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## Independent Evaluation Lao People's Democratic Republic

Promotion of Cleaner Production in Lao People's Democratic Republic



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

## UNIDO EVALUATION GROUP

## Independent Evaluation Lao People's Democratic Republic

Promotion of Cleaner Production in Lao People's Democratic Republic

Funded by the

Swiss State Secretariat for Economic Affairs (SECO)



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## Acknowledgements

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

## Abbreviations

APO	Asian Productivity Organization
СР	Cleaner Production
CP+	Cleaner Production Plus (as described in Project Document)
CTA	Chief Technical Adviser
GoL	The Government of the People's Democratic Republic of Lao
IP	Integrated Programme of Cooperation between Lao PDR and UNIDO
ITC	International Trade Center
JA	Junior Assistant
Lao PDR	People's Democratic Republic of Lao
NCBP	National Capacity Building Project (funded by DANIDA)
NEX	National Execution Mode
NPC	National Project Coordinator
MDG	Millennium Development Goals of the United Nations
MoIC	Ministry of Industry and Commerce of Lao PDR (formerly: MoIH)
MoIH	Ministry of Industry and Handicraft (former name of MoIC)
MoU	Memorandum of Understanding
PMU	Project Management Unit
QMS	Quality Management Systems
SECO	State Secretariat of Economic Affairs (Switzerland)
SER	Self-evaluation Report
SMEPDO	Small and Medium Enterprise Promotion and Development Office
STAMEQ	General Directorate of Standards, Metrology and Quality (Vietnam)
STMQ	Standards, Metrology and Quality
SID	Sustainable Industrial Development
TORs	Term of Reference (of this Evaluation)
UNDAF	United Nation Development Assistance Framework (for Lao PDR)
UNIDO	United Nations Industrial Development Organization
VNCPC	Vietnam National Cleaner Production Center
L	

## Glossary of terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development objectives of an intervention were or are expected to be achieved.
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results based management) principles.
Outcomes	The achieved or likely effects of an intervention's outputs.
Outputs	The products in terms of physical and human capacities that result from an intervention.
Relevance	The extent to which the objectives of an intervention are consistent with the requirements of the end-users, government and donor's policies.

Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.

### **Executive summary**

#### 1. Project Description

The project "Promotion of Cleaner Industrial Production in the Lao People's Democratic Republic" funded by the Swiss State Secretariat for Economic Affairs (SECO) was designed as one of three interlinked stand-alone projects in Lao PDR, Cambodia and Vietnam. The project explicitly aimed at synergies with the project "Support to trade promotion and export development in the sub-region of Cambodia, Lao PDR and Vietnam" funded by SECO and executed by the ITC, yet without specifying details of expected linkages. It was also (added ex post) part of phase II of the Integrated Programme of Cooperation between Lao PDR and UNIDO (IP), but there are no obvious links to and synergies with other projects within the IP. The project provided in addition a follow-up to a GoL-DANIDA project in Cleaner Production (CP) 2000 - 2003 (discontinued due to a strategic change of the Danish Government) implemented with the same institutional partner (Ministry of Industry and Handicraft, MoIH, now the Ministry of Industry and Trade, MoIT).

The overall development objective of the project was to "to alleviate poverty in Lao PDR and to promote the country's environmental sustainability by increasing industrial productivity and competitiveness and by reducing industry's impact on environment and worker's health and safety". Main expected outputs included:

- **Output 1 Establishing Organizational Structure of Project:** The basic organizational structure of the project is in place.
- **Output 2 Awareness Raising:** The awareness of key stakeholders in cleaner production has been raised (5 sets of activities)
- Output 3 Implementation of CP Demonstration Projects: At least 2 demonstration projects completed every year, for targeted industrial sectors and/or geographical areas.
- Output 4 Training Courses on CP and CP-related topics: At least two training courses offered every year on CP and CP related topics (at least two in total planned for government agencies involved in licensing new industrial projects, at least five in total run in the provinces with most industry.

Expected outcomes were not defined in the Project Document.

The project started in June 2004 and was expected to finish in June 2008. It was explicitly assumed that the current 4-year pilot phase would be followed by a next phase to strengthen and deepen the results achieved. At the time of the evaluation mission, activities were still under implementation. The main counterpart is the Ministry Industry and Commerce (MoIC), which was formerly the Ministry of Industry and Handicraft (MoIH). UNIDO has initiated first steps to explore the possibility of approaching the GoL with a proposal for a follow-up phase.

#### 2. Scope, methodology and limitations to this evaluation

This independent terminal evaluation of the project was carried out on request of UNIDO and the donor at the end of the first project cycle. According to the Terms of Reference (TORs), its main purpose was to enable the GoL, UNIDO and the donor:

- To assess the relevance and needs orientation of the project;
- To assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities;
- To assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact;
- To provide an analytical basis and recommendations for the focus and (re) design for the continuation of the programme under a Phase II;
- Draw lessons of wider application for the replication of the experience gained in this project in other projects/countries.

The evaluation applied an interactive and participatory approach, based on meetings and interviews with a wide range of stakeholders (counterpart, GoL representative, a sample of three beneficiary enterprises, local CP-experts and the CTA of the project). A one-week field mission was carried out to Vientiane (Lao PDR). Preliminary results and findings were presented to the Project Team in the country and to UNIDO staff at Headquarters. Furthermore existing documentation such as project documents, monitoring reports, etc. were reviewed and validated through country level perceptions. Conducting this terminal evaluation while the last activities were still ongoing and the Project Management Unit (PMU) still in place was a distinctive advantage. Memories of persons met were still fresh. Moreover, the mission was able to get a first-hand impression of the quality of trainings and consultancy work at enterprises. The mission received endorsement of the counterparts regarding all key findings, conclusions, recommendations and lessons learned.

Limitations to this evaluation included: Firstly, most documents (including the Project Document) were only received in the course of the field mission and no self-evaluation reports (SERs) were available. Although the PMU did an excellent job in preparing and assisting the mission during the field work, the allocated time for the field mission was rather short and would not be sufficient for an evaluation team who is not already familiar with the development context of Lao PDR. Expected outcomes were not defined and it was therefore not possible to assess whether the outputs lead to expected outcomes. Secondly, financial reporting, although in line with UN-standards, does not link budget lines to activities and outputs. As it is not known how much funding was employed to achieve each output, it was not possible to assess efficiency of implementation (value for money) in regards to individual activities. Furthermore, it is also not entirely clear to what degree input to some of the activities (mainly expertise of VNCPC and input of the CTA) were funded by the Cleaner Production Project in Vietnam.

#### 3. Main Findings and Conclusions

#### (a) High degree of relevance, in line with original expectations

This was the right type of intervention with the right partner at the right time, when Lao PDR started accelerating the process of international integration. Furthermore, the project matched well one of the core mandates of UNIDO and SECO and is in line with their strategic orientation. The intervention covers a niche where (at this time) only few other donors are active in Lao PDR and where both UNIDO and SECO have distinctive competitive advantages (in terms of methodology, experience) relative to other donors.

- **(b)** Identification and design of the project was generally well done, in particular in regards to:
- The participatory approach, involving a wide range of stakeholders, in assessing needs of direct (MoIC) and indirect beneficiaries (enterprises).
- The sector focus of the project (food and textile industries) reflected priorities of the GoL at the time the project was approved. The wood processing, agro processing and the service sector (hospitality industry), which have recently emerged as new key sectors in the government's economic development strategies and could significantly benefit from the application of CP, have not yet been included.
- The project document contains an excellent introduction of the local context.
- The outputs were translated into clearly measurable performance indicators (however, performance indicators did not include any qualitative criteria).
- The combination of awareness raising, advice on policy level, training and promoting the CP approach through demonstration projects in enterprises led to a comprehensive and well interlinked approach to promoting CP.
- The CP+ approach (holistic approach to productivity- and quality improvements with the aim to improve competitiveness of businesses) rather than only focusing on reducing negative environmental impact.
- Efforts to create linkages to the Trade Promotion Project funded by SECO and executed by ITC (although those were subsequently not formalized and did not materialize as expected) and the design as a follow-up on a similar DANIDA-funded project (e.g. the use of equipment sourced by this project allowed for cost savings);
- During the current phase, only marginal overlaps with other similar projects in Lao PDR were identified (but new initiatives, e.g. EU and APO, require careful coordination for a possible phase II).
- CP methodology itself includes the documentation of detailed baseline data, against which results can be assessed (at the level of indirect beneficiaries, i.e. enterprises).

