant to the international Aid-for-Trade agenda. In the same spirit, the project objectives are aligned to the international framework of Trade Related Technical Assistance (TRTA) and to the UNIDO-WTO framework. Counterparts of all three target countries confirmed the importance of SMTQ for their ability to comply with WTO TBT/SPS requirements[16].

Beyond this export logic, MEKONG II pursues also other logical paths towards improved living standards and poverty alleviation. Substandard products threaten public health, safety and welfare and undermine the limited purchasing power of poor consumers. Enforcing standards on imports and domestically manufactured products is vital to ensure that products meet the national health, safety, environmental and technical requirements, thereby protecting consumers. The circulation of cheap, substandard goods, many of which are illegally imported, continues to a major problem in all three beneficiary countries. Proper legal metrology is also key to avoiding fraud (e.g. the sale of underweight goods on markets and gas stations, overcharging for the use of electricity).

Relevance to UNIDO

The project matches UNIDO's operational mandate, core competencies, expertise and experience in trade capacity building. It is in line with UNIDO's three-pronged approach to

[16] This is especially important for Cambodia (WTO member since 2003), where the government faces the challenge to implement the remaining WTO commitments and of the Lao Government to prepare for WTO accession (now planned for 2012).

trade capacity building (3C-Approach) that aims to strengthen **compete, conform and connect** aspects in parallel.

- **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.
- **The "conform" element** relates to the ability of exporters to prove compliance of products to market requirements. Strengthening the national quality infrastructure enables exporters to meet market requirements (standards, technical regulations and conformity assessment procedures) and to overcome technical barriers to trade.
- **The "connect" element** depicts to what extent exporters are connected with their target markets, either directly or through international supply chains.

Of these three elements, MEKONG II focuses on "conform" aspects by strengthening the supply of SMTQ services. This focus has been relevant, considering that developing a national SMTQ infrastructure from scratch is a long-term endeavor, which started in Laos and Cambodia only about ten years ago. However, as stressed by the Thematic Evaluation of UNIDO SMTQ activities referred to above, the relevance of "conform" projects depends entirely on the parallel development of the two other "Cs". Investing into an SMTQ infrastructure without demand has often been criticized as a typical "White Elephant" syndrome.

The relevance of MEKONG II type projects rests therefore on building competitive export sectors by systematic strengthening of *value chains*[17] by a "compete" approach including "connect" aspects. Interviews with companies in all three countries confirmed that "compete" and "connect" aspects are of prime concern for exporters. Challenges were for instance reported in Laos for handicrafts, coffee and "fair trade" agricultural exports to Europe.

As discussed below, the planning of the coming project phase reflects this wider spirit and thus further improves project relevance.

Relevance to UNDAF in Lao PDR and Cambodia and to "One UN Plan" in Viet Nam

MEKONG II is well aligned to the current United Nations Development Assistance Framework (UNDAF framework) approved by the respective governments.

---

[17] The "value chain/trade corridor concept" looks at activities that are required to get products to the market. Value chain activities are operations that transport or transform elements of the final product, such as sourcing, inbound logistics, production (transforming inputs into finished products and services) and outbound logistics. Businesses are successful when the total value added throughout the value chain exceeds (a) the cost of those activities and (b) the value added by competitors. For many products sold in international markets, the profits are greater at the later stages of the chain, with the country that is the source of the raw materials gaining the lowest percentage of value. In order to boost economic development of exporting countries, value chains need to be reconfigured in a way that more value is realized at the early stages of the chain (before the products are exported). This requires (a) effective and efficient organizations (b) working within a supportive infrastructure and (c) an enabling policy framework. A competitive advantage may be maximized by enhancing added value within individual companies (value streams), which together lower cost or provide for a better differentiation.

Cambodia[18]: MEKONG II contributes to output 1.1.2 "Enabling environment established for more competitive Cambodian agricultural market at all levels through improving (1) Food safety trade compliance with international and regional norms, (2) sanitary and phytosanitary (SPS) measures (3) controls of trans-boundary animal diseases". Furthermore, the project links into output 1.3.2 "Productive and export capacities of enterprises enhanced to comply with international standards for labor and TBT".

Lao PDR: Mekong II links into output 1.5.2 of the UNDAF-Framework (2007 – 2011) "enhanced capacity building for service delivery and strengthened negotiation skills and policy advice on trade and poverty policies, including global and regional agreements such as the ASEAN Free Trade Agreement (AFTA), accession to the World Trade Organization and investment promotion".

Viet Nam: In Viet Nam, the project comes under outputs 1.16 and 1.17 of the One UN framework. Project objectives are aligned with the programmatic component IV (international trade policy) under outcome 1 of the One Plan[19]: "Support to improve food safety compliance, enforcement and export potential of food products; promote increased export opportunities for agricultural and industrial products through an upgraded conformity assessment, infrastructure and an improved investment environment". In a broader sense, project objectives are relevant to improve the business environment, which also links into programmatic component III (employment and enterprise development).

Relevance for target groups

Assistance was mainly tailored to the needs of direct beneficiary institutions, which lead to a high degree of relevance for all of them. Support to STAMEQ Viet Nam was specifically aligned to the "Development Strategy of STAMEQ in the Field of Standardization - Metrology - Quality until 2015" and "Orientation, Objectives, Missions of the STAMEQ 5-Year Plan 2006 – 2010". Both documents express a clear aim to enhance competitiveness of products and goods made in Viet Nam in terms of quality and productivity, as well as facilitating trade activities and the Viet Nam's international economic integration.

Other than in Viet Nam with its more advanced and diversified export industry, relevance of the project for exporting *companies* in Cambodia and Laos is at this time still rather limited. While in theory, exporters would have to comply with international standards related to health and food safety requirements, in practice, most agricultural commodities are currently "unofficially" exported to neighboring countries, including Viet Nam and China. This is for example the case for rice, rubber and fish. Compliance with standards will become more important, as Lao and Cambodia begin diversifying their exports towards more developed markets and start building up a food processing industry. For companies serving the *domestic* market, the relevance of a functioning quality infrastructure is at this time even more limited.

Strengthening consumer protection and market surveillance, which were part of MEKONG II's objectives, are relevant to consumers. In addition, they contribute on a longer term to improving the "quality culture" or "quality awareness" and a rule based trading environment.

---

[18] UNDAF 2011-2015 Cambodia 26 January 2010
[19] See „One Plan" for 2006 – 2010

Conclusions

MEKONG II was highly relevant in terms of international priorities, national policies and the expressed demands of direct beneficiaries (government institutions) covered. Objectives are well aligned to UNIDO's core mandates and competencies. The mix of strengthening different "conform" aspects was well selected. Relevance for enterprises would have been increased through including "compete" aspects along the supply chain and for some sectors "connect" aspects. Strengthening value chains of a number of key products along specific trade corridors might be an appropriate way of support.

B. Ownership

Ownership of direct beneficiaries and counterparts was to a large extent positive, as reflected by:

- Significant national inputs into infrastructure and facilities where the equipment procured by the project was installed. This included an upgrade and renovation of buildings in Cambodia (ILCC), the FDQCC (Laos) and more recently a new building for the Metrology Center (under construction) and the refurbishment of the Metrology Institute in Laos. Considering the budget constraints of the governments, this is remarkable.
- Personal motivation of counterparts and beneficiaries interviewed; even the top management of counterparts (level of Director General) was in detail informed about project activities and provided meaningful suggestions on how to move forward;
- Active contribution of counterparts to coordinate UNIDO inputs with those of other donors;
- Clear evidence for a relationship of trust between UNIDO experts and staff of local counterparts;
- Significant staff inputs in implementing project activities in general, such as the preparation of documentation for international accreditation. Counterparts selected the right persons for trainings. Most of them continued to work for beneficiary institutions;
- Initiative to propose changes to project content where the originally planned outputs were not relevant anymore (e.g. BOA in Viet Nam).

Certain weaknesses in ownership are evidenced by the following points:

- Some institutions (e.g. metrology in Cambodia) were not very actively contributing to the achievements of objectives.
- The fact that technical meetings for standard formulation in Cambodia seem to depend on the willingness of donors to pay "sitting allowances" is a sign of weak stakeholder ownership for this particular activity.

Ownership could be further strengthened by more actively involving counterparts into planning, management and monitoring of the project. While beneficiary institutions were consulted during project preparation, they were not always kept informed and involved into the process of implementation. There is for instance evidence that none of them received updated work plans or implementation reports.

Conclusions

Ownership of counterparts and beneficiaries was mixed. Positively, ownership is evidenced by significant staff input to implementing activities, contributions to building infrastructure, a relationship of trust with UNIDO experts and the initiative to request changes to the project plan, where the originally planned outputs were not relevant anymore. Some institutions were rather passive. The fact that technical meetings for standard formulation in Cambodia seem to depend on the willingness of donors to pay for meeting expenses is rather disappointing.

C. Effectiveness

As explained in the introduction, a systematic assessment of achievements against objectives is hampered by the lack of objectively verifiable performance indicators. The following is a qualitative assessment of achievements in relation to the three country specific objectives.

Objective 1 (Cambodia):

Strengthening the capabilities of key SMTQ institutions to enable them to provide Cambodian industries and commercial interests with national standards, product and system certification services, a standards library, TBT enquiry services and testing facilities

- **Standard formulation:** Results in terms of number of standards published (10 standards) with support of the project compared with the target set (40 standards) are rather modest. More important than the number of standards would however be to know whether the standards are relevant for the industry and whether they are practically applied. This was confirmed by the ISC but no evidence was provided. An independent validation with a larger number of enterprises was not possible. One enterprise interviewed confirmed the use of the standard for fish sauce, but at least one standard that would have been important as a basis for granting the quality mark for soy sauce has not yet been revised. Therefore, it is currently not possible to grant quality certificates for soy sauce. Standard formulation advanced slowly, due to the lack of funds to organize technical committee meetings. The ISC would have wished more hands-on expertise through experts who are highly specialized in the technical field and the provision of more updated standards, not only from Sri Lanka.
- **ISO9001, ISO14001 and HACCP certifications:** Very little was achieved. The key reason is an inappropriate sequencing of support and an inconsistent approach. Company awareness of the importance of QMS was raised under MEKONG I long before the auditor training started. But, at the time, many companies lost interest because STC was not in a position to respond to their demand. When lead auditors from STC for ISO 9000 had eventually been trained, these were unable to assist companies as they belong to the certifying agency (conflict of interest). As a result, the certificates of most auditors expired before they were able to undertake a single assignment. A request by the ISC for co-funding pilot projects in companies was rejected. This rejection created frustrations because it came at a time, when ISC had already obtained commitment from possible pilot

companies[20]. Theoretically, an exchange of auditors between countries (e.g. Cambodians auditing companies in Lao PDR and vice versa), could be a possibility to address the problem of lack of practice of auditors but this approach is unlikely to be practical because of language problems. Another challenge is that the certification body in Cambodia is not yet accredited, and therefore not allowed to provide QMS certifications. For accreditation, evidence of certification practice is needed. Temporarily providing "non-accredited" QMS certifications (as done for Oral Drinking Water Company) is not satisfactory, because it undermines the credibility and value of QMS certifications. The best way to address this problem might be to initially rely on foreign certification bodies (preferably from the region, e.g. in the case of Lao/Cambodia this could be QUACERT, Viet Nam). At a later stage, the local certification provider could team up with accredited foreign institutions and provide joint-certification. It should also be noted that a total of 17 companies in Cambodia are ISO9001 certified and 2 companies have an ISO14001 certificate (all by foreign certification bodies). This indicates that companies in need of a credible QMS certification find ways to obtain it, regardless of whether available in Cambodia. Those companies that do not need QMS certification would probably also not be willing to cover the costs of obtaining and maintaining it.

- **Product certification scheme (quality mark):** With assistance from the project, the ISC Product Certification Scheme was accredited for drinking water by Norwegian Accreditation in November 2008. This accreditation was extended until September 2011 and expanded to fish sauce and soy sauce[21]. A total of 51 companies were certified (48 drinking water companies, two vinegar producers, one fish sauce company). Some 43 other companies applied and are in the process of certification. The product certification scheme is operational, but only for three rather than for 40 product categories as planned. Product certification for soy sauce is currently not possible, because the product standard to be used as a basis needs updating. While the cost of product certification is rather low (USD 200 for three years plus inspection/testing cost), the practical value of product certification for companies is also limited, because most consumers lack awareness. Reputation gains and higher revenues can only be achieved for a limited number of customers such as upscale hotels and embassies. Although certification is compulsory for drinking water companies, only 48 out of an estimated 385 drinking water companies have been certified. Furthermore, the product certification scheme was not "aggressively" marketed, allegedly due to a lack of budget[22].
- **Upgrading of the ILCC laboratory:** On 3 December 2010, the ILCC microbiology laboratory was accredited by NATA, Australia[23]. The UNIDO project supported the accreditation and surveillance cost and made other significant contributions to this outcome. ILCC accreditation was also supported by the ADB project, which contracted the UNIDO expert (Dr. Upali). Testing services are currently mainly used for the purpose of government inspection (over 90% of tests, including mandatory inspection of companies using the quality mark). 70% of the samples tested are bottled water, 30% other food products (bread, soft drinks, syrup, none of those products for exports). In addition, the

[20] See mission report CTA, February 2009, Annex 5, workplan for system accreditation
[21] It is not clear, why three food products were selected in Cambodia. Interestingly, in Lao PDR the project opted for three construction materials (cement, steel and PVC pipelines) but did not include food products or water (see below).
[22] Rather rudimentary information is available on the ISC's website www.isc.gov.kh and some newspaper articles were published.
[23] Accreditation cost (including preparation) was funded by MEKONG II, not the ADB.