Possible areas of improvement for project identification/formulation include:

• Needs assessment should start with indirect beneficiaries (enterprise level) rather than with the needs of the government (no evidence that this was done);

- Although this did not create any particular problems for this project, the project management structure should be clearly defined (in particular in regards to specific responsibilities, competences and accountabilities);
- Outcomes, assumptions and expected impact are not defined;
- Links to ITC/SECO Trade Promotion Project were neither specified nor formalized (which resulted in only very limited synergies between those two projects). No links to other projects within the IP for Lao PDR and missed opportunity to create synergies with the NORAD-funded regional SMTQ project and (also covering quality/productivity improvements, namely through training in Quality Management Systems such as ISO 9001 and ISO 14000).
- (c) Ownership: All beneficiaries displayed an excellent degree of ownership, expressed by personal motivation, active participation in project activities and a relationship of trust with UNIDO experts. Enterprises participating in CP-demonstration projects provided significant own input in terms of improving equipment and personnel. The GoL provided mainly in-kind contributions.
- (d) Effectiveness: The effectiveness of the Project was high. The comprehensive approach of the intervention combining awareness raising, policy advice, training and expert advice was the right approach to achieve the objectives of the project. Expert advice in all areas was considered very useful by counterparts and was highly appreciated. The project responded in a holistic way to the needs of enterprises ("CP+") and attempted also to address challenges, which were not directly linked to cleaner production (e.g. tackling HR issues, improving packaging to increase shelf-live, meet basic food hygiene requirements and presentation of products etc.). Lao experts worked closely with international experts. The use of Vietnamese CP-specialists was not only cost efficient, but also adequate, as unlike most experts from highly industrialized countries, they were familiar with the level of technological development in enterprises and able to provide more added value. Furthermore, using Vietnamese experts also allowed for capitalizing on capacity building efforts done under the UNIDO/SECO CP-Project in Vietnam (VNCPC).

Most results at output level have been achieved as planned. Currently, additional activities along the lines of output 2 - 4 of the project document are implemented with left-over funds, apparently under a non-cost extension. The effectiveness of assistance provided to direct beneficiaries was high.

At the outcome level, CP options implemented with support of the project resulted not only in positive effects on the environment, but also contributed to higher competitiveness of participating enterprises by reducing production cost and enhancing product quality. A direct impact on worker's health (also mentioned in the project document) is not documented. Awareness raising and training on CP among key stakeholders lead to the introduction of CP in the curricula of two faculties of the Lao National University and provided input for the GoL to propose amendments on the environmental legislation. At the impact level, project outcomes are on the longer term likely to gradually improve environmental sustainability, industrial productivity and competitiveness, increase exports, create labor and contribute to poverty reduction, providing that efforts initiated by the project are sustained.

- (e) Sustainability: No institution is in place that would be able to fulfill the role of a CP Center after the end of this project. Services to enterprises were provided through a PMU-structure (with a lifespan per definition limited to the term of the project). In order to achieve sustainability of results, a follow-up project is needed with a main focus on building/strengthening an institution that is able to continue the work done under the project. The three critical factors for ensuring sustainability of a future CP-Center in Lao PDR are ongoing government support to a possible CP center, enforcement of environmental laws, and demand for CP-services. Results of awareness raising activities at the policy level seem to be sustainable, which is evidenced by a proposed change to the environmental protection law, which makes application of CP methods compulsory. At the level of the general public, upscaling and national inputs together with continued foreign assistance will be needed to achieve a lasting impact. Regarding training of national experts: Results are only partially sustainable, as local experts need more practice and specialized, industry-specific knowledge. The number of local CP-experts is not yet sufficient to meet Laos' potential demand for CP services on a broader scale (in terms of improvement potential in most enterprises). In enterprises that benefited in CP-demo projects, achievements in terms of implemented CP-options are likely to be sustainable (mostly simple, low-investment changes that are easily maintained).
- (f) Efficiency: Due to a lack of financial data linking inputs with outputs and activities, efficiency of individual outputs and/or activities is not assessable. Furthermore, it is not clear how the input of the CTA who was "shared" with Vietnam and Cambodia and VNCPC-experts have been accounted for. However, the project was certainly efficient in regards to reasonable overhead costs. The following should be highlighted: High quality of technical input ensured, despite only part-time CTA was hired, no costly project infrastructure, such as cars purchased under the project, use of existing equipment funded under a DANIDA-project. Moreover, an analysis of budget lines shows that a high percentage of the funds were directly targeted at the beneficiaries. This is a good example for a project with relatively low budget but good results. Funds were used economically.
- (g) Linkages and synergies: Beyond the linkages among the three CP-Projects in Vietnam, Lao and Cambodia, almost no synergies with other projects were achieved, mainly because the intended linkages were unilaterally defined, unrealistic, not specific enough and not formalized with the respective projects. This is in particular true in regards to the "Support to trade promotion and export development in the sub-region of Cambodia, Lao PDR and Vietnam" funded by SECO and executed by the ITC. There was also missed opportunities to create links with the regional SMTQ-project funded by NORAD in Lao PDR and Cambodia and SECO (in Vietnam), notably in the area of quality improvements. Several initiatives in areas related to CP are under preparation.

This will require UNIDO's attention in the identification/design stage for a possible follow-up phase, in order to avoid possible overlaps.

#### (h) Overall, the project was well managed

#### Key success factors were:

- The physical presence of a CTA in the region who also played an important role as a bridge between UNIDO HQ and the counterparts. The CTA was the only focal point in both technical and day-to-day project management matters for the local counterpart, which allowed for a smooth coordination.
- Appropriate selection of the CTA: The good in-depth knowledge and practical experience in the region of both the current and the former CTA were important factors for the successful implementation;
- The quality of UNIDO's technical input was praised by all beneficiaries interviewed by the evaluation mission. It seems that the right experts were selected for the right tasks (including some of the key persons trained under the CP-Project in Vietnam).
- Excellent, interactive seminars. The mission attended a seminar and noticed a high degree of enthusiasm of both experts and participants;
- Increasing use of local expertise, where available (experts trained in workshops already supported implementation of projects in companies with satisfactory results);
- Project management displayed flexibility in adjusting to changed needs, for example topics covered in awareness raising and capacity building seminars.
- Apart from occasional small flaws, the working relationship between all stakeholders was excellent.

#### Areas for improvement in project management include:

- Achievements in companies were generally well documented, however, the quality of trainings and other expert inputs was not systematically assessed (there were also no qualitative performance indicators);
- Role of counterpart: At the flip-side of having a strong, enthusiastic and highly committed CTA on site, the driving force triggering the implementation of the project was clearly the CTA. In order to ensure capacity building and sustainability, the role of counterparts in phase II needs to be *considerably* strengthened, in particular in building up and managing a CP center. This should be the main focus in phase II.
- Responsibilities, competences and accountabilities of different stakeholders were not defined. While this apparently did not lead to any particular problems, it could cause frictions in the future.
- Budgeting and financial reporting should be done not only according to budget lines but also in terms of individual outputs and/or activities;

#### 4. Main recommendations

- SECO/UNIDO should approve a non-cost extension of existing project until maximum March 2009, in order to continue training/consulting activities and to avoid a gap between two phases and the risk of loosing momentum and project staff;
- It is recommended that as soon as possible, SECO provide funding for a follow-up phase of this project based on a specific proposal elaborated by UNIDO along the specific recommendations in this report, which also includes a clear phase-out plan (with gradual reduction of expert input, including the CTA);
- Prior to the next phase, the GoL should facilitate the establishment of a CP Center. The institution fulfilling the role of a CP-Center should be determined through a transparent process in close coordination with UNIDO and SECO and should be granted sufficient financial and organizational autonomy. For transparency and good governance reasons, it should also not at the same time fulfill the role of policy making and enforcement;
- With the aim to move from direct service delivery through a PMU structure to building of an institution that can fulfill the role of a CP Center, further support could be provided in the form of "mixed execution". This means that UNIDO would still provide direct expert input but subcontract the major part of activities to a local institution (CP Center). This would possibly require that UNIDO wave the requirement for international bidding in regards to this subcontracting arrangement. It would also call for specific expert input to strengthen the management side of this institution, regular external financial monitoring and an independent financial audit. In order to keep the role of the CTA consistently to coaching and technical input, the task of external financial monitoring should be contracted to a third party.
- UNIDO to revisit sector focus for CP services and include in particular support to the agro-progressing, wood-processing and tourism sectors in next phase. The possibility to capitalize on resources of the Agro Branch and the Trade Capacity Building Branch should be explored. In order to do so, UNIDO's Agro Branch and the Trade Capacity Branch should be given the possibility to look at the project proposal for phase II to give their opinion where they can be of help;
- Gradually require cost participation of enterprises for services/trainings directly provided to enterprises in order to ensure motivation, not to create a perception that consulting is a free service and to avoid market distortion;
- Define project management structure and job descriptions in detail, in particular responsibilities, competences and accountabilities;
- Log-frames (include expected outcomes and assumptions) should be used to define both quantitative and qualitative success indicators. Performance indicators to document results at the enterprise level should be revisited and if possible standardized across CP-Centers receiving support from UNIDO to allow for a systematic benchmarking of performance.

- The three main "critical assumptions" relating to the sustainability of a future CP-Center: (a) GoL and other stakeholders' commitment as measured by continuing contributions (including financial), (b) progress in environmental legislation and its enforcement and (c) the development of a market for CP services, should be regularly monitored and reported on the basis of indicators agreed between UNIDO, SECO and the GoL. This should form part of the project agreement for phase II.
- Linkages with other projects (if any) should be realistic, specific and formalized;
- In order to provide a more meaningful and detailed picture on fund use, financial reporting should link expenditures to both budget lines and individual outputs/activities.
- 5. Main lessons learned
- Sharing expert resources among institutions supported by UNIDO: The use of Vietnamese CP-specialists as experts for the project was not only cost efficient, but also adequate. Unlike most specialists from highly industrialized countries, Vietnamese experts were more familiar with the level of technological development in enterprises and able to provide more value added. Furthermore, this also allowed for capitalizing on capacity building efforts done under other UNIDO projects and strengthening the network between different CP-centers in the Mekong Region.