ILCC laboratory tests the quality of tap water. The main impact of the project is therefore on general welfare (e.g. clean tap water, domestic food safety) and on companies that use quality marks for bottled water[24]. The latter is a precondition for local production of bottled water, which is an important market that would otherwise have to be served by imports. So far, the project's effect on the competitiveness of Cambodian exports is limited, because practically none of the testing is export-related. Whether the recent accreditation will change the customer/product test mix is too early to say. The ILCC still lacks accredited testing capacities for some parameters that are important for export (e.g. aflatoxin)[25].

- **Upgrading the laboratory at CAMCONTROL:** Support by UNIDO was limited to purchasing some small additional equipment and to facilitating the intervention of FAO experts who repaired some of the existing equipment. The number of tests conducted at the CAMCONTROL laboratories seems to be very limited and trained staff finds it more lucrative to generate informal income as inspectors at boarder posts instead of working at the laboratory. The contribution of project support to the overall project objectives was therefore minimal.
- **Support to TBT enquiry point, standards library and documentation center:** The project supplied computers, furniture and documentation on around 600 standards. The facilities for the TBT enquiry point are in place and working. ISC reported that 72 notifications from WTO had been received and forwarded to the relevant Ministries and Institutions. Furthermore, ISC also stated that three notifications[26] and questionnaires on import licensing procedures had been sent to the WTO Secretariat. Furthermore, ISC reported that three documents were provided to the ISO/IEC Information Center.[27] While the list of the Cambodian Standards Catalogue was updated (simple electronic database), a connection to international databases has not been established as planned. No statistics on the use of the standard library and the database are available. An assessment of whether the existence of the standard library serves the needs of enterprises in practice is not possible. The causality of UNIDO's support (office hardware) to the capacity of the TBT enquiry point to handle notifications is rather limited.
- **Upgrading of the rubber testing laboratory at CRRI:** The project provided useful support to the CRRI specifications laboratory. Partially as an outcome of UNIDO's support, this laboratory was accredited by the Bureau of Accreditation (BOA) of Viet Nam in October 2008 (ISO/IEC 17025) and the accreditation was extended in 2009/2010. As a result of the accreditation, the CRRI laboratory obtained the status of a "Full Participant" of the International Rubber Association and was recognized as a regional test laboratory. The project did not procure the planned equipment, due to budget constraints and because this equipment was considered non-essential. This decision is problematic

---

[24] No figures are available on how many out of 48 water companies that have received the quality certificate test their products at ILCC. The standard provides them with a choice of three laboratories to obtain the tests: Pasteur, CAMCONTROL and ILCC.

[25] The Chemical Laboratory of ILCC is expected to become accredited under the ADB project later in 2011. Triggered by the recent food crisis in Cambodia related to occurrence of 3MCPD in soya sauce, the ILCC received new sophisticated equipment under Government funding. However, it is unlikely that the laboratory will be able to make effective use of this equipment because it lacks not only qualified staff but also the necessary stand-by electricity generator.

[26] CA standard CS 0051:2005 Chili Sauce, Ministerial Regulation No. 1045 and Ministerial Regulation No 963

[27] The Statement on Implementation and Administration of the Agreement according to Article 15.2, notification of acceptance of the WTO/TBT Code of Good Practice and notification of existence of work program.

because the laboratory relies on a more than 20 years old rubber mill for which spare parts are no more available. Should this mill break down, the laboratory would no more be functional. It is true that, over the last years, the number of sample tests at the CRRI laboratory has significantly decreased because Cambodia's main clients for rubber (Viet Nam and China) don't seem to be interested in systematic tests. However, this laboratory is absolutely vital for Cambodia's ongoing strategy to substantially increase and diversify its rubber production and to conquer more high quality export markets.

- **Support to industrial and legal metrology:** Although most of the support has been provided as planned, except for the procurement of electrical measurement equipment, companies complain that calibration services for pressure and electricity are still not available. The facilities for calibration of electrical equipment were not set up, allegedly due to lack of staff. Some companies use calibration services of equipment suppliers. One company visited relies for some of its equipment on calibration services from QUATEST 3 in Ho Chi Minh City, but bringing the equipment in and out Viet Nam is a challenge. Another company replaces its "master thermometers" regularly by new ones rather than by recalibrating them. Overall, the practical use of the calibration laboratory by industry is quite limited.[28] As for testing, there is no evidence that the calibration capacities created and strengthened by the project have led to significant effects on exports.

Objective 2 (Lao PDR):

Strengthening the capabilities of key SMTQ institutions to enable them to provide Lao PDR industries and commercial interests with national standards, product and system certification services, standards library, TBT enquiry services and testing facilities

- **Standard formulation:** Two new standards have been published (cement, coffee) and seven other standards are under preparation. The standard for steel bars is still under revision although it is considered as very important. While some progress was made, the objective of publishing 10 new standards has not been achieved. Standards relating to the product certification scheme are all available.
- **Product certification scheme (quality mark):** The (voluntary) project certification scheme is operational and 13 companies have been certified for cement, steel and PVC pipelines. As in Cambodia, the scheme is not yet widely used but, unlike Cambodia, it is not yet accredited. Despite relatively low certification costs of USD 300 to 600, companies do not seem to perceive a benefit to apply for the voluntary schemes, because consumer awareness on the importance of quality of construction steel is low. The scheme is only effective if certification is commercially relevant (higher prices, more sales), which in turn supposes that consumers are aware and ready to pay more for products with quality marks. The enforcement of quality standards has a potential large impact, as Laos is commencing construction of large infrastructure projects, including hydro-power stations. Around 20 companies are in the process of obtaining the quality mark, in order to be eligible to supply material to those projects. All five major cement producers are certified. DSQ is still in the process of preparing for international accreditation. Unlike reported by the project, DSQ would not have the budget to cover the cost.

---

[28] Total number of calibrations in 2010: Weights: 18, Balance: 7, Gas stations 150, LPG stations: 5, Weight bridges: 6, Tank 50L: 1, Tank 200L: 2, Tank 1000L: 2, Tank 2000L: 1, Pre-packages: 142

- **ISO9001, ISO14001 and HACCP certifications:** Similar to Cambodia, companies with a real need for process certifications (e.g. to be considered as supplier for large projects) are able to access certifications and to cover the cost. But, such demand for certifications is still very limited. In Lao PDR, 10 companies are certified under ISO9001, five under ISO14001 and one under HACCP. But, also similar to Cambodia, even this limited market is captured by foreign certification providers. Auditors trained under the project are unable to apply their knowledge in practice and accreditation of the national certification body is unlikely to happen in the foreseeable future, due to limited demand. As a result, the project failed to deliver the expected outcome of an accredited national certification capacity but this failure does not seem to have a significant negative impact on industry.
- **TBT inquiry point/standards database:** Support was limited to providing some office equipment and sending staff to basic training to Viet Nam. A website, which would be an effective tool to disseminate information, is not yet available. The reported support to establishing a standard database was limited to providing an unlicensed copy of and old version of FileMaker Pro database software[29]. Data subsequently entered by DSQ is limited to 73 national standards. Further support is needed.
- **Industrial metrology:** In early 2011, Lao PDR legally established an Institute of Metrology (NMI). This new institute integrates all metrology facilities both for calibration and verification and has been granted a relatively high degree of administrative and financial autonomy. NMI has 33 employees (up from nine in 2008), of which 20 are temporary staff. The Government still funds permanent staff but, in turn, revenues from verification are still transferred to the Treasury. The NMI has the right to keep all other income, but must in turn cover the remaining expenses. UNIDO's support has helped with building industrial metrology capacities but, without an internationally recognized accreditation, the NMI will not be able to fully meet industry demand[30]. Nevertheless, a general conclusion that international accreditation would be a "sine qua non" for meeting industry requirements is not possible. Obtaining international accreditation would require donor support.
- **Legal Metrology:** 90% of the services provided by NMI relate to legal metrology. Major tasks performed in this area are the verification of truck scales, tankers and household meters for tap water and electricity. Significant numbers of water and electricity meters have been verified but the NMI management has not been able to provide the evaluators with figures on the results of these verifications. This confirms the impression that the institute still suffers from significant management weaknesses. "Outreach" to provinces is another key challenge of legal metrology in Lao PDR. Staff of the provincial metrology departments has so far only received only basic-training. Rural outreach has also been pursued by another project financed by New Zealand that procured eight "mobile metrology kits" on small motorbike trailers but no evaluation of rural metrology outreach is available. UNIDO established coordination with this project and the CTA also provided input to the new Metrology Law, which is now complemented by support of the LUNA-Project in drafting the implementing regulations.

---

[29] As reported by DSQ (the disk presented to the evaluators was obviously copied, which is an infringement of intellectual property rights). Providing unlicensed software copies to a government office that is also responsible for enforcing intellectual property rights is not appropriate. This could lead to a reputational risk for UNIDO.

[30] While NMI reportedly lost an important key client (Lao Beer) because of the lack of international accreditation, it should be noted that for at least two ISO9000 certifications, the foreign certification bodies seem to have recognized unaccredited calibration by NMC as sufficient.

- **Upgrading of the food and micro-biology testing laboratories at the FDQCC:** UNIDO's support significantly contributed to enhancing the capacities of the FDQCC laboratory in microbiology testing. FDQCC seems at this stage close to receiving international accreditation. The lack of capacity to test chemical parameters seems to be a challenge for exporters of some agricultural products (one company reported a rejection, because aflatoxin was discovered in France). It was not yet possible to address this important gap within the project.
- **Upgrading of micro-biology testing laboratory at the Plant Protection Center:** This output was cancelled, according to UNIDO, due to limited interest and absorption capacities of the beneficiary. It was not possible to validate this decision ex-post.
- **Development of HACCP certification services by FDD:** The training and support provided by the project improved FDD's understanding of the requirements to achieve accreditation as a HACCP certification body. With UNIDO support a Quality Manual has been drafted and some other progress has been made but the objective of making HACCP certification available in Lao PDR has not yet been achieved.

Objective 3 (Viet Nam):

Enhancement of the testing capacities and product certification capability of key SMTQ institutions in Viet Nam

Support of MEKONG II to Viet Nam was marginal. For the planned upgrading of the textile laboratory, UNIDO sourced funding from its SECO funded project in Viet Nam, which was evaluated in parallel. Support for CE marking, EUREPGAP, GVP and GAP remained at the stage of awareness raising and some initial training. After identification of equipment, the planned upgrading of the chemical metrology laboratory under VMC was subsequently not completed, apparently due to a lack of funds. The small equipment (electrical metrology, force) for QUATEST 2 filled some gaps and is used in practice. The national proficiency testing scheme has been launched and some laboratories under STAMEQ confirmed to use it (e.g. QUATEST 2), but support of MEKONG II was not really essential for this. Training of assessors for medical laboratories against ISO/IEC 15189, which was conducted instead of support to the BOA of becoming an accreditation body for inspection bodies, was considered as useful and filled a gap that was not covered by other donors. While support provided by STAMEQ was considered as useful, the difference made by the project was minimal and remained superficial. This is partially a result of an overambitious project planning (see above), which aimed at achieving too much considering the resources available.

General findings on all three countries

- **The evaluation confirmed the importance of a clear and detailed NQI development plan**, in order to avoid duplication of laboratory roles and capacities. Furthermore, laboratories must be embedded in a well functioning NQS (inspection, surveillance, standard setting, product certification, process certification, and accreditation).
- **How effective is laboratory accreditation as a means for improving export performance?** Interviews with the private sector indicate that the reputation gains expected from accreditation do often not materialize, at least not immediately. Exporters are often skeptical whether testing services from public sector laboratories will meet with the necessary client recognition and hence prefer services from private sector

providers of SMTQ services, even if these are more expensive. Price is often not the primary decision criterion, in particular because the official tariffs for services do often not reflect reality, as payments to the laboratory need "topping up" by "informal" payments to laboratory staff. Last but not least, even if testing services are credible and recognized by buyers, they are not a ticket for becoming a successful exporter.

- **Quality of expert support:** Generally, technical support provided was – with some exceptions - of good quality. UNIDO selected the right experts. Trainers were enthusiastic, experienced and able to convey their knowledge. Trainings provided the right mix between theory and practice. Some beneficiaries felt that a more "cooperative" rather than "unilateral" approach of the CTA to deliver expertise would have further increased the benefits of his support. In Laos, using Thai experts would facilitate communication with non English speaking staff.
- **Quantity of expert support:** Beneficiaries perceived that the frequency of CTA missions was too low (in average only every 6 months) and the actual quality time he was able to spend as insufficient. In critical phases of the project, for instance at the time the laboratories were audited for accreditation, no experts were available on site. In the eyes of beneficiaries UNIDO's low input approach compares unfavorably with other projects, who also apply an intermitted CTA approach, but with a much stronger presence of the CTA on the ground.
- **Little local expertise was used:** In an LDC context, SMTQ experts are rare but they exist. Twinning them with international experts would increase their capacities and contribute to developing a local expert basis. This would further increase the impact of the project and also contribute to its technical sustainability.
- **The approach to developing national certification capacities for QMS was not clear** and seems to have changed during implementation. This might be one of the reasons why MEKONG II failed to achieve its objectives in this area.
- **UNIDO selected the right equipment, but procurement was poorly implemented.** Beneficiaries were actively involved into (a) identifying what was needed to fill gaps and (b) the drafting of technical descriptions for procurement. Effectiveness of technical upgrading was reduced by failure to communicate a clear procurement plan (what equipment will be purchased by when), a lack of combination of equipment delivery and training and a slow response to address problems of equipment that arrived incomplete and/or defective. Specific problems are outline in more details in section IV.C above.
- **Trainings abroad were considered as useful, although rather short**. Longer attachment trainings for would allow participants to familiarize themselves with a broader range of aspects of operating a laboratory.

Conclusions

Results of MEKONG II are rather mixed. This is partially a result of overambitious objectives not commensurate with the budget and time available. With a few exceptions, capacities of direct beneficiaries (laboratories) in Laos and Cambodia have remarkably improved during the project. A significant part of those achievements can be attributed to the support provided by MEKONG II. Due to the very limited resources allocated to Viet Nam, the "value added" of the project for Viet Nam was marginal. 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.

D. Efficiency

This paragraph assesses efficiency under the aspects of management, coordination, monitoring, procurement and timeliness. A more detailed analysis of efficiency along the lines of the DAC definition "how *economically* inputs (through activities) are converted into outputs" is hampered by the UNIDO practice not to apply the principles of results based budgeting and results based financial reporting for its technical assistance.

Project management

The project design as three interlinked stand-alone projects contributed to efficiency because it allowed for a better orientation towards the specific needs of the three countries while creating favorable conditions for economies of scale and scope. Project management proved to be flexible. Outputs that did not or no more meet the demand of counterparts were cancelled or adapted (e.g. the Plant Protection Centre in Lao PDR; replacement of training assessors for medical laboratories instead of support to the BOA to become an accreditation body for inspection bodies in Viet Nam).

As outlined in section IV.D above, the management structure of MEKONG II was rather complex. The set-up is composed of a project manager, a CTA, three UNIDO country heads, three NPCs, and one regional director but the evaluators did not find an explicit description of tasks and responsibilities for each of these 11 persons. Feed back collected during the evaluation confirmed that counterparts were also confused by this management set up. The very limited involvement of the country heads and the regional directors in project implementation was perceived as unfortunate. Interviews with country heads, field staff and counterparts provided evidence that this deficit hampered smooth implementation and affected the UNIDO image.

Management and coordination shortcomings are evidenced by the fact that some expert missions were planned on a very short notice or during public holidays. In Laos, counterparts reported a case where a local consultant was paid, apparently without consultation with the local counterparts, although he had not completed his contractual work. On the other hand, a Vietnamese supplier of electrical testing equipment was apparently not paid, although he had delivered the equipment. As a result, he refused to complete the remaining part of his contract and the equipment was not operational in time. It is unlikely that this would have happened if the counterparts and the UNIDO representative had been more closely involved into project management. There is also evidence that some of the procurement problems discussed below resulted from unclear communication lines.

It should be underlined that UNIDO management is fully aware of these shortcomings in "implementation from the field". Under its ongoing change management initiative UNIDO dedicates significant financial resources and management attention to overcoming these weaknesses and capturing efficiency gains. It is hoped that a more efficient implementation from the field will also contribute to reducing the substantial travel budgets for coordination missions of UNIDO HQ staff, in addition to travels of the CTA and international technical experts (in the present case the UNIDO travel budget amounts to US$ 70.000, which is higher than the budget for local experts).

The profile of the CTA was the right match for LDCs at the initial stage of NQI development. He played a key role and significantly contributed to "moving things forward" beyond a mere technical advisory function. However, using a CTA based in Sri Lanka and only on a part-time basis was not an ideal solution and has been mentioned as one of the causes for implementation delays. While sharing a part-time CTA for three countries allowed for cost savings, the time allocation of the CTA proved to be too limited to allow for sustained and comprehensive technical support in Lao PDR and Cambodia. On the other hand, a full-time CTA for each country would not have been an option for a project of this size. A full time CTA based in the region covering all three countries would have been a better option (not realistic for this project alone but a possible option in combination with the TBT/SPS project in Viet Nam, see below).

Coordination with other UNIDO projects

Several projects in the target countries present the characteristics for potential synergies: the National Cleaner Production Centres (NCPC) in Lao PDR and in Cambodia (launched in 2009, with a budget of 1.2 million USD each); the UNIDO support for the Cambodia Trade Development Support Program – UNIDO contribution to MDTF (launched in 2008; 0.26 million USD) and the project for TBT/SPS compliance development in Viet Nam (2.1 million USD, launched in 2008).

The potential for synergy has been particularly high with the TBT/SPS project in Viet Nam that was evaluated in parallel and by the same team, as mentioned above. Using the same CTA for MEKONG II and the TBT/SPS project in Viet Nam would have been the obvious solution. With an amount of 3.7 million USD, the total financial volume of both projects would have justified the permanent presence of a CTA in one of the target countries. The UNIDO environmental branch has applied this solution for the two NCPCs in Lao PDR and Cambodia (cumulated budget of 2.4 million USD). Unfortunately, the potential to join forces with the two UNIDO Cleaner Production Centers in Cambodia and Laos[31] in strengthening competitiveness of beneficiary companies in a more comprehensive way was not exploited.

Coordination with non-UNIDO projects

The potential for synergy with non-UNIDO projects has been particularly high in Cambodia where the ADB is heavily involved in funding SPS projects. However, information exchange and coordination between UNIDO and ADB in Cambodia has been suboptimal, at times tense, and not well perceived by the donor community. The evaluators were not in a position to identify the root causes for these coordination problems but assigning the UNIDO country head in Cambodia with a more proactive coordination role would have been a better solution than trying to solve these coordination problems from UNIDO HQ, in particular because the country head has been well acquainted with the donor community in Cambodia since many years. The CTA was not given a proactive coordination role either in this matter but managed to raise synergies at the working level. Apparently, UNIDO perceived the fact that ADB contracted an independent expert who had also been contracted under MEKONG II as a loyalty problem but this move turned out to be instrumental for advancing the ISC towards accreditation.

---

[31] Promotion of Cleaner Production In the Lao People's Democratic Republic; Promotion of Cleaner Industrial Production in the Kingdom of Cambodia, both funded by the SECO (2004 – 2008).

There are other signs for certain coordination weaknesses in Cambodia. The UNIDO strategy of contributing financially to the MDTF in Cambodia through the above mentioned project backfired instead of generating the expected UNIDO involvement. While the World Bank, ADB and FAO have been working for some time on developing a national SPS Action Plan, they did not call on UNIDO for this plan. As a result, some resource capturing" and duplication of efforts in supporting Cambodia's testing infrastructure occurred. Stringent donor coordination, providing support only on the basis of thorough needs analysis instead of laboratory wish lists are the only way to avoid such efficiency losses.

A positive case of achieving complementarities has been the coordination with Viet Nam's bilateral support to strengthen metrology in Laos where Viet Nam mainly funded the building and UNIDO parts of the equipment and training, with some limited support being provided by PTB. When it comes to SMTQ supply-side projects the CTA played a pro-active coordination role, for instance with the metrology project in Cambodia funded by New Zealand that was already mentioned above. The final report of this project explicitly mentions the good cooperation with the UNIDO project. Unfortunately, cooperation with projects covering the demand-side of SMTQ services was much less developed. In particular the quite substantive and long-standing GIZ programs related to SME upgrading, quality and trade capacity building in Cambodia and Lao PDR should be mentioned here. In certain cases UNIDO and GIZ were dealing with the same clients, for example SMEs in the Cambodian food sector, but no coordination efforts could be observed. These coordination shortcomings are of course two-sided and not only a UNIDO problem. The same applies to the missed opportunity to specifically complement efforts under Mekong Project Development Facility 3 (MPDF), in strengthening agricultural value chains), e.g. through strengthening testing capacities needed in the key sectors covered, in particular rice. It should however be mentioned that the relationship with the IFC was good and included regular exchange of information.[32]

Monitoring and reporting

The discussion of progress reports with the NPCs and beneficiaries showed that some of the earlier progress reports were not fully accurate and/or not up-to-date[33]. Some activities were reported as completed, yet a verification in the field showed that they were "cancelled". In the case of Viet Nam, certain outputs of phase I of the UNIDO project funded by SECO were also reported as results of the NORAD-project[34]. This indicates that the project management might not always have had a clear, accurate and up-to-date picture on implementation progress and thus not the necessary basis for well-informed decisions. However, the quality of the progress reports is clearly improving over time.

There is no evidence that UNIDO shared its reports for feed-back with counterparts. The Vietnamese Government (Ministry of Planning and Investment) explicitly raised the issue of unsatisfactory planning and reporting during the Steering Committee Meeting on 9 April

---

[32] In particular, the IFC promotes SME development in supply chains. The programme aims at enhancing SME competitiveness and image in order to create livelihoods for poorer people with little education or training. It focuses predominantly on agribusiness and forestry products. In Lao PDR, the sector focus is on bamboo while in Cambodia, the IFC mainly works in the field of cashew nuts, rubber, fruit and vegetables.
[33] In some cases, activities are reported in the mission report of the CTA, but not in the progress report (e.g. training provided on standard formulation and for provincial metrology staff in June 2010).
[34] Partially corrected in the reports for 2009 and 2010 – but it is still not entirely clear what and to which degree was funded by whom.

2008 (see minutes of meeting included in mission report of CTA, April 2008) but no corrective action was taken. No rigorous assessment of planned against achieved results, using the indicators defined in the project document, was done. For example, the Minutes of the Steering Committee Meeting in Laos of 25 May 2009 do not report on discussions of results or implementation plans. On the other hand, the discussions in the report of problems encountered and measures taken are useful.

Procurement

Several interviewees mentioned procurement related problems as a cause of efficiency losses. More specifically, the evaluators noted the following issues:

- **Unclear specifications of conditions in the project document.** The project document mentions that laboratory buildings come under the responsibility of the government but does not exactly specify the conditions, such as air conditioning, electricity generators or UPS, that need to be in place prior to the installation of equipment. Power supply in Lao PDR and Cambodia is not reliable and none of the target laboratories is equipped with a generator[35]. Unstable power supply not only disrupts the operations of the laboratories but might also damage the equipment, as evidenced in the LMC. Some suppliers would even not install equipment before they have evidence that uninterrupted, stable power supply is available. In some cases, the lack of clear provisions in the project document on who pays which pieces of infrastructural equipment lead to lengthy negotiations, causing delays.

- **Equipment ordered too late:** It is not clear why a large part of the equipment was ordered late. As a matter of fact, most pieces of key equipment arrived only at the end of the project (in 2008 or during the extension period in 2009), making proper training and follow-up impossible. For some laboratories these delays jeopardized accreditation, which was one of the main objectives of the project.

- **Procurement plans and decisions not communicated to partners:** Beneficiary laboratories were consulted on equipment needs and the definition of specifications but they were often not informed in due course about the exact equipment ordered and the expected delivery date. They were therefore unable to include equipment and operating costs into their yearly procurement plans and budgets. Beneficiaries in Viet Nam and Cambodia expressed discontent that they were not informed in a timely fashion about UNIDO's unilateral decisions to cancel the purchasing of certain pieces of equipment.

- **Equipment delivery and training not synchronized:** Complex equipment typically requires installation and user training by manufacturers. For less sophisticated equipment, manufacturers do not provide on-site training, making hands-on training and installation advice by UNIDO specialists necessary. However, such support was not always provided. For instance, a pressure gauge was delivered to the NMC, but this equipment is lying idle because the project did not provide the necessary training.

- **Slow or no UNIDO response in case of damaged delivery.** Reportedly, certain pieces of equipment arrived damaged (possibly a case for the transportation insurance), did not

[35] The ADB has the intention to procure a 65 KVA generator in May 2011 for the ILCC in Cambodia

meet the specifications (cases of warranty) or were incomplete (parts necessary for operation not ordered)[36]. In one case, equipment was "signed-off" by UNDP but turned out to be damaged. In another case, a laboratory reported that equipment arrived damaged and supplies (media) did not respond to specifications. The consequence of this delay was that an expert was unable to complete his task, which in turn delayed accreditation[37]. In case of problems, laboratories find their hands tied, because they don't have a contractual relationship with the provider of the equipment. Repairing in-house or through a local service will forfeit warranty.

Conclusions

The efficiency record of the project is mixed. While it was flexibly managed and channeled the right type of technical assistance to the counterpart institutions, it suffered from considerable delays. The project management set-up was complex, which was part of the reason for challenges encountered during implementation, including implementation delays. Operational and financial planning and reporting showed certain weaknesses and was not properly communicated to partners. The project was well coordinated with some, but not all, of the SMTQ supply-side projects of other donors (Viet Nam; New Zealand; PTB). In some cases, weak coordination with other donors caused duplications and, in one case, frictions with another donor. Using two different part time CTAs for MEKONG II and the TBT/SPS project in Viet Nam was not ideal. The project procured a wide range of equipment but, towards the end of the project, the sequencing of the procurement and the follow-up on some procurement related issues showed weaknesses. Many of the project's efficiency losses are consequences of UNIDO's centralized management approach that concentrates decision making power at Headquarters, even on minor issues.

E. Impact

Most key outputs and outcomes were completed only recently. It is therefore rather early to asses the likelihood of impact but the following preliminary conclusions can be drawn:

- **Quality marks:** In Cambodia, the project opted for bottled water, soy sauce and fish sauce as products for which a quality mark should be developed and was successful in accrediting the mark for these products. Two enterprises reported that the quality mark for bottled water had made them eligible as suppliers for up-market hotels and embassies (one company mentioned that, in addition, ISO9001 and HACCP certification were required). Whether the international accreditation of the mark was a decision criterion for their clients is not clear. There is a clear impact on protecting consumers of bottled water (mainly expatriates and affluent consumers) but it should be borne in mind that only 15% of all bottled water producers are certified.