UNIDO should continue drawing on expert resources in institutions it provided support to. This might for instance also include using food safety or QMS specialists trained by projects under the TCB-branch for CP-centers and vice versa. In order to maintain transparency of fund use in ongoing projects and to encourage a commercial mind-set in those institutions, formal contractual agreements should be used where possible.

• Using the same CTA on a part-time basis for different projects in the same region resulted in significant economies of scale and scope. This is a good alternative to hiring a full time CTA for relatively small-scale projects in countries where partners still have limited institutional and/or technical capacities and significant capacity building and project management input is needed.

## Introduction

### A. Background

The project "Promotion of Cleaner Industrial Production in the Lao People's Democratic Republic" funded by the Swiss State Secretariat for Economic Affairs (SECO) was designed as one of three interlinked stand-alone projects in Lao PDR, Cambodia and Vietnam. It seized an opportunity to follow-up on efforts made under GoL-DANIDA project in CP 2000 – 2003 with the same partner (discontinued due to a strategic change of the Danish Government)<sup>1</sup>. It is part of phase II of the Integrated Programme of Cooperation between Lao PDR and UNIDO (IP)<sup>2</sup>. However, there were no obvious links to and synergies with other projects within the IP. The project explicitly aimed to achieve synergies with the project "Support to trade promotion and export development in the sub-region of Cambodia, Lao PDR and Vietnam" executed by the ITC. Yet, specific details on expected linkages with this SECO/ITC-Project were not defined.

The project design *explicitly* assumed that the current 4-year pilot phase would be followed by a next phase to strengthen and deepen the results achieved.

The overall development objective of the project was "to alleviate poverty in Lao PDR and to promote the country's environmental sustainability by increasing industrial productivity and competitiveness and by reducing industry's impact on environment and worker's health and safety"<sup>3</sup>. Main expected outputs included<sup>4</sup>:

- **Output 1 Establishing Organizational Structure of Project:** The basic organizational structure of the project is in place.
- **Output 2 Awareness Raising:** The awareness of key stakeholders in cleaner production has been raised (5 sets of activities).

<sup>&</sup>lt;sup>1</sup> GoL-DANIDA National Capacity Building Programme (NCBP) 2001 – 2003. Some of the equipment sourced under the DANIDA-Project was provided to the project as a Government Contribution.

 $<sup>^{2}</sup>$  The project is also component 1.4 of the ongoing phase II of UNIDO's Integrated Programme for Lao PDR 2004 – 2007.

<sup>&</sup>lt;sup>3</sup> Project Document December 2003, page 23

<sup>&</sup>lt;sup>4</sup> Project Document December 2003, pages 23 - 25

- Output 3 Implementation of CP Demonstration Projects: At least 2 demonstration projects completed every year, for targeted industrial sectors and/or geographical areas.
- **Output 4 Training Courses on CP and CP-related topics:** At least two training courses offered every year on CP and CP related topics (at least two in total planned for government agencies involved in licensing new industrial projects, at least five in total run in the provinces with most industry).

The project document does not use the logframe as a planning tool<sup>5</sup>. While outputs are linked to measurable performance indicators, expected outcomes and assumptions relating to expected outcomes were not defined.

The project started in June 2004 and was expected to finish in June 2008. The first six months were mainly used for preparation work, i.e. recruitment of staff, setting up the project office, recruiting experts. The first activities started in early 2005. At the time of this evaluation mission, a number of activities relating to outputs  $2 - 4^6$  were still under implementation. The main counterpart is the Ministry of Industry and Commerce (MoIC), (formerly the Ministry of Industry and Handicraft, MoIH). UNIDO has started preparations for a possible follow-up phase. This included the drafting of a preliminary project proposal<sup>7</sup>, which was made available to the evaluation team.

However, a formal project proposal for a phase II has not yet been prepared and neither SECO nor the GoL have been officially approached.

## B. Purpose and methodology of this evaluation

This independent final evaluation of phase I of the project was carried out on request of UNIDO and the donor at the end of the first project cycle.

The three main functions of independent final evaluations in general are:

- Accountability towards the donor and the national stakeholders;
- Support stakeholders and managers in regards to a possible future cooperation;
- Draw more general lessons learned applicable to other cooperation projects.

This evaluation was based on the Terms of Reference (enclosed in Annex 3) and the UN evaluation norms and standards<sup>8</sup>. The main purpose of this specific evaluation was to enable the GoL, UNIDO and the donor:

- To assess the relevance and needs orientation of the project;
- To assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities;

<sup>&</sup>lt;sup>5</sup> Current UNIDO Guidelines on Technical Cooperation Programmes and Projects, August 2006, in particular Annex 6.

 $<sup>^{\</sup>overline{6}}$  See page 23 – 24 of the project document.

<sup>&</sup>lt;sup>7</sup> Unofficial draft for phase II titled "Trade Promotion through Applying Cleaner Sustainable Production in the Lao People's Democratic Republic", dated April 2008

<sup>&</sup>lt;sup>8</sup> United Nations Evaluation Group (UNEG), Norms and Standards for Evaluations in the UN System, April 29, 2005

- To assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact;
- To provide an analytical basis and recommendations for the focus and (re) design for the possible continuation of the programme.
- Draw lessons of wider application for the replication of the experience gained in this project in other projects/countries.

The UNIDO evaluation group provided systematic feed-back after the mission. None of the two evaluation consultants were involved into the design or implementation of the project. The team applied an interactive, participatory approach, based on meetings and interviews with stakeholders (counterparts, sample of beneficiaries, both representatives of the UNIDO country office and UNIDO headquarters). A field visit was carried out in Vientiane, including an extensive meeting with three "customer" enterprises of the Project (as indirect beneficiaries). The evaluation team reviewed a number of background papers of policy, programmatic and project related nature (see list of documents included in Annex 2).

All discussions with stakeholders during the field visit were open and constructive. Answers given were precise, clear and consistent in regards to major findings. Everyone interviewed was willing to proactively provide the evaluation team with relevant information.

Conducting this terminal evaluation while the last activities were still ongoing and the PMU still in place was a distinctive advantage, as the mission was able to get a first-hand impression namely in regards to the quality of trainings and consultancy work at enterprises. Also, memories of stakeholders were still fresh and most persons involved into the implementation of the project were still available.

A feed-back meeting was conducted at the end of the field mission with representatives from counterparts, the line ministry (MoIC) and the PMU to present the preliminary findings, conclusions, recommendations and lessons learned to provide an opportunity for the counterparts to make comments. The list of persons and organizations met is attached in Annex 1.

A debriefing meeting was conducted in Vienna on July 7, 2008. No presentation was made to SECO. The mission received endorsement regarding all key findings, conclusions, recommendations and lessons learned.

**Limitations** to this evaluation included:

Almost all documents (including the Project Document) were only received in the course of the field mission and could therefore not be studied in advance. Also, self-evaluation reports as a basis for the evaluation, and an updated progress report beyond December 2007 have not yet been prepared by the project. While the time allocated for the field mission was rather short (5 days, including de-briefing), the PMU did an excellent job in preparing and providing support to the mission.

As the project document does not define expected outcomes, it was not possible to assess outcomes against expectations. Financial reporting, although in line with UN-standards, does not link budget lines to activities and outputs. An assessment of efficiency (value for money) in regards to individual outputs/activities is not possible. It is also not entirely clear to what degree input to some activities (mainly

expertise of VNCPC and input of the CTA) were cross-funded through the Cleaner Production Project in Vietnam or the CP project in Cambodia funded by SECO.

Despite those limitations, the factual information obtained during the mission provided sufficient evidence for expressing a well-founded opinion on the issues to be addressed according to the Terms of Reference.

The evaluation team consisting of Daniel Keller, Director of Swiss Consulting, Hanoi (Vietnam), appointed by UNIDO, Team Leader, and Assoc. Prof. Dr. Sengdeuane Wayakone, Director of Planning and International Relations, National University of Laos, National Consultant, appointed by the GoL, expresses its gratitude to the project counterparts, the Chief Technical Advisor, the Evaluation Group of UNIDO and all persons in UNIDO HQ who supported this mission for the cooperation and excellent support provided throughout the evaluation exercise.

## Project planning and achievements

## A. Project funding

The project is fully funded by SECO with an overall budget of US\$ 838'000 (excluding agency support cost), of which US\$ 701'900 were disbursed as per end of June 2008. The uncommitted balance as per 30.6.2008 amounts to US\$ 136'100<sup>9</sup>.

## B. Project planning

#### Identification

The project seized an opportunity to complement, follow up on a DANIDA Project in the area of Cleaner Production in Lao PDR with the MoIH<sup>10</sup> and partially to capitalize on results of a UNIDO CP-Project implemented in Vietnam since 1998. It also aimed at linking into another SECO-funded project in the area of trade promotion<sup>11</sup>.

The type of intervention perfectly matches the operational mandate and the core competencies of UNIDO<sup>12</sup>, which is to alleviate poverty and promote social advance, by supporting developing and transition countries to participate in the world production system by helping them to raise productivity and to develop competitive economies. It also contributed to sustainable industrial development (SID), another strategic objective of UNIDO. Enhancing competitiveness of products and promoting sustainable industrial production in order to help developing and transition countries to better integrate into the world economy, to participate in multi-national supply chains and to capitalize in general on international trade, are also core areas of SECO's cooperation programme<sup>13</sup>.