  In Lao PDR, the project opted for construction material (steel bars, cement and PVC pipes) as products for which a quality mark should be developed, but it was not successful in accrediting the mark for these products. Despite lack of accreditation, the quality marks for steel bars and cement are applied and help local companies in obtaining tenders for

[36] The CTA did report problems to the Project Manager (see mission report CTA, February 2009, Appendix 7 for defective equipment in CAMCONTROL).
[37] FDCC in Laos, see progress report October 2008 – March 2009

infrastructure projects (e.g. hydropower plants, large buildings) funded by international donors. However, the quality mark for construction material fails to have a wider impact beyond international projects, because its application is not reinforced and hence de-facto voluntary. A Lao standard for steel bars exists but is not widely applied. It is a well-known fact that locally produced steel bars are often substandard and hence a major local construction risk. The average consumer in Laos who builds a house is not aware of the existence and importance of standards and quality marks nor does he have the means to buy high quality construction material. This adds up to the observation that neither Cambodia nor Laos managed leveraging the theoretical potential of quality marks to protect consumers from substandard products. This would require a holistic approach with awareness building, focusing on products with the most urgent quality needs and implementing the quality marks in a credible manner. The project did not apply such a holistic approach but only intended to upgrade the schemes to comply with the requirements of ISO/IEC Guide 65 and obtain accreditation.

- **Testing laboratories:** The ILCC in Cambodia has been the most successful testing laboratory supported by the project. This laboratory increased its volume of testing services significantly with 90% of the tests relating to the quality mark or to government inspection. A USAID project promoting private suppliers of tap water for villages and small towns has been relying on ILCC for water quality control. Over the last 18 months, this project managed to provide access to safe drinking water for 24,000 households. There are other indications of impact on public health and consumer protection, but it is not possible to quantify the extent of this impact. Unintended impacts occurred, such as use of the laboratory as a training facility for university students (problems relating to maintaining accreditation standards during the trainings have been resolved). Another unintended positive impact results from the advisory services of the ILCC to companies, e.g. advice how to prevent 3-MCPD contamination of fish sauce. However, it should be underlined that no export products have been tested at the ILCC so far. Overall, the evaluation did not detect any significant cases of export-related tests being enabled or supported by the project in Cambodia or Lao PDR.

- **Support to the FDQCC:** Due to the lack of detailed figures, it is not possible to draw any conclusions on the impact of support.

- **Metrology in Cambodia and Laos:** Considering the small number of calibrations, the impact of industrial calibration has been very limited so far and the local availability of metrology laboratories has not been essential for industry. As far as legal metrology is concerned, the delivery of certain verification services may have produced some limited social and poverty reduction impact (e.g. the verification of petrol stations and electricity meters), but none of the metrology bodies was able to produce figures on the results of the verifications.

Conclusions

Quite clearly, the domestic impact of the project has been more significant than its impact on exports. Domestic impact is increasing but hampered by limited consumer awareness and shortcomings of the inspection and market surveillance system.

The limited impact on exports reflects primarily the low development stage and the specific structure of Cambodian and Lao exports. Agricultural exports of both countries are either very limited or largely informal, as for example most of Cambodia's paddy exports to Thailand. Garment is the biggest contributor to Cambodia's exports but this industry has developed thanks to a stringent application of social labels and without the existence of a public textile laboratory. In the case of Lao PDR the main formal exports are minerals, which is mostly a big business export that is not dependant on the existence of a public quality infrastructure.

However, building SMTQ capacity is a long-term effort, which is justified in export sectors with significant prospects and the export development strategies of both countries will require the availability of SMTQ capacities in the near future. For example, Cambodia's efforts to shift from informal low value exports of paddy to formal exports of high quality milled rice will depend on the existence of state-of-the art accredited rice testing facilities. The same applies to the diversification of Cambodian rubber exports. In Laos, coffee and vegetables are high-potential export goods that will require food testing and certification capacities.

F. Sustainability

The following section assesses the likelihood of continued benefits beyond the end of the project.

Viet Nam

The results achieved in Viet Nam are considered sustainable. The equipment provided is not very sophisticated. It can be repaired internally and replacement prices are modest. STAMEQ (including the BOA) has a successful track-record of maintaining and expanding its internal technical capacities, by both employing internal and external resources. Also, STAMEQ's internal expertise is sufficiently broad-based to cope with possible problems of staff turnover.

Institutional and financial sustainability of service provision in Lao PDR and Cambodia

The project worked under the assumption that beneficiary institutions would become financially sustainable by providing industrial metrology and testing services on a commercial basis. This assumption depends of course on sufficient institutional and financial autonomy. At the present stage, most partner institutions are still government administrative entities, with revenues transferred to the treasury and expenses and investments borne from the state budget.

However, efforts towards a higher degree of autonomy and sustainability are underway. ILCC is preparing itself to become a public enterprise with economic characteristics by 2013. Only recently the NMC in Laos has been granted financial independence, although adequate management capacities still need to be developed. Ultimately, financial sustainability will require the ability to compete successfully with private service providers, including those in neighboring countries. Increasing testing fees to a cost price level and improving service quality will be necessary to attract more clients. Strengthening the management capacities that are necessary to operate on a commercial basis will be essential, while the assistance provided so far has focused on technical capacities (equipment and staff). The "business plans" and brochures developed by UNIDO experts for Cambodia and Lao PDR are a good start but there is still a long way to go to ensure institutional sustainability. Without further donor

support, none of the laboratories/metrology service providers would currently be able to source sufficient funding for major repairs, purchasing proper media for micro-biological testing or gas for chemical testing, and the maintenance of accreditation. As government budgets are unlikely to be significantly increased, financial autonomy and development of commercial services to achieve additional revenues are crucial. At this stage, neither the ISC in Cambodia nor the DSQ in Laos would be able to obtain sufficient government funding for maintaining an international accreditation for their quality marks. Funds for *operating* the schemes are available, but not for *marketing* and further expanding it. The ability of the ISC to formulate standards seems to depend on donor funding to cover meeting expenses for the technical committees.

Sustainability of staff expertise built in Lao PDR and Cambodia

Some institutions (e.g. the Metrology Center in Cambodia), reported a lack of staff. Staff shortage at the NMC in Laos seems to have been mitigated, because after obtaining organizational independence, it was possible to recruit staff under temporary employment contracts[38]. According to the assessment of beneficiary institutions, there is a limited risk of staff turnover. CAMCONTROL has the problem of internal staff turnover, i.e. laboratory staff prefers to work at boarder gates rather than in the laboratory in Phnom Penh. Official salaries according to government scales continue to be rather low, but they are sufficient to cover basic needs. There might be other incentives for employees to remain in their positions than the official salaries, but the evaluation team did not look into this in detail. Technical sustainability could be further increased through twinning international experts with national experts, where available. This would allow for creating a local expert base that would be able to provide outside support at more affordable prices. Successfully expanding certification services for QMS would require building up local expertise (outside the ISC and the DSQ) that would be able to support companies in preparing for certification.

Conclusions

For most laboratories staff sustainability does not seem to be, an issue. However, most laboratories are unlikely to maintain expensive international accreditation without further donor support. With the exception of Viet Nam, there are also concerns that laboratories will not be able to cover maintenance and replacement costs of testing equipment. In some cases, it might even be challenging for them to cover the cost of material/media needed for operating the equipment. The same applies for the more sophisticated calibration/verification services. Quality marks are likely to continue to be granted, but an expansion of their application and a renewal of accreditation would require additional donor funding. Standard formulation will continuously require highly specialized expertise and apparently also financial support to cover the cost for organizing technical committee meetings.

[38] The NMC used “volunteers” and “trainees” before, with no official salaries.

V

The next phase of the project

As any other final project evaluation of a TC project, this evaluation has been primarily a backward looking exercise. However, in line with the evaluation purpose mentioned above to *"develop lessons and recommendations for enhancing the design and implementation of similar future projects in Mekong countries and elsewhere"* the evaluators did also briefly assess the project document for the next phase of the project and the process by which this document was developed.

A comprehensive process was applied for the formulation of the next project phase, which was conducted by between July and October 2010 by a team composed of an international and two national consultants. This thorough formulation approach was agreed with the donor who provided additional funding. The formulation team carried out a needs' assessment of the private sector followed up by a workshop and submitted their interim report in August and their final report in October 2010. The workshop was to engage the private sector/industry associations in the needs process, to further consolidate the findings of the private sector needs assessment and to serve as a platform for exchange of views for mapping out collaboration for the future. This needs oriented and participative approach was in line with the recommendations of the Thematic Evaluation of UNIDO's SMTQ activities[39]. In their final report the formulation team recommended to consider a number of activities for the next phase of the MEKONG project.

For **Cambodia** the following activities were mentioned:

- Provide assistance for formulating national standards for agricultural commodities with focus on rice;
- Provide assistance for strengthening & capacity building of fishery administration (including Competent Authority), formalizing legislation & establishing/ strengthening facilities for testing fishery products & other associated testing (accredited to ISO 17025) AND/OR establishing food safety systems (HACCP) for exporters (in consultation with other donor agencies);
- Establish testing laboratory (ISO 17025) for agricultural commodities with focus on rice;
- Establish facility (regional) for organic certification subsequent to a thorough needs assessment (in consultation with other donor agencies active in area);
- Complete and strengthen standardization and conformity assessment activities at ISC;

[39] See in particular recommendations 1.1 – 1.5 on project preparation.

- Provide inputs to DOM to enhance activities in areas of industrial and legal metrology and achieve ISO 17025 accreditation;
- Upgrade non-SPS related testing areas (to ISO 17025) at ILCC - SPS related needs are already receiving support from the ADB project;
- Upgrade NSL of CRRI especially as rubber is earmarked as a crop with much potential for exports in the future.

For the **Laos** component the following activities were recommended:

- Strengthen testing laboratory (accredited to ISO 17025) for the handicrafts sector;
- Establish a testing laboratory (accredited to ISO 17025) for the coffee sector;
- Establish a facility for organic certification subsequent to a thorough needs assessment;
- Upgrade the chemical laboratory at FDQCC and support its accreditation according to ISO 17025);
- Upgrade the Environment Quality Monitoring Centre at the Water Resources and Environment Research Institute (WERI) and support the accreditation of its laboratory according to ISO 17025);
- Complete and strengthen standardization and conformity assessment activities at the DSQ;
- Provide inputs to the LMI to enhance activities in industrial metrology;
- Provide inputs to the Metrology Department to enhance activities in legal metrology (mobile lab).

Subsequently, UNIDO used the report of the formulation team to develop a project document for the next project phase, which was accepted by NORAD as a basis for funding the next three-year phase of the MEKONG project to the amount of Euro 1,432,981.

It has not been the mandate of this evaluation to assess the above recommendations and the draft project document. However, a number of observations were made and feed-back collected, which are offered below for consideration.

General comments

- **Refocusing of the project on Lao PDR and Cambodia is a commendable decision.** The situation in these two LDCs is comparable, whereas Viet Nam's National Quality System is already much more advanced and calls for different types of interventions.
- **The quality of the project document for MEKONG III has significantly improved compared with the one for phase II**. It takes into consideration most

of the recommendations on project preparation provided by the thematic evaluation. Standard planning tools, such as logical frameworks with clear performance indicators and baselines, GANTT charts, and result-based budgets are now applied. A detailed risk analysis is included. Still missing is a detailed description of the organizational structure with clear responsibilities for all parties involved.

Project content for Cambodia:

- **Standard formulation:** The project document suggests a focus on developing standards for key agricultural export products, in particular rice. Essential will be to align the national standards to be developed with those of key export markets. Furthermore, standards needed for the implementation of quality marks are a priority as well. Coordination with other donors (e.g. the ADB's support to the ISC, IFC's program aiming at strengthening agricultural value chains is crucial).

- **Metrology:** In Cambodia, further support to developing metrology capacities is only effective, once (a) the new facilities currently under construction are completed, (b) sufficient staff is available and (c) it becomes clear how the metrology equipment will be used. This should be conditional for further support. Otherwise, there is a high risk that technical input is lost. In both countries, limited resources available call for setting priorities in a limited number of areas with a potentially high impact on the industry and consumer protection and to address those in-depth.

- **Quality marks:** Identification of products should take possible impact on public health and safety into consideration (this was well done in phase II – bottled drinking water). In parallel, development of necessary standards should be prioritized (currently, there is no updated standard for fish sauce, thus certification of the respective quality mark is not possible). Quality marks only lead to the expected impact if they have an economic value for companies (i.e. if they result in higher sales and/or higher prices and increased revenues). Awareness of consumers is crucial, also for the implementation of compulsory quality marks in a context of limited enforcement capacities. Unlike in phase II, sufficient funds need to be allocated to promote the marks. Otherwise, their impact will remain limited.

- **Support to testing laboratories at ILCC:** the proposed strengthening of chemical testing capabilities (both for REACH/RoHS and food chemistry) is highly relevant to key export sectors and/or to domestic consumer protection. Coordination with efforts of other donors (in particular the ADB) is of high importance.

- **Support to the CRRI:** Including tackling of specific quality problems of rubber from smallholder production would be important. There are several forthcoming projects of other donors that are focussing on developing smallholder production and UNIDO could add value to those. This again needs close coordination.

- **Awareness rising activities with the Cambodian Chamber of Commerce and Industry (CCC):** NQI awareness creation is crucial in LDCs and therefore a very good objective! This could be developed more systematically in cooperation with relevant Private Sector Development projects (USAID; GIZ; etc) rather than only independently with the CCC. Awareness rising should target industry but also

(urban) consumers. Properly targeting the campaign and using the right media is crucial for achieving the expected impact. The strategy for the campaign should be carefully designed, which might require the support of a Public Relations specialist. UNIDO should develop a customizable modular communication package. Besides awareness rising to the public, integrating quality aspects in university curricula of technical faculties could have a significant impact on strengthening quality culture in companies.

- **Support to rice millers in implementing GHP/GMP:** Close coordination with the IFC's MPDF will be crucial. Rice export is a government priority and, only recently, CAMCONTROL has been equipped with a brand new sophisticated laboratory for rice.

Proposed project content for Lao PDR:

- **Standard formulation and certification scheme:** same comments as for Cambodia
- **Enhanced TBT/SPS enquiry point, library and information section of DSQ:** As assessed above, there is no evidence that support under phase II produced any significant results. Considering further the sustained support of other donors to the DSQ (e.g. LUNA, the World Bank), we recommend discontinuing support in this area.
- **Creating awareness on the impact of Organic Certification for enhanced trade:** It is not clear how the proposed support will be coordinated with the project "Enhancing sustainable tourism, clean production and export capacity in Lao People's Democratic Republic"[40], covering aspects of domestic and international trade of organic products. Outcome 3 of this inter-agency trade cluster aims at "enhanced backward linkages of selected Handicraft (especially silk) and organic agricultural products to the tourism industry". Its expected outcome 4 is "strengthened capacities of the GoL in the areas of trade policy and Non Tariff Measures, as well as improved export opportunities of selected high quality silk and organic agricultural products (developed under outcome 3)". The UNIDO contribution to both of those projects should be clearly determined and coordination formalized. Covering the same field through two different projects using technical input from UNIDO is rather questionable.
- **Legal metrology:** UNIDO rightly identified outreach to provinces as a key problem. Bottlenecks of such outreach need to be identified before focusing on delivery of equipment.
- **Industrial metrology:** As in Cambodia, prioritizing further support through focusing on areas of high relevance to the local industry is crucial, should economic impact be maximized. Also, the need for international accreditation (and if so, for which fields) should be carefully assessed prior to commencing support.
- **Establishment of a facility for testing of coffee in collaboration with the Lao Coffee Association[41]:** The proposed activities merely focus on setting up testing facilities.

---

[40] UNOPS ATLAS No: 0007-52-91, dated May 2011, funded by SECO, budget US$ 4.04 million, jointly implemented by UNOPS (Trust Fund Manager), UNIDO, ILO, ITC and UNCTAD. While UNCTAD and the ITC rather than UNIDO will have the lead in covering "organic trade", organic certification is a crucial element to improving export opportunities and strengthening domestic trade of organic products.

[41] The local coordinator of the "Trade Cluster" confirmed that coffee will not be one of the focus products.

Whether and why this is the right type of support to foster coffee exports would need to be assessed in more detail. Even if this is the case, the business model of operating the proposed laboratory has yet to be determined. Key concerns are financial sustainability and the risk that the laboratory mainly benefit a few exporting key coffee producers. It would of course not be appropriate to use ODA to support individual commercial coffee producers. Any support should be conditional to a clear agreement on how the facilities will be operated, including a business plan that provides evidence for financial and technical sustainability.

- **Enhanced and accredited chemical laboratory at Food & Drug Quality Control Centre (FDQCC):** no particular comment – accredited chemical testing capacities should be prioritized (those needed for key export products, e.g. handicraft, rice).
- **Enhanced and accredited materials testing laboratory at the SDMT (State Enterprise for Survey Design and Materials Testing):** Considering the huge ongoing infrastructure projects, testing services in the field of construction material are of high relevance to public safety. Furthermore, they are needed to enable local companies to bid for international tenders, in particular those of ODA-funded projects.

VI
Conclusions and recommendations

A. General conclusions

This evaluation corroborates many findings of the thematic evaluation of UNIDO SMTQ activities and provides evidence that UNIDO is putting the recommendations of the thematic evaluation into practice. More specifically this is demonstrated by the following points [references to the recommendations of the thematic evaluation in brackets]:

- Application of a needs oriented and participative project formulation approach with specific funding from the donor [recommendations 1.1 – 1.5]
- Group only countries with similar characteristics under a "regional programme" while allowing for sufficient flexibility to address country specificities [recommendation 5.3]
- Use state-of-the-art project planning tools such as logical frameworks and results based budgeting [recommendations 7.1 and 7.2].

Certain recommendations of the thematic evaluation are not yet fully implemented, such as:

- Project documents should apply a longer-term strategic approach with a "master plan" for NQI development including expected contributions by other donors. This overall planning would be updated as the project moves forward and subsequent phases are designed. Support in subsequent phases could be made conditional to achieving certain objectives. [recommendation 2.6 and recommendation 9 to donors].
- Projects in the same area with the same counterparts in the same country but funded by different donors should be planned and implemented as multi-donor projects pooling resources from different donors. [recommendation 2.2 and recommendation 10]
- Project documents should define clear governance and management structures, including specific competences, responsibilities and accountabilities of each of the parties involved into strategic and operational management.
- Project documents should include baselines and monitoring mechanisms for outcomes and impact and progress reports should focus on results rather than on activities and link expenditures to results.

B. Recommendations

To the TCB Branch for Lao PDR and Cambodia

(a) Complement project planning during inception: Revisit priorities and consider focusing. Establish results based budget and a detailed description of the organizational structure with clear responsibilities and accountabilities (decentralization of management to the field in line with current UNIDO change management). Responsibilities should match decision making power (competence to decide).

(b) Quality marks: Besides the criteria of availability of standards and testing facilities, the selection of products for voluntary certification (quality marks) should take into account aspects of potential social and/or economic impact. Sufficient funds need to be allocated to promote voluntary quality marks. Otherwise, their impact will remain limited.

(c) Leave the further strengthening to the TBT enquiry points in Laos and Cambodia to ongoing support by other donors (ADB, United States)

(d) Metrology: Further support to the NMC in Cambodia should be suspended until (1) the new facilities currently under construction are completed, (2) sufficient staff is available and (3) NMC clarifies how and for what purpose the equipment to be procured will be used. Bottlenecks of legal metrology outreach to provinces should be identified and addressed before further delivery of equipment. The need for international accreditation should be carefully assessed.

(e) Formalize coordination with other relevant projects, such as the UN CEB Inter-Agency Cluster on Trade and Productive Capacity in Lao PDR, the ADB project, the French/German rubber project in Cambodia, the French coffee project and the German SME projects in Lao PDR.

(f) Rubber: support to the CRRI in Cambodia should include addressing quality problems of rubber from smallholder production in addition to the proposed technical upgrading, in close coordination with French/German rubber project and other donors.

(g) Coffee: Support to the coffee sector in Laos should be closely coordinate with the French coffee project aiming to strengthen coffee quality and support the establishment of protected geographical indications for the coffee sector. Support to establishing a coffee laboratory should be conditional to a clear agreement on how the facilities will be operated, including a business plan that provides evidence for financial and technical sustainability.

(h) Rice: If support to rice testing is provided, avoid duplicating other donors.

LDC specific recommendations to the TCB Branch

(i) SMTQ projects in LDCs should not only focus on export but give specific consideration to developing SMTQ services for the national market (reinforcing standards; quality marks; testing services) and for improving national consumer safety (water and food products; building material; environment) [recommendations 2.4 and 2.5 of the thematic evaluation].

(j) SMTQ projects in LDCs should include a strong awareness building component addressing firms and consumers. Awareness raising activities should be professionally planned and implemented by a communication specialist. UNIDO should consider developing a customizable modular communication package for replication in other projects.

(k) Complement technical capacity building with institution building - including management capacities that laboratories and institutions need to operate as service providers on a commercial basis [see recommendations 4.1 – 4.5 of the thematic evaluation].

General recommendations to the TCB Branch

(l) Continue implementing the recommendations of the thematic evaluation of SMTQ activities into new projects and monitor the status of their implementation for all ongoing projects.

(m) For efficiency reasons, TCB projects in a given country should be managed by the same project manager.

(n) Transfer more systematically innovations that were successfully developed and applied in some of its projects to projects in other countries. Examples are the quality mark for hotels and restaurants developed in Sri Lanka and the focus on packaging in the Lebanese food industry. Both are potentially relevant in all three Mekong countries.

General recommendations to UNIDO

(o) Together with the TCB Branch, carefully analyze the procurement problems encountered in this project and establish an action plan on how to avoid similar problems in the future

(p) In countries with a UNIDO field office, the UNIDO representative or head of operations should be given responsibility for day-to-day project management [recommendation 6.3 of the thematic evaluation].

(q) Formalize links between projects of different UNIDO branches through agreements, set cooperation targets and ensure a formal coordination mechanism.

(r) Make result-based financial reporting mandatory for all projects. Data could be used to systematically benchmark projects and made available within UNIDO for the planning of new projects.

(s) Wherever practical, UNIDO should contribute to building human capacity by twinning international experts with local experts.

Annex A: Terms of reference

I. Background

With funding from the Norwegian Agency for Development Cooperation (NORAD), UNIDO has implemented a regional and multiple-phase project in the Mekong Delta region, which aims to strengthen the institutional and national capacities related to Standards, Metrology, Testing and Quality (SMTQ) of three countries, namely Cambodia, Lao People's Democratic Republic (PDR) and Viet Nam.

The first phase *'Market access and trade facilitation support for Mekong Delta Countries'*, known as Mekong Phase I, was initiated in 2003 and completed in December 2005, with a total budget of USD 908,520. Mekong Phase I focused on building initial SMTQ capacity, raising awareness of the importance of SMTQ for industrial development, and upgrading some technical infrastructure. This project was evaluated in 2005.

The project under evaluation is phase II of the operation, called *'Trade capacity building in the Mekong Delta countries'.* It concentrates on developing new and strengthening existing conformity infrastructure, developing national capabilities on different standards related to key export industries, ensuring regional and international credibility of the conformity infrastructure, and developing enquiry points for Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary (SPS) in each country. The project started in April 2006 with a total budget of USD 1.5 million. The initially planned completion date of December 2008 was extended twice by a total of two and a half years until June 2011.

NORAD has agreed, in principle, to financially support a third phase of this regional project. In preparation of this third phase, a project identification mission to Lao PDR and Cambodia was conducted between July and October 2010. This mission produced two valuable stocktaking and formulation reports, which provide valuable background information for this independent evaluation.

The Viet Nam component of the project under evaluation is related to project US/VIE/03/083 *'Market access support through the strengthening of capacities related to Standards, Metrology, Testing and Quality (SMTQ)'* funded by the Swiss State Secretariat for Economic Affairs (SECO), which is being implemented with the same counterpart organizations in Viet Nam.

Project objectives. The development objective of the project is to facilitate industrial development, consumer protection and export capabilities of Cambodia, Laos and Viet Nam through strengthening standards, metrology, testing and quality management institutional infrastructure and national capacities. Implementing the project in three Mekong countries, the project aimed at enhancing regional trade capacity. As the development of SMTQ in each country is different, the project has different objectives for each country.

In Cambodia, it is expected that the country would be in a position to fulfill the TBT/SPS commitments of the World Traded Organization (WTO) accession requirements and that more specifically:

- The standards institute would be operational serving the function of developing and disseminating standards, and certifying products
- The metrology laboratory would be upgraded to fulfill the calibration needs of industry and to have an operational legal metrology system
- The export sectors related to food, agriculture, fisheries and rubber would be served by the developed laboratory capacity
- The country would have an operational system certification mechanism for ISO 9000, ISO 14000, HACCP and SA 8000.

In Laos, it is expected that the institutional structure for standards development and system certification would be strengthened:

- A medium size laboratory, a strengthened legal metrology operation and sector testing laboratories concentrating on food sector would be put in place. These interventions would assist Laos in beginning WTO accession negotiations and satisfy the TBT/SPS conditions.

In Viet Nam, with its more developed SMTQ infrastructure and large export base, it is expected that the existing capacity in metrology, testing and certification would be strengthened.

Project budget and duration. The original project budget (including support costs) was USD1.5 million, funded by NORAD. In July 2010, the budget was increased by Euro 53,360. So far, 99% of the total budget has been committed and/or spent.

The project started in April 2006 for an expected duration of 2.5 years. But in reality it lasted more than 4.5 years and was completed in December 2010. In 2009, as a part of the SMTQ thematic evaluation, an independent assessment was conducted and made recommendations to further improve the project implementation. Subsequently NORAD has agreed in principle to fund phase III of the project.

Table1. NORAD funding provided through UNIDO to implement the project (excluding support cost)

Budget Items	Budget Line	Allotment	Expenditure	Implemented (%)
Personnel	19-99	556,802	500,348	90%
Contracts	29-99	298,034	354,262	119%
Training	39-99	77,069	76,280	99%
Equipment	49-99	515,262	512,418	99%
Miscellaneous cost	59-99	85,681	77,202	90%
Total		1,532,848	1,520,510	99%

Source: UNIDO Infobase as of 24 Feb 2011

II. Purpose of the Evaluation

The evaluation will be conducted in accordance with the UNIDO Evaluation Policy and the UNIDO Guidelines for the Technical Cooperation Programmes and Projects. The purpose of this evaluation is threefold:

- Assess the project in terms of relevance, effectiveness, efficiency, sustainability and impact;
- Examine and validate the findings and recommendations of the thematic evaluation of UNIDO's approach to SMTQ development, which was conducted in 2009 and 2010;
- Develop lessons and recommendations for enhancing the design and implementation of similar future projects in Mekong countries and elsewhere.