UNIDO identified the right institutional partner<sup>14</sup>. A participative needs assessment of direct beneficiaries (MoIC) by UNIDO experts lead to a high degree of relevance for both direct and indirect beneficiaries, although no assessment of needs at the enterprise level and indirect beneficiaries at the mesa level, (e.g. experts) has been documented.

<sup>&</sup>lt;sup>9</sup> Financial reporting provided by UNIDO as per 7 July 2008

<sup>&</sup>lt;sup>10</sup> GoL-DANIDA National Capacity Building Programme (NCBP) 2001 – 2003.

<sup>&</sup>lt;sup>11</sup> "Support to trade promotion and export development in the sub-region of Cambodia, Lao PDR and Vietnam" funded by SECO and executed by the ITC.

 $<sup>^{\</sup>rm 12}$  UNIDO in brief, June 2005

 $<sup>^{\</sup>scriptscriptstyle 13}$  SECO's strategy 2006 and the SECO's vision 2010

<sup>&</sup>lt;sup>14</sup> See however recommendations on phase II.

#### Formulation

The project was designed as a comprehensive, inter-linked approach to promoting sustainable industrial production, including the institutional side (GoL) and the demand side (enterprises). It promotes a holistic CP+ approach to productivity and quality improvements, which is not limited to reducing negative environmental impact. For instance, the project aims at promoting changes in product development *and* processes, promotes technology change *and* management change, and at environmental impact *and* occupational health and safety. It was intended to mainly focus on export-oriented sectors that were priority to the GoL in 2003 (garment, in order to improve competitiveness in the light of a possible phase out of the Multi-Fiber Agreement and wood processing).

Despite the absence of a preparation phase, the project document includes comprehensive, country-specific background information (e.g. principal industrial development issues, a broader analysis of the country's institutional and policy framework and the environmental context).

Several expected synergies with other projects were identified, yet those were "unilaterally" defined, not specific and not formalized through agreements (see Chapter I, above)<sup>15</sup>. An obvious possible linkage to the regional SMTQ project funded by NORAD that just started at the same time, namely in the area of Quality Management Systems, was not explored. Therefore, with the exception of the two other UNIDO/SECO CP projects in Cambodia and Vietnam, where considerable synergies in terms of cost savings by coordinating expert input/trainings were achieved, the envisaged linkage to the ITC project did not work out in practice<sup>16</sup>. Nevertheless, it seems that areas of intervention of other donors were carefully taken into consideration at the design stage and areas of overlaps or duplications with initiatives funded by other donors seem to be marginal<sup>17</sup>.

The evaluation obtained unanimous confirmation among all stakeholders interviewed that the UNIDO intervention was the right type of intervention at the right time, when Lao PDR started accelerating the process of international integration.

The project document explicitly emphasizes the need of a donor-funded follow-up after the current first 4-year phase (designed as pilot phase), in order to achieve sustainable results. This is certainly adequate for a project of complex nature in a country where at the outset, institutional and technical capacities were relatively weak. An explicit strategy on how to achieve sustainability of results and the expected impact at the end of the envisaged second phase was not included in the project document.

While the project document outlines a management structure, the specific responsibilities, competences and accountabilities at all levels (including Steering Committee) are not defined. "Responsibilities" for activities were defined ("responsible parties"), however it is not clear *who* among several responsible persons would be accountable for results and competent to take decisions. While this is not in accordance with sound management practices, it did not cause any particular problems.

<sup>&</sup>lt;sup>15</sup> Due to absence of the ITC representative in Lao PDR, the mission was unable to obtain a view of the ITC representative in Lao PDR.

<sup>&</sup>lt;sup>16</sup> With the exception of one presentation made by the CP project in a seminar organized by the ITC

<sup>&</sup>lt;sup>17</sup> One case where the UNIDO/NORAD SMTQ Project worked in parallel at the same company on similar topics (the SMTQ-Project on Quality Management Systems and the CP-project on a CP-assessment). Some duplication also exists with some of the trainings of the Asian Productivity Organization (APO) on "Green Production", an approach that is similar to "Cleaner Production".

The agency execution mode through a PMU directly managed by UNIDO creates parallel structures. It is clearly not in line with recent tendencies on Harmonization & Alignment principles (defined in the Paris Declaration and the Vientiane Declaration). Furthermore, it is not conducive for working towards the long term perspective of building capacities and ownership in order to institutionalize CP-services in Lao PDR. Yet, for a pilot phase in Lao PDR at the time the project started commensurate with absorption/institutional capacities of country and partners.

For future support, UNIDO might consider shifting to a form of "mixed execution", whereas international expert input and maybe provision of highly specialized equipment would still be delivered by UNIDO, but other services subcontracted to a local organization that is committed to become a CP service provider. In selecting an organization, UNIDO should pay attention that this organization does have a reasonable degree of organizational and financial independence. For transparency reasons, it should also not be the same agency that is responsible for setting or enforcing environmental policies. A successful application of this model requires a systematic strengthening of institutional capacities within this local institution, including strategic planning, marketing, and financial accounting. Using the subcontracting mode might require waving bidding requirements under UN-guidelines.

The project is broken down in one immediate objective and four main outputs linked with specifically defined activities. While the outputs as such are not measurable, they are broken down into activities that are used as performance indicators (e.g. number of seminars, trainings, CP-assessments). Those performance indicators are clear and measurable in *quantitative* terms, however mostly not in *qualitative* terms (e.g. quality of trainings). There is also a detailed time schedule for outputs and activities.

While a budget according to UNIDO-budget lines is available, budget lines are not linked to outputs or activities<sup>18</sup>. This would be a good management tool for UNIDO and the donor to assess value for the funds disbursed per output and activity. As an important part of Result Based Management, it would also provide a systematic basis for further organizational learning, in terms of how to allocate funds most economically.

Expected outcomes and related assumptions were not defined. As a conclusion, the Project Document does not meet standard international practice for project plans, in particular, since the logical framework was not consistently applied<sup>19</sup>.

## C. Project implementation

**Development Objective:** To alleviate poverty in Lao PDR and to promote the country's environmental sustainability by increasing industrial productivity and competitiveness and by reducing industry's impact on environment and worker's health and safety.

**Immediate Objective**: To increase the adoption of Cleaner Production concepts and practices in Lao manufacturing enterprises in the targeted export-oriented sectors.

<sup>&</sup>lt;sup>18</sup> UNIDO input, page 26 of Project Document

<sup>&</sup>lt;sup>19</sup> See for example SECO's manual on logical frameworks published on www.seco.admin.ch

<ul> <li>Planned/Realized</li> <li>Planned: <ul> <li>Establish the Steering Committee, modeled on the Advisory Board of the DANIDA NCBP;</li> <li>Choose the NPC and place him/her under UNIDO contract;</li> <li>Choose the CTA for the regional CP programme and put him under UNIDO contract;</li> <li>Choose the interpreter/translator and put him/her under UNIDO contract;</li> <li>Choose the JA and put him/her under UNIDO contract</li> <li>Prepare an inception report for submission to the Steering Committee, SECO and UNIDO.</li> </ul> </li> <li>Implemented: <ul> <li>All implemented on time.</li> </ul> </li> <li>Planned/Realized</li> </ul> <li>Planned activities: <ul> <li>Hold at least one national conference and several provincial conferences on CP, aimed at entrepreneurs, policy-makers, financial institutions, and other key stakeholders;</li> <li>Hold at least two seminars a year on CP and related topics, focus on distinct target groups, to show how CP can influence their work;</li> </ul> </li>
<ul> <li>Establish the Steering Committee, modeled on the Advisory Board of the DANIDA NCBP;</li> <li>Choose the NPC and place him/her under UNIDO contract;</li> <li>Choose the CTA for the regional CP programme and put him under UNIDO contract;</li> <li>Choose the interpreter/translator and put him/her under UNIDO contract;</li> <li>Choose the JA and put him/her under UNIDO contract</li> <li>Prepare an inception report for submission to the Steering Committee, SECO and UNIDO.</li> <li>Implemented:</li> <li>All implemented on time.</li> <li>Planned Activities:</li> <li>Hold at least one national conference and several provincial conferences on CP, aimed at entrepreneurs, policy-makers, financial institutions, and other key stakeholders;</li> <li>Hold at least two seminars a year on CP and related topics, focus on distinct target groups, to show how CP can influence their work;</li> </ul>
<ul> <li>Planned/Realized</li> <li>Planned activities:</li> <li>Hold at least one national conference and several provincial conferences on CP, aimed at entrepreneurs, policy-makers, financial institutions, and other key stakeholders;</li> <li>Hold at least two seminars a year on CP and related topics, focus on distinct target groups, to show how CP can influence their work;</li> </ul>
<ul> <li>Planned activities:</li> <li>Hold at least one national conference and several provincial conferences on CP, aimed at entrepreneurs, policy-makers, financial institutions, and other key stakeholders;</li> <li>Hold at least two seminars a year on CP and related topics, focus on distinct target groups, to show how CP can influence their work;</li> </ul>
<ul> <li>Hold at least one national conference and several provincial conferences on CP, aimed at entrepreneurs, policy-makers, financial institutions, and other key stakeholders;</li> <li>Hold at least two seminars a year on CP and related topics, focus on distinct target groups, to show how CP can influence their work;</li> </ul>
<ul> <li>Make at least three presentations a year at conferences, seminars, etc. put on by others on CP;</li> <li>Brief the press and other media on the project, involve them in the project results (?)</li> <li>Prepare brochures and other publicity material.</li> <li>Realized activities: <ul> <li>Total CP Seminars: 10</li> <li>Total Participants: 429</li> <li>CP Presentations: 7</li> <li>Total Participants: 570</li> </ul> </li> <li>Mass Media Coverage (TV: 13 contributions, printmedia: 25)</li> <li>Information dissemination through various publications, website, brochures, leaflets, publications, annual reports, case studies etc.</li> <li>Mix of publication material for different target audiences.</li> </ul>
<ul> <li>→ Targets defined in project documents exceeded.</li> </ul>
Planned/Realized
<ul> <li>Planned activities (3.1 – 3.10, summarized)</li> <li>Sector selection, awareness raising seminars for enterprises in selected sectors, enterprise selection, selection of national experts, in-plant-assessments, reports on impact, printing and distribution case studies, follow-up with demonstration projects undertaken by DANIDA.</li> <li>Realized activities <ul> <li>Number of participating units: 15</li> <li>CP options identified: 577</li> <li>CP options implemented: 232</li> <li>Investments made by units: &gt;380,000 \$</li> <li>Annual savings achieved: &gt;420,000 \$</li> <li>Pollution reduced: 10-60%</li> </ul> </li> </ul>