Due to the complementarity between this project and the project funded by SECO 'Post WTO accession support to Viet Nam' the two evaluations will be closely coordinated.

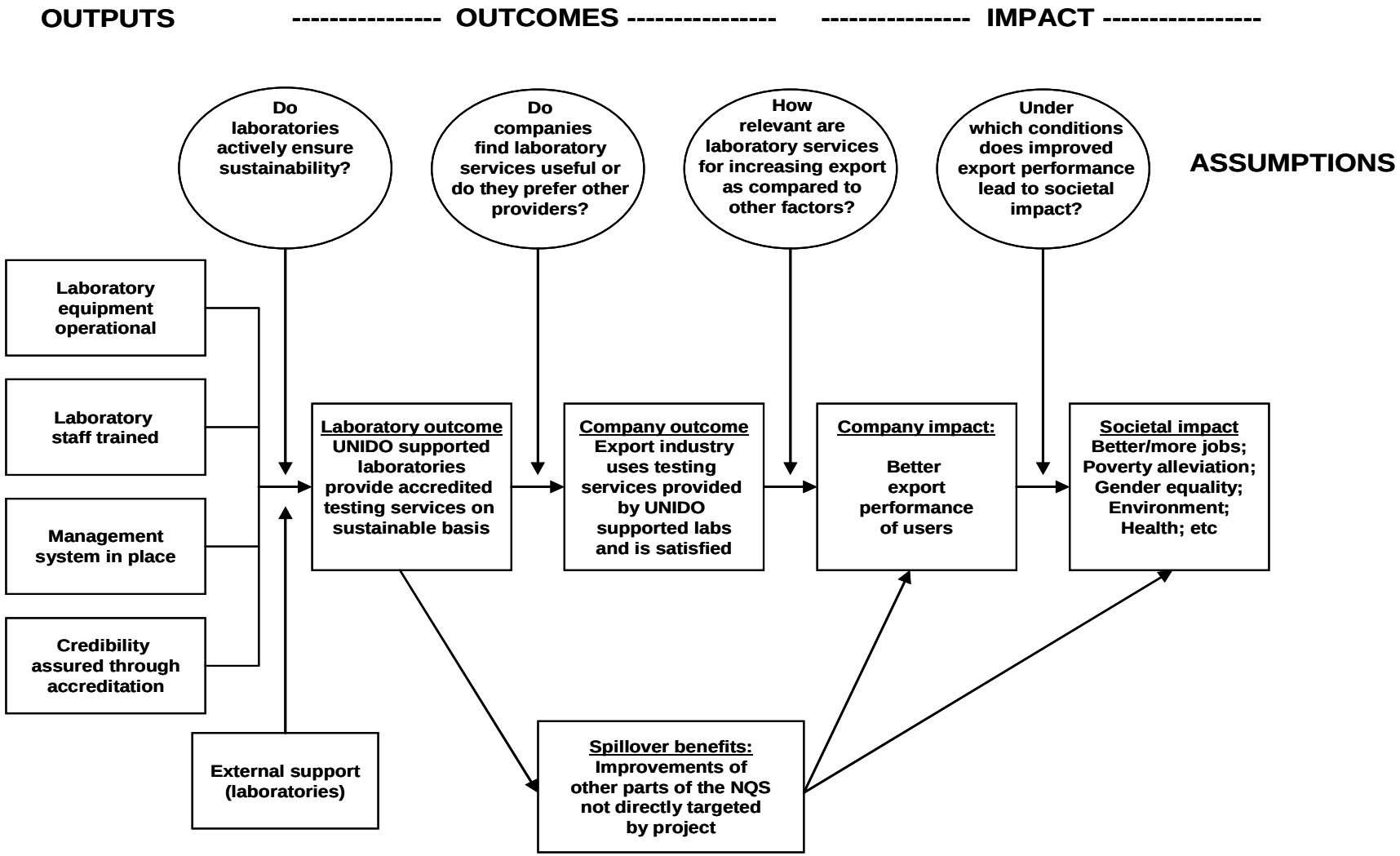
III. Scope and focus of the evaluation

The evaluation will focus on phase II of the operation from the starting date in April 2006 to the completion date in June 2011. As this operation, starting from phase I, has been ongoing for about 9 years, it is expected that it should be possible to observe impact not only on the SMTQ infrastructure but also on the companies using SMTQ services. Therefore the evaluation will make efforts to capture and assess the project impact.

As the project document does not contain a fully fledged logical framework, the evaluation team will reconstruct the theory of change and related assumptions. This reconstruction will be based on the generic intervention logic for SMTQ projects in Figure 1, which has been developed under the recent thematic evaluation of UNIDO's SMTQ projects.

The evaluation team will validate the theory of change through specific interviews with different stakeholders such as companies, SMTQ institutions or trained staff and consultants in the field of SMTQ.

Figure 1: Generic intervention logic of SMTQ projects



IV. Evaluation criteria and questions

The evaluation will examine the following aspects:

Design

- The extent to which:
  - ✓ a participatory project identification process was instrumental in selecting problem areas and national counterparts;
  - ✓ the project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;
  - ✓ the project was formulated based on the logical framework approach;
  - ✓ the project was formulated with the participation of national counterpart and/or target beneficiaries;
  - ✓ relevant country representatives (from government, industries and consumer associations) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies

Relevance

- The extent to which the project is relevant to the:
  - ✓ national development priorities and strategies of the Government and population of Cambodia, Laos and Viet Nam
  - ✓ UNIDO's thematic priorities
  - ✓ UN Development Assistance Framework (UNDAF) for the Mekong countries
- Is the project's design adequate to address the problem(s) at hand? Does the project remain relevant taking into account the changing environment? Is there a need to reformulate the project design and the log frame given changes in the country and operational context?

Effectiveness and impact

- To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved? Are the actual project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, the evaluators should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project. How do the stakeholders perceive the quality of the project outputs and outcomes? Were the targeted beneficiary groups actually reached?
- What outputs and outcomes has the project achieved so far (both qualitative and quantitative results)? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?

Impact

- Identify the potential longer-term impacts or at least indicate the steps taken to assess these (see also below "monitoring of long term changes"). Wherever possible, evaluators should indicate how findings on impacts will be reported in future.

Efficiency

The extent to which:

- UNIDO and Government/counterpart inputs have been provided as planned and were adequate to meet requirements.
- The quality of UNIDO inputs and services was as planned and timely
- The interventions were cost-effective. Was the project the least cost option?
- There was coordination with other UNIDO and other donors' projects and possible synergy effects
- Has the project produced results (outputs and outcomes) within the expected time frame? Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?

Sustainability

Sustainability is understood as the likelihood of continued benefits after the project ends. Therefore, assessment of sustainability of outcomes will give special attention to analysis of the risks that are likely to affect the persistence of project outcomes at the various levels of the intervention logic shown in Figure 1 (page 60). At the laboratory level, the sustainability criteria in Table 2 (next page) will be applied.

The following dimensions or aspects of risks to sustainability will be addressed:

- *Financial risks:* Are there any financial risks that may jeopardize sustainability of project outcomes? To what extent are the outcomes of the project dependent on continued financial support? What is the likelihood of financial resources not being available to sustain the project outcomes/benefits once the NORAD assistance ends (resources can be from multiple sources, such as the public and private sectors, income generating activities, and market trends that support the project's objectives)?

- *Socio-political risks:* Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the likelihood that the level of stakeholder ownership will be sufficient to sustain the project outcomes/ benefits? Do the various key stakeholders see their interest in the continued

flow of the project benefits? Is there sufficient public/ stakeholder awareness in support of the project's long term objectives?

- *Institutional framework and governance risks:* Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are the required systems for accountability and transparency, and the required technical know-how in place?

Table 2: Sustainability criteria at laboratory level

1. Equipment:
1.1. Laboratory infrastructure
1.2. Climate controlled metrology labs
1.3. Availability of chemicals and standards
1.4. Repair and maintenance service
1.5. Forward budget for purchase of new equipment
2. Staff:
2.1. Skilled staff
2.2. *Appropriate remuneration package
2.3. Promotional schemes to encourage performers
2.4. Performance based incentive scheme
2.5. Suitable succession plan
3. Management/governance:
3.1. Knowledge and experience suitable as per IEC 17025
3.2. Quality concept leveraged across entire organization
3.3. Laboratories operating as profit centres
3.4. Costing methods and pricing strategy
3.5. Dependence on income from mandatory requirements
3.6. Laboratories able to meet changing demands
3.7. Strategic orientation towards client needs
4. Accreditation:
4.1. Scope of accreditation related to country needs
4.2. Budget for annual renewal of accreditation
4.3. Budget for maintaining accreditation
4.4. Budget for staff training for scope expansion

Project coordination and management

The extent to which:

- The national management and overall coordination mechanisms have been efficient and effective. Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfill its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions…)?

- The UNIDO HQ and Filed Offices' management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits…)

- Assessment of implementation approach: What are the advantages and disadvantages of the project implementation approach (regional approach)? Does it comply with the principles of the Paris Declaration? How can it promote local ownership and capacity building? Any innovative approaches or best practices that can be identified? What are the potential risks?

- Monitoring and evaluation (M&E) assessment: Monitoring and self-evaluation were carried out effectively, based on indicators for outputs, outcomes and impacts. Is there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance review take place regularly?

  - ✓ *M&E design*: Does the project have a sound M&E plan to monitor and track progress towards achieving project results?
  - ✓ *M&E implementation*: The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress toward project objectives by collecting information on chosen indicators continually throughout the project implementation period; annual project reports were complete and accurate, with well-justified ratings; the information provided by the M&E system was used during the project to improve performance and to adapt to changing needs; and projects had an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure.
  - ✓ *Budgeting and funding for M&E activities*: In addition to incorporating information on funding for M&E while assessing M&E design, the evaluators will determine whether M&E was sufficiently budgeted for at the project planning stage and whether M&E was funded adequately and in a timely manner during implementation.

Processes that affected attainment of project results

Among other factors, when relevant, the evaluation will consider a number of issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the evaluators find them fit (it is not necessary to have a separate chapter on these aspects in the evaluation report).

- ***Preparation and readiness***. Were the project's objectives clear, practicable and feasible within its timeframe? Were the capacities of participating institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval? Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?
- ***Country ownership, commitment and motivation***. Was the project concept in line with the sectoral and development priorities and plans of the country? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives, from government and civil society, involved in the project? Did the recipient governments maintain their commitment to the project? Has the government approved policies or regulatory frameworks been in line with the project's objectives?
- ***Stakeholder involvement***. Did the project involve the relevant stakeholders through information-sharing, consultation and by seeking their participation in the project's design, implementation, and monitoring and evaluation? For example, did the project implement appropriate outreach and public awareness campaigns? Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, civil societry, community groups, private sector, local governments and academic institutions in the design, implementation and review of project activities? Were perspectives of those that would be affected by decisions, those that could affect the outcomes and those that could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved?
- ***Financial planning***. Did the project have the appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds. Was there due diligence in the management of funds and financial audits?
- ***UNIDO's supervision and backstopping***. Did UNIDO staff identify problems in a timely fashion and accurately estimate its seriousness?

Did UNIDO staff provide quality support and advice to the project, approved modifications in time and restructured the project when needed? Did UNIDO provide the right staffing levels, continuity, skill mix, and frequency of field visits for the project?

- ***Delays and Project Outcomes and Sustainability***. If there were delays in project implementation and completion, then what were the reasons? Did the delay affect the project's outcomes and/or sustainability, and if it did then in what ways and through what causal linkages?

Broader issues covered by the UNIDO SMTQ thematic evaluation

In 2009/10, the UNIDO Evaluation Group conducted a thematic evaluation of UNIDO activities in the area of SMTQ and made a series of recommendations on how to improve SMTC projects. The project evaluation team will use the recommendations made to ensure that its assessment and recommendations be compatible with that of the thematic evaluation (see the list of recommendations applicable to this project attached to the TOR).

V. Evaluation methodology

The evaluation will follow UNIDO evaluation guidelines and policies. It will be carried out as an independent terminal evaluation using a participatory approach whereby the UNIDO staff associated with the project is kept informed and regularly consulted throughout the evaluation. The project evaluation team will liaise with the UNIDO Evaluation Group on any logistic and/or methodological issues to properly conduct the exercise.

The evaluation team will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative assessment based on diverse materials: from desk studies, literature review, statistical analysis to individual interviews, focus group meetings, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons why certain results were achieved or not. The concrete mixed methodological approach will be described in the inception report.

The evaluation will encompass the following steps:

<u>Desk review and interviews at UNIDO HQ</u>

The evaluation team will review and analyze available documents related to the project: the original project document, monitoring reports (e.g. progress and financial reports to UNIDO and NORAD), and relevant correspondence. Relevant documents from the Governments of Cambodia, of Lao PDR and of Viet Nam and other development organizations will also be consulted. Interviews with the project manager will be conducted at UNIDO HQ in Vienna.

Field visits and interviews

The evaluation team will:

- Visit project sites in Cambodia, Laos and Viet Nam to carry out in-depth interviews with representatives of all stakeholder groups (government counterparts, supported institutions, enterprises, private sector representatives; etc).
- Interview project staff and partners (various national and provincial authorities dealing with the project), other stakeholders, and a sample of consultants and/or institutions that were hired by UNIDO to support the project. The evaluators shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organizations.

For each type of interviews, the evaluation team will develop their ideas for the coverage and interview guidelines will be used to capture the information required. For companies in Cambodia and Laos, the evaluators should use the survey questionnaire to collect information so that these data and information can be comparable with that of Vietnamese companies. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

Counterfactual information: In those cases where baseline information for relevant indicators is not available the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.