Table 1: Outputs planned and realized (as reported by project)

	$\rightarrow$ Targets defined in project documents exceeded.			
	Sectors:			
	• Textile/garments: 15 units			
	<ul> <li>Food processing: 7 units</li> </ul>			
	Wood processing: 2 units			
	• Steel rolling mill (VSI): 1 unit			
Output 4	Planned/Realized			
At least two training courses	Planned activities (4.1 – 4.5 summarized)			
offered every year on CP and CP	Prepare and implement training courses			
related topics (at least two in total	Realized activities:			
planned for government agencies	• CP intensive trainings: 12			
involved in licensing new	<ul> <li>Total participants:434</li> </ul>			
industrial projects, at least five in	• CP+ Trainings (CP-EE, OHS, CSR, CDM, CP-MEA, CP			
total run in the provinces with	Investment hazardous& Toxic waste Management,			
most industry.	WWTP, CP in Education, CP in Curricula):14			
	<ul> <li>Total participants: 450</li> </ul>			
	<ul> <li>Total training days: 1946</li> </ul>			

#### Case Study: Xangpheuak Noi Noodle Factory

Xangpheuak Noi Noodle Factory visited by the Evaluation Team is a small scale familyowned company and one of the leading Chinese noodle producers in Vientiane, with a production capacity of around 600 tons per year. Production capacity utilized is around 80%. Main input material is rice flour and vegetable oil. During the production process, large quantities of water and energy are used. Despite a rudimentary waste treatment system, organic residues in waste water cause pollution. Chinese noodles are mostly sold fresh on the market, with a shelf live of few days only. The company participated in a CP-Demonstration Project in April 2006, which resulted in the identification of a wide range of CP-options – mostly low cost (totally around US\$ 12'000). Initial major challenges encountered was the lack of a systematic approach to production management, scepticism towards outside consultants, the lack of baseline data and the difficulty to implement changes. Nevertheless, major achievements are visible. The factory established a CP-team, started systematic data collection and very recently, hired a young Quality Assurance Manager. Photos before and after the factory joined the CP-programme show evidence of significant improvements made. Besides direct annual savings of ca. US\$ 10'000 (less product waste, less energy consumption) product quality improved remarkably. Data on how much this is expressed as a percentage of production cost and on the impact on the overall profitability of the company are not available (financial information are considered as highly sensitive and difficult to obtain). Some of the CP-options resulted in reduction of environmental impact, but no significant cost savings (e.g. the reduction of water consumption – as ground water is used). The owners of the company are currently exploring the possibility to export their products to ASEAN markets. This would require using packaging, which extends the shelf-life (vacuum packaging, UV treatment of products) and fulfilment of a number of food safety regulations. The major challenge in doing this is that local expertise is not available and also the high cost involved into obtaining certification.

Source: Case Studies published by the Project, amended and validated during field mission

# Assessment of project results

## A. Relevance

#### Policy relevance

The project was highly relevant and fully in line with the strategies, plans and policies of the GoL<sup>20</sup>, as well as with the objectives and priorities of the main counterparts, and the target groups. It fits well in Lao's overall economic development strategy to enhance the competitiveness of locally manufactured products in order to better meet local demand (thus also contribution to import substation) and export demand.

## Key points of national strategies, plans and policies Relevant to Cleaner Production

- International integration of the Lao economy (ASEAN preparation for WTO accession);
- Modernization/industrialization efforts, in particular increasing the competitiveness of products and services of Lao enterprises by encouraging enterprises to apply modern production management techniques;
- Labour creation, improving working conditions and livelihood of workers.
- Policy to increase scientific and technological capacities and the human capital in the country in general (work with universities);
- Policy to encourage environmentally sustainable production (environment protection law).
- Implementation of international commitments of Lao PDR in the field of environment (Multilateral Environmental Agreements).

#### Relevance to target groups

While the project was relevant to the main counterpart (MoIC) in terms of policy advice and awareness rising, the direct relevance of building technical capacities in CP-services for the main counterpart was limited. The MoIC is mainly responsible for developing and implementing policies relating to trade and industry. The core tasks of the Ministry is not congruent with main aim of the project, i.e. capacity building in providing CP services.

The project would be more relevant to a service provider targeting enterprises (not necessarily a consulting company), but at the outset of the project, no such service

<sup>&</sup>lt;sup>20</sup> Content of policies was retrieved through interviews with main GoL stakeholders. We were not able to obtain copies of the respective policies in English.

provider existed (some of the organizations engaging into this area, such as the Lao Chamber of Commerce and Industry and the SME Promotion and Development Office of MoIC (SMEPDO), were only recently established).

#### **Relevance to Enterprises**

The programme is highly relevant for the enterprises visited by the mission. There is an obvious urgent need for productivity/product quality improvements. The baseline is very low and it will take a lot of efforts to gradually reach competitiveness in line with other countries in the region. The implementation of ASEAN+ free trade area will expose companies to even more competition (see also comments under "Effectiveness"). For two clients visited by the team (one local food-processing company, one association of craft villages in the textile sector), relevance would be significantly increased through advice in how to get *officially recognized certifications* required by export clients. It became also clear that for enterprises, *the only selling proposition for using CP services is to improve their financial bottom line, and not to reduce their environmental footprint*. Nevertheless, relevance for enterprises would be further increased by a more stringent enforcement of environmental protection laws and by an increasing demand for products that meet certain environmental and social standards in export markets<sup>21</sup>.

According to the experience in Vietnam, strengthening the enforcement of environmental norms is likely to take several years and requires sustained support, including awareness rising and training on the central and local levels.

Another challenge is how to provide enterprises with access to capital for investments into environmentally friendly technology. One possible approach is a model similar to the "Green Credit Trust Fund", established under the SECO Programme in Vietnam. The Green Credit Trust Fund (GCTF) is an instrument for the promotion of SME investments, which result in a positive impact on the environment. GCTF facilitates access to finance for SMEs with insufficient collateral by guaranteeing 50% of credits granted to the SMEs. If a company achieves certain environmental improvements, measured against pre-defined indicators, GCTF reimburses up to 25% of the investment costs. The environmental improvements to be achieved as well as the indicator are determined and subsequently verified by the Vietnam Cleaner Production Centre (VNCPC)<sup>22</sup>.

#### Relevance to the Millennium Development Goals (MDG)

The overall objective of the project indirectly contributes to the achievement of the Millennium Development Goal 1 (Eradicate extreme poverty and hunger) by creating more jobs through facilitating the development of a competitive industry. It directly supports MDG 7 - environmental sustainability - and MDG 8 - developing partnership for development – by improving the access of Lao to new markets and technologies.<sup>23</sup>

However, so far no direct impact in terms of MDG indicators could be observed.

#### Relevance to the UNDAF-Framework in Lao PDR

<sup>&</sup>lt;sup>21</sup> It should be noted that demand for socially and environmentally friendly manufactured products stems mainly from U.S. and European rather than from Asia, which is still the main importer of products from the Mekong Region. Thus, the driving force for companies that are not part of multi-national catering to western markets remains is clearly the improvement of the bottom line.

<sup>&</sup>lt;sup>22</sup> Fact Sheet SECO Private Sector Development Programme, <u>www.seco.admin.ch</u>

<sup>&</sup>lt;sup>23</sup> For a definition on MDG 8, see <u>http://www.undp.org/mdg/goal8.shtml</u>

At the country level, the project contributes towards UNDAF-Lao<sup>24</sup> outcome 1.1, which includes access to economic services, environmentally sustainable utilization of natural resources (green growth). It also makes a contribution towards UNDAF outcome 1.4: enabled environment for growth with equity, in particular in regards of assist enterprises in capitalizing on a more liberalized economic environment.

#### Relevance to UNIDO

The project perfectly matches the operational mandate and core competencies, expertise and experience in industrial development of UNIDO and is in line with the key points of the overall CP-strategy of UNIDO, namely in regards to the holistic and sectoral CP approach.

#### Relevance to the Donor

Increasing competitiveness of enterprises in terms of quality and productivity in order to enable them to export their products to international markets is the core area of the SECO Trade-Cooperation Programme. The intervention fits well into the (current) Development Strategy of the Swiss Government for the Mekong Region<sup>25</sup>, which - although Lao PDR is not a priority country - leaves room for projects capitalizing on the experience of and/or linking into projects in Vietnam.

#### Relevance to the Vientiane Core Statement on Aid Effectiveness

The organizational mode of the project is not in line with fulfilling ownership, harmonization, alignment and results principles under the Vientiane Core Statement on Aid Effectiveness. This in particular in regards to (1) parallel structures established (PMU) and (2) no responsibility of the counterpart in regards to implementation and to financial management. The project was however well aligned the top priorities of local counterparts and harmonized with interventions of other donors (no overlaps). Interviews with other donors evidenced that due to various reasons, most donors were still using the traditional modes to implement projects. As such, the project does not fulfil the requirements of the Vientiane Core Statement of Aid Effectiveness, but is managed according to current practices in the country. Traditional agency execution to implement the project was relevant for a pilot phase implemented with partners whose capacities for executing (at least parts) of the project nationally had not yet been created.

## B. Ownership

Local counterparts expressed a high degree of ownership, reflected by:

- Personal motivation of everyone interviewed; even the top management of counterparts was in detail informed about project activities;
- Clear evidence for a relationship of trust developed between UNIDO experts and staff of all local counterparts interviewed;

<sup>&</sup>lt;sup>24</sup> Source: United Nations Development Assistance Framework for the Lao PDR (2007-2011)

<sup>&</sup>lt;sup>25</sup> Source: Swiss Cooperation Strategy in the Mekong Region, 2007 – 2011, Swiss Agency for Development and Cooperation (SDC) and State Secretariat for Economic Affairs (SECO), © SDC 2007

The high degree of ownership does however not include the financial dimension of the project:

a) There was no financial input of the GoL<sup>26</sup> and participating enterprises. With regards to the GoL, this might be due to the limited budget available. Regarding the enterprises, the PMU structure would not allow for receiving consulting fees, even if enterprises were willing to pay for services.

b) In line with UNIDO policies, counterparts were not provided with financial reports, which is also a missed opportunity for capacity building in fund management in the view of a future CP-center. Although in the case of this particular project, the lack of involvement in financial matters was not seen as a major problem by MoIC, withholding financial information from counterparts is likely to further reinforce the pressure of governments on UNIDO to shift to full-fledged National Execution Mode (NEX) for future projects.

## C. Effectiveness

#### Expert Input

The quality of technical inputs provided by UNIDO was high. Activities were well implemented. UNIDO selected the right experts for the right tasks. Expert advice in all areas was considered very useful and was highly appreciated by counterparts and beneficiary companies. Due to the fact that the required technical expertise is not yet available in Lao, the project still depended heavily on international expertise (mainly delivered by the CTA and Vietnamese experts). Nevertheless, local experts were increasingly provided with more responsibility towards the end of the project (e.g. they worked independently in companies). In general, it was good to target a relatively small number of enterprises and to spend enough time to really make a difference. The problem of many other donor-funded projects in the field of business development services is that they remain superficial. Adding tangible benefits for participating enterprises needs however time, including for regular follow-up. Bad experience with poor services delivered by other projects made it rather difficult for the project to convince enterprises of the benefits to participate in the programme.

The project also produced excellent case studies and reports for all enterprises that benefited from a CP assessment. Savings in terms of energy and cost are well documented. One point to make the data even more meaningful would be to relate cost-savings to total production cost and (if possible) to revenues<sup>27</sup>. This would allow for better demonstrating productivity improvements (not only on cost savings).

#### Selection of Sectors

It was originally planned to focus chiefly on export-oriented sectors, in particular the garment and the wood processing sectors<sup>28</sup>. In reality, the project selected many non-exporting enterprises, two large state-owned groups (beverage, steel) and a number of

<sup>&</sup>lt;sup>26</sup> With the exception of equipment and a car that was provided by the GoL-DANIDA NCBP Project.

<sup>&</sup>lt;sup>27</sup> Such figures might be difficult to obtain. The way the project reported is in line with current practices of CP centers in developing countries and principles outlined in the MoUs signed with client enterprises.

<sup>&</sup>lt;sup>28</sup> See activity 3.1 and 3.3 of the project document

foreign-invested enterprises (including one international beverage producer). While this made sense for CP-demonstration and training purposes, supporting the already more competitive foreign-invested and the privileged state-owned sector is certainly not in line with the aim of the project. Using Official Development Assistance to provide free consulting services for international companies is sensitive. For services provided to foreign-invested enterprises, fees should be cost covering.

Overall, the project stroke quite successfully a balance between local small-scale enterprises with a very low baseline, where it was possible to achieve a significant impact and more advanced companies (mostly foreign-invested, state-owned groups) companies. While in the former, it is possible to make a real difference in terms of competitiveness, such businesses would probably not be able to pay for services of a CP center. While the impact of CP-services in large enterprises (in terms of improving competitiveness) might be lower, larger enterprises are more likely to be future paying clients of a CP Center. Implementing CP services in larger enterprises from various sectors also allows for a better demonstration effect, building credentials and capacity building of staff.

On a longer term, enterprises benefitting from CP-services should be gradually required to contribute to the cost. The price scale might differ according to the type of enterprise (small scale, large scale, foreign-invested, local etc.). Providing services free of charge will lead to crowding out the fledgling consulting sector, market distortion and above this, create a perception among clients that consulting is a complementary service provided by international donors. This is detrimental to the development of a business development service sector, as nobody will be interested to compete against ODA-funded projects.

The project reached well the primary target groups envisaged in the project document (general public through media, universities, government officials, enterprises).

- Awareness raising: The project reached well the primary target groups, including parts of the general public. For example, the local press regularly reported on awareness raising activities. It also seems that policy advice and input was positively considered by the GoL. This is reflected in a proposed change to the Environmental Protection Law, which would make application of CP-principles in enterprises compulsory.
- **Training:** in the course of the project, national consultants became increasingly active in providing input to CP demonstration projects, consisting in CP assessments and identifying/implementing CP options. The project also cooperated with the Lao National University, in particular the Department for Environmental Science and the Department of Engineering. The mission learned that the CP-methodology is taught within the curricula and that some students selected the topic for their graduation papers.
- **Technical assistance to enterprises**: Participating enterprises were well reached. Enterprises established CP-Teams and participated actively in trainings provided under the project. To achieve a real change within the industry of Lao PDR, many more demonstration projects will be needed. Due to the limited scope and duration of the project, it was only possible to reach a tiny percentage of the industry.

The project created basic conditions for future upscaling and replication, except for institutional sustainability (see below): Although there is no evidence that a specific strategy was outlined at the design stage, the project contributed to creating favorable conditions for future replication of activities and upscaling of the CP-concept in Lao PDR, for instance:

- The dissemination of CP-success stories is likely to spur interest in CP among enterprises and increase future demand.
- Besides policy makers, the general public was included into awareness raising activities. This is important because as experience in Vietnam shows public pressure is a crucial factor for better enforcement of environmental laws.
- Training of university professors who then integrated CP methodology into their teaching is likely to have a multiplier effect and lay the basis for upscaling CP services, as students will gradually apply CP when entering their professional life.

## D. Efficiency

As mentioned earlier, it was in most cases impossible to assess efficiency of individual outputs in details, as (1) the financial reporting system available to the evaluators does not link inputs with outputs and activities and since it is not clear how VNCPC expert input is accounted for and how the cost of the CTA are allocated to each of the three countries. An analysis of budget lines (Table 2) shows however, that overhead costs were comparatively low. This was mainly due to the cost saving benefits of sharing the CTA with projects in Vietnam and Cambodia, keeping purchases for project infrastructure to a minimum, and use of existing equipment (including the car) funded under a DANIDA-project. Therefore, it was possible to channel a high percentage of funds directly into activities that added value for the targeted beneficiaries.

Overall, it can be concluded that funds were used efficiently and economically. This is a good example for a project with relatively low budget, but good results.

			Total as at	% of	% of budget
Expenditures by budget lines/type of input (in			25.06.08	budget	disbursed
US\$)		Budget	(rounded)	(rounded)	(rounded)
11-99	International experts	409'700	346'418	48.89	84.55
13-99	Administrative Support Personnel	13'500	8'944	1.61	66.25
15-99	Project Travel	47'000	38'865	5.61	82.69
16-99	Other Personnel Cost	20'000	6'182	2.39	30.91
17-99	Short-term National Consultants	132'500	113'215	15.81	85.44
21-99	Subcontracts	28'800	28'686	3.44	99.60
32-99	Study Tours	16'000	10'566	1.91	66.04
33-99	In-Service Training	85'405	77'765	10.19	91.05
35-99	Non-UNDP Meetings	8'500	5'447	1.01	64.08
49-99	Equipment Procurement	25'000	18'830	2.98	75.32
51-99	Sundries	51'595	46'982	6.16	91.06
99-99	Total	838'000	<u>701'900</u>	100	83.76

Table 2: Structure of Expenditures (as reported by UNIDO)<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Not equivalent to budget in project document

## E. Sustainability

On the institutional level, the key problem is that no institution is in place that would fulfill the role of a CP Center after the end of this project. Services were provided through a PMU-structure. Once dissolved after the project ends, there will be no institutional set-up that could continue providing policy input, training and service provision. Sustainability of results clearly requires a follow-up phase with a main focus on building an institution that is able to capitalize on the work done under the project.