Reporting

The draft report will be delivered to UNIDO EVA (following the report outline in Annex 1) and circulated to UNIDO staff and national stakeholders associated with the project, including the UNIDO offices in Cambodia, Laos, Viet Nam and the regional office in Thailand, for factual validation and comments. Any comments or responses to the draft report will be sent to UNIDO EVA for collation and onward transmission to the evaluator who will be advised of any necessary revisions. On the basis of this feedback, the evaluator will prepare the final report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place at HQ after the field visit.

The length of the Final Report should be around 30-35 pages excluding Annexes, with a 3-page executive summary in English.

Quality Assessment of the Evaluation Report: All UNIDO evaluations are subject to quality assessments by UNIDO Evaluation Group. Quality control is exercised in different ways throughout the evaluation process (briefing of

consultants on EVA methodology and process, review of inception report and evaluation report by EVA). 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). The applied evaluation quality assessment criteria are used as a tool to provide structured feedback.

VI. Evaluation team and timeline

The evaluation team will be conducted by an International Evaluation Consultant with experience in TCB and SMTQ. The UNIDO Senior Evaluation Officer will participate in the initial phase of the evaluation and provide methodological guidance through an inception report. The profiles and duties of the consultants are specified in the job descriptions in Annex 3 attached to this TOR.

All members of the evaluation team must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the project under evaluation. This principle is underlined in the UNIDO Evaluation Policy: "*For independent evaluations, the members of an evaluation team must not have been directly responsible for the policy-setting, design or overall management of the subject of evaluation (nor expect to be so in the near future)*". The consultants will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Evaluation Group.

The project management and UNIDO offices in Cambodia, Laos and Viet Nam, and the project management in Vienna will provide support to the field mission.

The draft evaluation report will be submitted to EVA within one month of the completion of the field mission. After taking account EVA's comments, the draft report will be submitted to the Governments of the three countries for comment. The detailed timetable for conducting the evaluation will be outlined in the Inception Report.

Annex 1 to ToR: Outline of an in-depth project evaluation report

Executive summary

- Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations;
- Must present strengths and weaknesses of the project;
- Must be self-explanatory and should be 3-4 pages in length.

I. Evaluation objectives, methodology and process

- Information on the evaluation: why, when, by whom, etc.
- Scope and objectives of the evaluation, main questions to be addressed;
- Information sources and availability of information;
- Methodological remarks, limitations encountered and validity of the findings.

II. Country and project background

- Brief country context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project ;
- Sector-specific issues of concern to the project[42] and important developments during the project implementation period;
- Project summary:
  - Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing
  - Brief description including history and previous cooperation
  - Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation
  - Positioning of the UNIDO project (other initiatives of government, other donors, private sector, etc.)
  - Counterpart organization(s).

III. Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section III Evaluation Criteria and Questions). Assessment must be based on factual evidence

[42] Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g. relevant legislation, enforcement capacities, government initiatives, etc.)

collected and analysed from different sources. The evaluators' assessment can be broken into the following sections:

A. Design
B. Relevance
C. Effectiveness
D. Efficiency
E. Sustainability
F. Project coordination and management.

IV. Conclusions, recommendations and lessons learnt

This chapter can be divided into three sections:

A. Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

B. Recommendations

This section should be succinct and contain few key recommendations. They should:

- be based on evaluation findings;
- be realistic and feasible within a project context;
- indicate institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation, if possible;
- be commensurate with the available capacities of project team and partners; and
- take resource requirements into account.

Recommendations should be structured by addressees:

- UNIDO
- Government and/or Counterpart Organizations
- Donor

C. *Lessons Learnt*

- Lessons learned must be of wider applicability beyond the evaluated project, but must be based on findings and conclusions of the evaluation; and
- For each lessons the context from which they are derived should be briefly stated.

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 2 to ToR: Checklist on evaluation report quality

Report quality criteria	UNIDO Evaluation Group Assessment notes	Rating
(a) Did the report present an assessment of relevant outcomes and achievement of project me objectives?		
(b) Were the report consistent and the evidence complete and convincing?		
(c) Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible?		
(d) Did the evidence presented support the lessons and recommendations?		
(e) Did the report include the actual project costs (total and per component or project)?		
(f) Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
(g) Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?)'. Can they be implemented?		
(h) Was the report well written? (Clear language and correct grammar)		
(i) Were all evaluation aspects specified in the TOR adequately addressed?		
(j) Was the report delivered in a timely manner?		

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

Annex 3 to ToR: Job descriptions

Independent Evaluation of UNIDO projects
US/VIE/08/004 and TE/RAS/06/001

Job Description

Post title International evaluator

Post number

Duration 36 Work Days on project US/VIE/08/004
26 Work Days on project US/RAS/06/001
(between 5 April and 30 September 2011)

Date required 5 April 2011

Duty station Home based; travel in Vietnam; travel to Vientiane and Phnom Pen; travel to HQ

Duties The international evaluator carries out the final evaluations of the UNIDO 'Trade Capacity Building' project in Viet Nam (US/VIE/08/004) and a related project in Viet Nam, Laos and Cambodia (TE/RAS/06/001). The international evaluator will conduct the evaluation in cooperation with the UNIDO Senior Evaluation Officer, who will participate in the inception phase, prepare an inception report for each of the projects and provide methodological guidance. The combined evaluation of the two projects will yield important synergies. However, the international evaluator will produce two separate and self-standing evaluation reports.

Main duties	Tentative schedule	Venue	Duration (days)		Deliverables
			VIE	RAS	
Inception meeting in Vienna[43]	April	HQ	1	1	Tentative planning document
Initial desk studies of US/VIE/08/004 and its predecessor projects	April	Home base	3		
Initial desk studies of TE/RAS/06/001	April	Home base		2	
Initial interviews and initiating data collection with counterpart institutes	Mai	Home base	2		Interview reports

[43] Travel Bern – Vienna – Bern required

Main duties	Tentative schedule	Venue	Duration (days)		Deliverables
Interviews with counterpart institutes and stakeholders in LAO	Mai	Vien-tiane		5	Interview reports
Interviews with counterpart institutes and stakeholders in CAM	Mai	Pnomh Pen		5	Interview reports
Initial interviews with selected stakeholders in VIE and additional desk studies	Mai	Home base	2		Interview reports
Drafting the chapters of the VIE evaluation report on national context and relevance	Mai	Home base	3		Draft chapters of VIE evaluation report
Supervision of company survey in VIE to be conducted by national sub-contractor and validation of report	June	Home base	2		Validated report
In-depth interviews with counterpart institutes and stakeholders and presentation of preliminary findings in Hanoi	August	Hanoi; Ho Chi Minh; Da Nang	10		Interview reports
Drafting of evaluation reports	September	Home base	8	8	Draft report VIE Draft report RAS
Presentation in Vienna[44]	September	HQ	1	1	Slides
Finalization of reports	September	Home base	4	4	Final report VIE Final report RAS
TOTAL			**36**	**26**	

Qualifications and skills:
- ✓ Advanced degree in development studies or related areas
- ✓ Extensive knowledge and experience in evaluation of development projects
- ✓ Extensive knowledge and experience in SMTQ projects
- ✓ Experience and knowledge of UNIDO activities an asset
- ✓ Working experience in Viet Nam an asset.

Language: English and Vietnamese

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

[44] Travel Hanoi – Vienna – Hanoi required

Annex B: List of organizations and persons met

Date/Time	*Organizations and persons met*
Cambodia	
10 May 2011	
12:30	Arrival with VN841 from Hanoi - Vientiane
14:30 – 16:00	UNIDO: Mr. Sok Narin, Head of UNIDO Operations, Cambodia; UNIDO: Mr. Hou Leng, National Project Coordinator
16:00 – 17:00	**World Bank:** Julian Clarke, Trade Specialist
11 May 2011	
8:30	**IFC**: Mr. Charles Schneider, Resident Representative; Mr. Baz Rozemueller, Project Manager
9:00	**CHUP Rubber plantation Company:** Mr. Heng Doeun, Director of Laboratory
9:30	**Coca Cola Company**: Mr. Meng Sereivath, Director of Metrology Lab; Mr. Plong Thangrak, QA Technologists, Mr. Kean Vanny, Quality Controller, Mr. Monn Pong, Quality Control Team Leader
11:00 – 11:30	**TUV Rheinland:** Mr. Heng Dang, Project Manager (QMS)
11:30 – 12:30	**Ly Ly Food Industry Co., Ltd:** Ms. Keo Mom, Director (also Deputy Secretary General of Phnom Penh Small and Medium Industries Association)
14:00	**National Metrology Center:** HE Laim Kimleng, Director General
16:00	**ILCC**: Mr. in Sambo, Director
17:00	**ADB**: Peter Brimble, Senior Country Economist
12 May 2011	
09:00 – 10:30	**ISC**: Mr. Thara Nou, Deputy Director General; Mr. Yem Narith, Director, Department of Information; Mr. Vann Mao, Deputy Director, Department of Certification; Mr. Seng Chhang, Director of Certification Department.
10:30 – 12:00	**Camcontrol**: Mr. Loeung Ratha, Deputy Director; Mr. Dim Teng
12:00 – 13:00	**Top Ice Factory**: Mr. Khim Nary
11:30 – 12:00	**HengHeang Company (Fishsauce)**, Mr. HengHeang, Chairman
12:15 – 12:45	**Khmer Wisky Factory:** Mr. Heng Heang, Chairman; Factory Manager
13:30 – 14:30	**TUV Rheinland:** Ms. Eleonora Fischer, Chief Representative and General Manager
14:00 -	**Cambodia Brewery Ltd**: Mr. Daniel Khaw, Technical Manager; Mr. Meng Sereivath, Director of Metrology Lab
14:30 – 16:00	**CRRI**: HE Dr. Yin Song, Director General; Mr Hun Kimsan, Chief of National Rubber Specifications Laboratory
16:15 – 17:00	**ORAL Drinking Water Company**: Mr. Seng Chhang, Director of Product Certification department

Date/Time	*Organizations and persons met*
16:00 – 17:00	**Federation of Associations for Small and Medium Enterprises of Cambodia** **FASMEC:** Mr. Oknha Te Taing Por, President; Mr. LunYeng, Executive Director; David Van, Senior Advisor
13 May 2011	
09:00 – 10:30	Cambodia/ADB Sanitary & Phytosanitary Standards Management Systems Project: Mr.Upali Samarajeewa, Micro-biology and Chemical Laboratory Expert
12:00 – 14:00	Cambodia/ADB Sanitary & Phytosanitary Standards Management Systems Project: Mr. David B. Parsons, Team Leader
14:00 – 15:00	**DAI/USAID Cambodia MSME Project:** Mr. Boreth Sun, Team Leader, Value Chain Strengthening; Mr. Sophath Oeun, Senior Value Chain Project Advisor; Mr. Kimhor Proum, Senior Aquaculture Calue Chain Coordinator
14 May 2011	
16:30	Departure with VN840 to Vientiane
Lao PDR	
16 May 2011	
08:30 – 09:30	FDQCC: Mr. Thongvang Ratsavong, Deputy Director;
09:30 – 10:30	Department of Public Health, Ministry of Health: Ms. Vienxay Vansilalom
11.00 – 12.00	SME Promotion and Development Centre: Mr Soutchay Sisouvong, Deputy Director General; Mr Horst Bauernfeind, Technical Advisor
08:30 – 08:45	Lao National Chamber of Commerce and Industry: Mr. Oudet Souvannavong, Vice-President
12:00 – 13:00	Mr. Tony (Toshikazu Yamazaki): Senior Adviser for Marketing Research (SMEs), Japan International Development Cooperation Agency (JICA)
17:00 – 18:00	Phaeng Mai Gallery (handicraft, art): Ms. Kongtong Nanthavongdouangsy, Director
17 May 2011	
08:40 – 09:00	National Authority for Science and Technology (NAST), Department of Intellectual Property, Standardization & Metrology (DISM), Mr. Sitha Phouyavong, Director General
09:00 – 11:00	DISM: Mr. Sisomphet, Deputy Director General; Ms. Nisith Khammounheuang; Mr. Bounpone Bouapheng, Director of Metrology Division; Mr. Bouavone Sinouthady, Director of Standards and Quality Divison.
11:00 – 11:30	Meeting with NPC: Bounpone Bouapheng, Director of Metrology
13:30 – 15:30	Lao Metrology Institute: Mr. Soumana Choulamany, Director General
18 May 2011	
08:30 – 10:00	State Enterprise for Survey, Design and Material Testing. Mr. Viengvisa Sivisong, Director of Technical Department
10:30 – 11:30	Lao Farmer Products Factory: Mr. Thou Bountarath, Director
13:00 – 14:00	LUNA-Lao Project, Mr. Steve Parker, Project Manager and Resident Trade Advisor