**Awareness of CP-issues on the policy level** seems to be sustainable (evidenced by proposed change to environmental protection law, which makes application of CP methods compulsory in Lao PDR). At the level of the general public, ongoing efforts are needed and GoL needs further support.

**Regarding capacity building of local experts,** results are only partially sustainable, as trainers need more practice and specialized, industry-specific knowledge. Furthermore, the critical number of experts to maintain good quality CP-services in the country is not yet available. If the project stops at this point, most CP-experts (except the CP-teams in companies) would possibly find other employment and would not continue working as CP-consultants. In the best case, they would be able to work for other related donor-funded initiatives or apply their knowledge within new jobs.

**Results achieved in enterprises:** in enterprises visited by the mission, achievements in terms of implemented CP-options seem to be sustainable. Implemented CP options typically are of low-investment, simple changes that are easy to maintain. As electricity prices and labor are cheap in Lao, the pressure on companies to improve their productivity is lower than in other countries. Whether enterprises will engage into further continuous improvements depends also on the enforcement of environmental protection laws and market demand for environmentally friendly produced goods and services.

## F. Project management

#### 1. Strengths

Overall, the project was well managed, in particular:

- The selection of CTA(s) with appropriate personality, skills, understanding of the country context and leadership skills by UNIDO was a key success factor.
- The high quality of technical input was praised by all beneficiaries interviewed by the evaluation mission. It seems that the right experts for right tasks were appointed. Seminars organized were excellent from a standpoint of teaching methodology, interactive seminars (the mission attended one workshop). Participants highlighted a high degree of enthusiasm of both local and international UNIDO experts. Use of Vietnamese experts (VNCPC) allowed for achieving a multiplier effect with the CP-Project in Vietnam, contributed to the establishment of a network for south-to-south cooperation, to lower cost for international experts. We were also told that often, input from experts of developing countries who are more familiar with the technology used in Lao enterprises was more useful to companies. It seems that towards the end of the implementation, the project increasingly used local expertise, where available

(experts trained in workshops already supported implementation of projects in companies with satisfactory results). The evaluation team was told that most local experts were thus able to independently conducting CP-assessments.

• Excellent working relationship between UNIDO and local partners: Apart from occasional minor problems, the working relationship between all stakeholders (including enterprises) was excellent. Evidence for this is also that everyone expressed a strong wish to continue the cooperation.

#### 2. Weaknesses

Nevertheless, there is room for improvement in the following areas:

#### Weaknesses:

- **Synergies with other projects:** While the CTA was in regular contact with his colleague at the ITC, expected synergies with other projects (except VNCPC and the CP-Project in Cambodia) were in practice only marginally achieved, in particular the envisaged cooperation with trade promotion project of SECO.
- Limited management role of the counterpart: At the flip-side of having a strong, enthusiastic and highly committed CTA on site, the driving force behind the implementation of this project was clearly the CTA. The role of the counterpart in phase II needs to be strengthened, in particular in building up and managing a CP center. This should be the main focus in phase II.
- Decision making processes: Some stakeholders felt that UNIDO was only partially flexible and responsive to changed needs (steering committee meets only once/year). The mission was not able to validate this on specific cases. More autonomy in decision making at the project level (in line with approved budgets and well defined objectives) would allow for better catering to local needs. There should also be a mechanism for decision making between Steering Committee Meetings (e.g. by circular or phone conference). Applying a form of mixed execution for the next phase would largely address this problem.
- **Monitoring and reporting**: Progress reports are comprehensive but were not updated at the time of the final evaluation. The last document received reported the status as per December 2007, although activities were still under implementation (mainly training seminars, consulting work and documentation).
- Achievements in companies are generally well documented (this is a part of the CPmethodology). Nevertheless, indicators on the project level should be better selected in terms of their *relevance* to measure environmental and financial impact. For instance, reporting the number of options proposed versus the number of options implemented is not very significant, as one single option might lead to a higher economic impact as all other options together. More conclusive would be to *relate the saving potential of all options identified (in terms of resource and cost savings) to savings effectively achieved by realized options*<sup>30</sup>. Similarly, the project documents *cost and resource savings* (in financial and quantitative terms), but does not relate them to total production cost and revenues. Thus, an assessment of *how much productivity has improved* – which is the crucial success factor for enterprises - is not possible. In order

<sup>&</sup>lt;sup>30</sup> Examples of meaningful parameters for measuring impact can be found in: Dr. Jürg M. Grütter, "Impact Assessment of SED Centers", realized on behalf of SECO in November 2005

to allow benchmarking between different CP-centers receiving UNIDO support, the implementation of a uniform system of performance indicators might be useful.

- There is no evidence of a systematic assessment of quality of trainings and other expert inputs (reporting only relates to the number of trainings and participants).
- Financial budgeting and reporting per year was only provided during the de-briefing meeting. Financial reporting, although in line with UNIDO policies, does not allow for a clear picture what has been spent for what activity. The information for the donor on how the funds were used is rudimentary. In order to provide the necessary transparency, the evaluation team recommends that in addition to the minimum UNIDO standards, a financial reporting template following a matrix system be established, which presents the expenses according to outputs or components (e.g. project infrastructure, awareness raising, CP training, CP demonstrations) all on a country basis for regional projects) in addition to the usual budget lines (e.g. equipment, experts, etc.).

# G. Horizontal issues

Synergies in form of economies of scale and scope were achieved with the two other stand-alone CP projects in Vietnam and Cambodia.

This contributed to efficiency as well, specifically:

- Sharing a CTA and experts for all three projects;
- Using the VNCPC as a reference center and provider of expertise for the project;
- Sharing know-how through facilitating exchanges among the three projects in general.

However, there are also a number of missed opportunities for synergies, in particular:

- The envisaged synergies/cooperation between the project and other ongoing traderelated projects funded by SECO were unrealistic and did only marginally materialize.
- There is also no indication of communication between the UNIDO SMTQ project in Lao PDR (funded by NORAD), which was implemented in parallel and also closely linked to a similar SECO-funded intervention in Vietnam.

Main Strengths		Main Weaknesses		
1. 2.	Selection of the right CTA; Timeliness and relevance of the intervention;	1.	Potential for synergies with SECO- ITC project not exploited; partially since linkages not specified and formalized;	
3. 4.	High level of ownership expressed by beneficiaries; Comprehensive approach of the intervention (awareness raising, capacity building, demonstration	2.	<ul> <li>While the needs assessment of direct beneficiaries was well done, there is no evidence of a needs assessment at the level of indirect beneficiaries;</li> <li>Log-frame as standard project management tool not applied, no outcomes defined. Only quantitative, not qualitative performance indicators.</li> <li>A number of performance</li> </ul>	
5.	projects); The CP+ methodology addressing a wide range of issues contributing to improving competiveness, beyond CP;	3.		
6.	Results on enterprise level are well documented through case studies.	4.		
7. 8.	High quality of technical input; Efficiency in terms of high percentage		indicators on enterprise level are not significant for measuring impact.	
	of input channeled into activities that directly benefit counterparts. No costly project infrastructure and management overhead. Economic use of funds, while still maintaining quality of input. Economies of scale and scope with projects in Vietnam and Cambodia, in particular the use of Vietnamese experts.	5.	Project document does not clearly define responsibilities, competences and accountabilities within the management structure.	
9.		6.	Financial budgeting and reporting, although in line with UNIDO norms, does not provide information on fund use as per specific outputs/activities.	
		7.	Sustainability is questionable, unless there is a follow-up phase that successfully builds institutional and technical capacity of an institution that is able to act as a service provider.	

Table 3: Summary of main strengths and weaknesses of the Project

# **Recommendations and lessons learned**

# A. Recommendations to UNIDO

# 1. Formulation of phase II

UNIDO should consider the consistent and accurate use of log frames as a project management tool. Log frames include expected outcomes linked to assumptions rather than only outputs/activities. Success indicators should be specific, measurable, accurate, realistic and tough. Both qualitative and quantitative parameters should be used. Project management structure should not only include an organizational chart, but also define clear responsibilities, competences and accountabilities for each counterpart.

Projects aiming at developing enterprise services under a PMU tend to not yield sustainable results. Therefore, the focus of phase II should shift towards capacity building and institutional development of a CP-center with adequate financial/operational autonomy, which is able to continue operating beyond the limited time of a project. Consequently, the new project document should provide for a project management structure that is adapted to the operations of a CP center, not a PMU. Specifically, the CP center should be managed by a local management team with proven credentials in CP approved by UNIDO, while the steering committee would have guiding role regarding UNIDO/SECO support to the center, similar to a Board of Directors. The main role of CTA in phase II should gradually move to training trainers coaching the management of the CP center rather than acting as a trainer and manager.

An "advisory committee" with consultative function might be the better platform to exchange information and ensure stakeholder involvement than a large steering committee at the operational level with many members not directly involved in the project. For decision making, a steering committee might for instance only include SECO, UNIDO, the local counterpart and the top-management of the CP-Center. Also, a mechanism should be established to make key decisions between physical meetings.