Date/Time	*Organizations and persons met*
14:00 – 15:00	Sinouk Café Lao Ltd, Mr. Sinouk Sisombat, Chairman & CEO
15:30 – 17:00	Vientiane Steel Factory
19 May 2011	
08:30 – 10:00	Lao Cement Co: Mr. Vanthong Sitthikoune, first Deputy Managing Director
10:30 – 11:30	Lao National Chamber of Commerce and Industry: Mr. Khantavong Dalavong, Secretary General: Mr. Ramon Bruesseler, Advisor to the Board
11:30 – 12:00	Laboratory of the Handicraft Association (LHA – Chai Lao)
12:00 – 13:00	De-briefing with DIMS (DG Sisomphet)
13:00 – 14:00	Meeting with former Head of UNIDO Operations, Mr. Bounprasid Kheungkham
18:30	Departure with VN841 to Hanoi
Viet Nam	
4 May 2011	
9.00 – 10.00	Briefing UNIDO Country Office: Mr. Patrick Gilabert - UNIDO Representative; Ms. Hoang Mai Van Anh, National Programme Coordinator; Ms. Le Thi Thanh Thao, National Programme Officer
15:00 – 16:00	EUROCHAM: Ms. Mai Thi Thanh Huong, Project Manager
16:15 – 17:00	SECO/Swiss Coordination Office: Ms. Brigitte Bruhin, Deputy Country Director, Mr. Do QuangHuy, National Programme Officer
17:30 – 18:30	Meeting with FAO: Ms. Yuriko Shoji, FAO Representative in Viet Nam; Mr. Vu Ngoc Tien, Assistant FAO Representative (Programme)
19:00 – 20:00	Skype interview with CTA (SECO-project): Mr. Anthony Russel
5 May 2011	
09:00 – 10:00	STAMEQ/UNIDO: Ms. Le Huong Huong, National Project Coordinator; Ms. Nguyen Thanh Van, National Programme Officer
10:00 – 11:00	STAMEQ: Dr. Ngo Quy Viet, Director General
13:30 – 15:00	VMI/STAMEQ: Mr. Nguyen Manh Hung, Head of Planning & Cooperation Section; Mr. Duong Quoc Thao, Head of R&D Management Division, Quality Manager
15:00 – 16:00	QUATEST1/STAMEQ: Mr. Nguyen CanhToi, Director; direct managers of laboratories supported by the project
6 May 2011	
09:00 – 10:00	NAFIQUAD/MARD: Mr. Nguyen Nhu Tiep, Director General; Mr. Nguyen Van Thuan, Head-Division of Agriculture, Forestry and Salt Quality Assurance; Ms. Vu Thi HuyenVinh, Officer, Planning and General Affairs Division.
10:30 – 12:00	VINACHEMIA-MOIT: Mr. Luu Hoang Ngoc, Deputy Director; Mr. Pham Hoai Long, Official, Department of Convention and International Relations; Mr. Van HuyVuong, Official, Department of Precursors Management.
13:30 – 14:30	QUACERT/STAMEQ: Ms. Ly, Vice-Director
15:00 – 16:30	CIEM: Ms. Tue Anh, Vice-Director

Date/Time	*Organizations and persons met*
20 May 2011	
10:30 – 11:30	Viet Nam Electronic Industries Association: Mr. Tran Quang Hung, Secretary General
13:30 – 14:30	Viet Nam Textile & Apparel Association (VITAS): Mr. Le Van Dao, Vice Chairman; Ms. Dang Phuong Dzung, Vice Chairwoman, General Secretary
29 May 2011	
18:30	Arrival in Buon Ma Thuot with VN 1601 from Hanoi
30 May 2011	
09:30 – 11:00	Buon Ho Coffee Company (subsidiary of VINACAFE): Mr. Tran Xuan Binh, Director, Mr. Nguyen Ngoc Kieu, Deputy Director.
13:30 – 15:00	SIMEXCO Daklak Ltd.: Mr. Le Duc Thong, Chairman and General Director; Mr. Nguyen Tien Dung, Senior Project Officer; Mr. Le Duc Huy, General Management Assistant.
15:00 – 17:00	Community Development Center (CDC): Mr. Bach Thanh Tuan, Director (worked as coffee expert for UNIDO); Mrs. Nguyen Thanh Tam, Vice-Director, Mr. Pham Kim Cuong, Head of Training Department.
31 May 2011	
09:00 – 11:00	Nam Nguyet Coffee Company: Ms. Tran Thi Minh Nguyet, Deputy Director
16:00	Departure to Danang with VN 1910
1 June 2011	
08:30 – 11:30	QUATEST 2 (Danang): Mr. Doan Van Back, Vice-Director Testing: Ms. Nguyen Ngoc Tram, Head of Laboratory; Ms. Truong Thi Be, responsible for micro-biology testing and participant of training course in Thailand; Mr. Vo Khanh Ha, Quality Manager Food Testing; Mr. Tranh Nguyen Ngoc, responsible for chemical testing; Mr. Luong Ngoc Nhut, Technical Manager. Metrology: Mr. Phan Canh Quang, Electrical Metrology Laboratory; Mr. Bui Chien Thang, Physical-Mechanical Metrology Laboratory.
5 June 2011	
	Arrival in Haiphong with VN1670 from Danang
6 June 2011	
09:00 – 11:30	NAFIQUAD 1 (Haiphong): Ms. Bui Thi Nhanh, Vice-Director; Ms. Do Thi Thu Huong, Head of Laboratory; Ms. Nguyen thi Hong Hanh, Microbiology Analyst; Ms. Ha Ngoc Dung, Microbiology Analyst
15:00	Departure with Train Number LP8 to Hanoi
16 June 2011	
18:00 – 19:00	Mr. Alex Gruber
	Mr. Jonas Franceschina,

Date/Time	*Organizations and persons met*
17 June 2011	
09:00 – 12:00	QUATEST 3:
16:00	Departure with VN 1144 to Hanoi

Annex C: List of documents

Project documents

- Project Document, Trade Capacity Building in the Mekong Delta Countries of Cambodia, Lao PDR and Viet Nam, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II, TE/RAS/06/001

- Project Document, Market Access and Trade Facilitation Support for Mekong Delta Countries, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) in Mekong Delta countries (Viet Nam, Lao PDR, Cambodia), TF/RAS/02/003, 2002

- Trade capacity-building in the Mekong Delta countries of Cambodia and Lao People's Democratic Republic through strengthening institutional and national capacities related to standards, metrology, testing and quality (SMTQ) phase III (Draft Project Document, Mekong III), 11 May 2011

- Project Document: "Post WTO Accession Support to Viet Nam - TBT/SPS Compliance Capacity Development Related to Key Export Sectors" funded by SECO, US/VIE/08/004, amended in 2009 (see Inter-Office Memorandum 13 July 2009)

- UNIDO: Integrated Programme of Technical Cooperation with the Socialist Republic of Viet Nam, February 2006 (Viet Nam)

- United Nations: „One Plan" for 2006 – 2010 (Viet Nam)

- UNDAF Frameworks for Viet Nam, Lao PDR and Cambodia

- Project Documents: "Promotion of Cleaner Production in the Lao People's Democratic Republic"; "Promotion of Cleaner Industrial Production in the Kingdom of Cambodia", both funded by the SECO (2004 – 2008).

- Project Document: UNOPS ATLAS No: 0007-52-91, dated May 2011, funded by SECO, budget US$ 4.04 million, jointly implemented by UNOPS (Trust Fund Manager), UNIDO, ILO, ITC and UNCTAD

Evaluation reports:

- UNIDO, Final Evaluation Report, Market Access and Trade Facilitation Support for Mekong Delta Countries, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) in Mekong Delta countries (Viet Nam, Lao PDR, Cambodia), TF/RAS/02/003, Field mission: 6 to 20 June 2005, UNIDO 2005

- Independent Evaluation of “Market access support through the strengthening of capacities related to metrology, testing and conformity funded by SECO, UNIDO 2007

- Thematic Evaluation of UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), co-funded by the Swiss State Secretariat for Economic Affairs (SECO), Final Report, Volume 1, April 2010 (based on the work of BENNET, Ben; LOEWE, Peter; KELLER Daniel).

- Evaluation of Impact of UNIDO SMTQ projects in Sri Lanka (XP/SRL/99/049; TF/SRL/99/003; UB/SRL/00/001; US/SRL/01/108; TF/SRL/01/001 and US/SRL/04/059), UNIDO 2010

- Project Phase II TE/RAS/06/001 Mekong Region: Viet Nam, Cambodia, Laos, Update Evaluation Report conducted under Work Package 1 of the Thematic Evaluation Of UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), UNIDO, August 2009

Minutes of meetings and progress reports:

- Minutes of meetings between NORAD and UNIDO, April 2009 and October 2010 and presentations (2007, 2008, 2009 and 2010)

- Regular progress reports (last report dated 8 March 2011, status per 28 February 2011)

- Regular mission reports of the Project Manager covering Viet Nam, Lao PDR and Cambodia

- Regular mission reports of CTA covering Viet Nam, Lao PDR and Cambodia

- Minutes of Steering Committee (Viet Nam, Lao PDR and Cambodia)

- Implementation of Strategy for Identifying Private Sector Needs in the Testing Area and engaging the Private Sector in the Mekong Phase III Project in Cambodia and Lao PDR, TE/RAS/06/001/11-81, Final Report, 07 July to 15 October 2010, based on the work of Dr. Nirmala M. Pieris, Expert in Testing Service Capacity Development

Other background documents:

- Country data for Viet Nam, Lao PDR and Cambodia retrieved on 30 June 2011 from CIA World Fact Book www.cia.gov

- UNIDO in brief (2005)

- Meeting Standards, Winning Markets, Trade Standards Compliance, UNIDO 2010

Cambodia

Project reports Cambodia:

- Mr. Seng Chhang, Survey on Quality Management Systems, October 2008 and updated List of ISO 9001, ISO 14001, GMP, HACCP and ISO 22000 Certified Organizations in Cambodia (2010)

- Updated lists of equipment (2011) for ILCC and CAMCONTROL

- Requirements towards Establishing Certification Capacities for ISO 22000 and HACCP at the Department of Industrial Standards and Certification, Ministry of Industries and Mines, Phnom Penh, Cambodia, based on the work of Mr. Martin Dietz, Technical Adviser, December 2006

Reference documents Cambodia:

- List of standards (updated May 2010) – newer list was not available

- List of companies certified for existing quality marks

- MIME, ILCC Commercialization Plan 2010 - 2013, established with support of the ADB, 2011

- GRANT NUMBER 0136-CAM(SF), GRANT AGREEMENT, SPS Management Systems Project between KINGDOM OF CAMBODIA and ASIAN DEVELOPMENT BANK, 2008

- Progress Report April 2011, Grant 0136-CAM, Sanitary and Phytosanitary Standards Management Systems Project, Cambodia, prepared for the Asian Development Bank

- USAID, CAMBODIA MSME 2/BEE, PROJECT QUARTERLY REPORT NO. 6, JANUARY-MARCH, 2010

- Standards and Trade Development Facility (STDF), SPS Balance Sheet for Cambodia, Strengthening links between supply and demand of SPS-related technical assistance in a sub-group of ASEAN countries (Stage 2), Research work for the Standards and Trade Development Facility, by Kees van der Meer, Laura L. Ignacio, Draft April 2008 and various progress reports.

- Brochure of IFS Advisory Services (formerly called Mekong Project Development Facility, phase III)

Lao PDR

Project reports Lao PDR:

- Requirements towards Establishing Certification Capacities for ISO 22000 and HACCP at the Department of Food and Drugs, Ministry of Health, Vientiane, Laos, based on the work of Mr. Martin Dietz, Technical Adviser, December 2006

- Dr. Namrata Pandita Wakhaloo, Expert in HACCP, Mission report to Lao PDR, October 2010

- Mission reports of Dr. Upali Samarajeewa on HACCP, November 2008 and March 2009

- Lists of equipment provided under the project

Reference documents Lao PDR:

- World Bank: Sanitary and Phytosanitary Standards Management Action Plan LAO PEOPLE'S DEMOCRATIC REPUBLIC for Capacity Building, December 2006

- Lao Metrology Institute, Annual Report 2008 – 2009

- Brochure of State Enterprise for Survey Design and Material Testing

- NATIONAL IMPLEMENTATION UNIT, MINISTRY OF INDUSTRY AND COMMERCE, Capacity Assessment in TBT, Lao PDR, prepared by Colm Halloran MBA, TBT Expert; Tira Greene, Legal Expert; Dr Houy Pholsena, Legal Expert, April 28, 2010

- Groupe de Travail Café (GTC), Participative analysis of coffee supply chain in Lao PDR, 2007

- Various documents relating to strengthening supply chains in the area of coffee (GTZ, AFD)

- NZAID, Final Report on MEKONG METROLOGY CAPACITY BUILDING PROJECT, June 2009

Viet Nam

Project reports:

- Dr Alan G Rowley, Mission report, February 2011 (Viet Nam)

- Mr Philip Martin Briggs, report on trainings conducted in QUATEST 1 and 3, June 2010

- Mission report of Dr. Upali Samarajeewa (November 2006)

Background documents:

- Steering Committee Minutes of SECO phase II

- Progress Reports of SECO Phase II (June 2009 – May 2010, June 2010 – March 2011) and work plan (updated in May 2010).

- SECO's factsheets for Viet Nam, May 2011

- Brochures of STAMEQ, QUATEST 1, QUATEST 3, QUACERT, Viet Nam Metrology Institute

- EUROCHAM: User Handbook of the European Trade Information Center, supported by MUTRAP, 2010/2011

- CIEM: Research Report on the Competitiveness of Exporting Firms in Viet Nam: Evidence from the Garment, Seafood and Electronic Industries; supervised by Dr. Nguyen Dinh Cung and prepared by Nguyen Thi Tue Anh, Luu Minh Duc, Nguyen Minh Thao, Le Phan, Hanoi, May 2011

- UNIDO: Draft investor survey conducted in 2011 among 1'500 companies (not yet published).

- STAMEQ: Draft Development Strategy in the area of SMTQ 2011 – 2015, with a vision to 2020 (title translated by evaluators - available in Vietnamese only)

- Donor mapping in the field of SMTQ, conducted by UNIDO with funding of SECO, included in interim Progress Report of SECO phase II, March 2011.