In order to facilitate the process of shifting from direct service delivery through a PMU structure to building up an institution that can fulfill the role of a CP Center, UNIDO could consider using a form of "mixed execution" for project implementation. This means that UNIDO would still provide direct expert input, but subcontract the major part of activities to a local institution (CP Center). This would possibly require that UNIDO wave the requirement for international bidding in regards to this subcontracting arrangement. Besides an annual financial audit, expert input to strengthening the management side and ensuring a regular external financial monitoring might be required. In order to keep the role of the CTA consistently to coaching and technical input, the task of external financial monitoring should be contracted to a third party.

## 2. Relating to the concept for a future CP-Center in Lao PDR<sup>31</sup>

At the outset of the project, a clear concept needs to be developed (including mission statement, aim, strategy and structure). The evaluators have not in details examined the question of a future business model for the center to be established. As outlined above, in order to serve the purpose of strengthening CP in Lao PDR and achieve the expected socioeconomic impact, the future CP center will need to offer a multi-pronged set of services that can be divided into three main categories:

- Services provided on a commercial basis to enterprise clients (medium enterprises, foreign-invested enterprises). Revenues from those service should eventually at least cover direct cost such as salaries of consultants, testing material etc. and gradually generate enough revenues to contribute to overhead costs;
- Services provided to enterprises at subsidized rates (for small enterprises with a development objective): Revenues (if any) will in the best case contribute to covering direct cost. Core funding is needed to subsidize those services;
- Services in public interest (such as training, awareness raising, policy advice), which the CP center will provide free of charge (or at subsidized rates). Core funding is needed to cover most of the cost (except where donors/sponsors directly pay for such services).

It is therefore clear that the future CP-Centre will require continuous access to core funding (consisting of contributions by the GoL and funding from other sources, such as ODA, international NGOs, sponsoring etc). Due to budget constraints in the foreseeable future, contributions from the GoL (e.g. in form of basic salaries of staff and in-kind contributions, such as offices) are not likely to cover overhead costs and direct costs regarding to provision of service in public interest. This in particular if the quality of service provision is to be maintained, which requires inter alia competitive salaries, continuous training of experts, maintenance and amortization of appropriate equipment. The CP-center is therefore likely to continue to depend on donor resources or sponsoring far beyond the timeframe of a possible second phase.

A concept on *how to access outside funding* (besides and after UNIDO/SECO support) should be included in the business model. Outside resources may also exist in obtaining donor funding to implement projects. Capacity building in fund raising (nationally and internationally, including designing and writing of project proposals) should also be done (by an expert specialized in this field).

In order to allow for a sound financial planning and cost calculation, the new CP-center should adopt a financial/managerial accounting system suitable to its operations, not a project, right at the outset of operations. *This will also require input by an expert specialized in financial management*.

## 3. Horizontal issues (linkages)

<sup>&</sup>lt;sup>31</sup> Recommendations on financial/managerial accounting and fund raising capacities are also based on key findings in different evaluations/institutional assessments Daniel P. Keller has lead or participated in, including the Evaluation of the UNIDO Integrated Programme in Vietnam (2005), the Mid-Term Evaluation of the Regional Forestry Training Center in Bangkok, Thailand (RECOFTC), funded by the Governments of Sweden and Switzerland (2006), the Programme supporting Vietnamese Organizations in Socio-Economic Integration of Street Children funded by Terre des hommes Lausanne and the Government of Switzerland (2007), Institutional Assessment of the General Directorate for Standards, Metrology and Quality in Vietnam (conducted for UNIDO in 2006).

Linkages to other projects seem often difficult to materialize if links are not built into the design of all related projects. Coordination and linkages among projects need to be formalized (e.g. by means of cooperation agreements or MoUs). Specifically, UNIDO might explore the possibility of linkages and synergies with phase II of the STMQ project funded by SECO in Vietnam (namely in using specialists of STAMEQ trained under the project under a service contract). Areas of interest provided by STAMEQ might include Quality Standards, Labor Standards, Good Manufacturing Practices, Food Safety Standards, etc. Furthermore, UNIDO should continue drawing on resources of VNCPC on a contractual basis and (if a second phase for the CP-project in Cambodia is approved) continue sharing expert resources.

## 4. Monitoring and Reporting

Although not required by UN-standards, financial reporting should be improved by linking expenses according to budget lines to specific activities or outputs.

Quality of trainings and expert work should be systematically assessed (rather than just reporting on the number of trainings, participants and expert man days).

Indicators to measure impact of CP on enterprise level should be redefined in a way that they provide a meaningful picture on the performance of CP-work in terms of value added. For example in case studies, cost savings (in financial terms) should be related to total production cost and revenues, in order to allow for an assessment of how much productivity has improved. Instead of just reporting on the number of CP-options proposed/implemented, the saving potential of all options identified (in terms of resource and cost savings) could be related to savings effectively achieved by realized options.

Introducing a standardized system of performance indicators across all CP-centers supported by UNIDO would allow for a systematic benchmarking of performance.

The three main "critical assumptions" relating to the sustainability of a future CP-Center (a) GoL and other stakeholders' commitment as measured by continuing contributions (including financial), (b) progress in environmental legislation and its enforcement and (c) the development of a market for CP services should be regularly monitored and reported on the basis of indicators agreed between UNIDO, SECO and the GoL. This should form part of the project agreement for phase II.

## 5. Project Content

The evaluators recommend covering the following topics:

- The CP center supported by UNIDO should cover CP services, awareness raising (including among local and central GoL officials), policy advice to the GoL (including on implementation of international treaties) and training. At the same time exercising regulatory or law enforcement functions would be contrary to the spirit of the CP-methodology. Policy advice should mainly serve the purpose to create a regulatory environment that enables the application of CP-methods. The limited scope of this evaluation did not allow for assessing interest and institutional capacities of possible host organizations for a CP-Centre (except that the Lao National University is highly motivated to support, yet not interested in becoming the host institution).
- In regards to service provision to industry, it is recommended to focus on strengthening capacities in sectors most relevant to Lao PDR's economic development

(include processing of local agricultural products, furniture, handicraft, *and the service industry – namely hotel and tourism*).

- Continue using a comprehensive approach to improving product quality and productivity (CP+), including other tools to increase competitiveness;
- Gradually start requiring adequate cost participation of beneficiaries for consulting activities in order to ensure commitment and avoid market distortion. This in particular for services provided to foreign-invested enterprises;
- Training activities should continue to include universities, in order to increase the pool of local experts. In particular, we recommend that the CP center provides support in establishing a training curriculum *each* for technical students (engineering) and students of environmental science in Lao language and support ongoing "social environment awareness activities" of university volunteers.
- While infrastructure provision should clearly not be a main focus of the project, a budget for upgrading equipment that is directly needed for a CP center to fulfill its core functions (especially "dry equipment" to be used for measurements in factories) should be allocated. A needs assessment for such equipment should be conducted at the design stage of the project.
- Consider addressing the problem of access of enterprises to loans for financing CP options (e.g. through sharing experience in other countries, consider facilitating contacts with institutions/donors interested in financing Clean Technology, similar to the model used in Vietnam by the SECO-funded Green-Credit Trust Fund).

## 6. Sharing resources and internal know-how within UNIDO

UNIDO's Agro Branch and the Trade Capacity Branch should be given the possibility to look at the project proposal for phase II to give their opinion where they can be of help.

# B. Recommendations to GoL

- 1. Facilitate the establishment and operations of a CP-center with adequate financial and operational independence (in particular the ability to generate revenues, to manage its own budget, to enter into contractual agreements and to issue official VAT-invoices to customers). The host institution should be selected through a transparent process in close coordination with SECO and UNIDO. For transparency and good governance reasons, the host institution should also not at the same time fulfill the role of policy making and enforcement. We recommend approaching UNIDO for a presentation of successful role-models in other countries, which can then be adapted to the specific socio-economic, legal and political conditions.
- 2. Favorable consideration of a project proposal submitted by UNIDO that will be formulated along the lines of above recommendations.
- 3. Further strengthen the enforcement of environmental protection laws.

# C. Recommendations to the Donor

## 1. Non-cost extension of phase I

Provide non-cost extension of phase I until March 2009 in order to continue activities in line with outputs 2 - 4 (awareness raising, capacity building, and CP-demonstration projects). The next steering committee (phase I) should take a formal decision on further use of existing hardware.

# 2. Continue support through a second phase of the project

Continue support to a phase II of the project as soon as possible, with a *clear focus on institutional strengthening and technical capacity building of a CP center* plus *a gradual phase out strategy*. Phase out should also include assistance in identifying funding from other sources after SECO-support ends (see comments above on concept).

Formal committment of the GoL to establish or designate an existing institution with own legal personality and own budget as a CP center should be a pre-condition for further funding. In order to support the GoL with preparations of establishing a CP center, we recommend that the Steering Committee of phase I present to all stakeholders different options for the establishment of a CP center based on experience of a number of other countries with similar socio-economic conditions.

# D. Lessons learned

# 1. Sharing expert resources among institutions supported by UNIDO

The use of Vietnamese CP-specialists as experts for the project was not only cost efficient, but also adequate. Unlike most specialists from highly industrialized countries, Vietnamese experts were more familiar with the level of technological development in enterprises and able to provide more value added. Furthermore, this also allowed for capitalizing on capacity building efforts done under other UNIDO projects and strengthening the network between different CP-centers in the Mekong Region.

UNIDO should continue drawing on expert resources in institutions it provided support to. This might for instance also include using food safety or QMS specialists trained by projects under the TCB-branch for CP-centers and vice versa. In order to maintain transparency of fund use in ongoing projects and to encourage a commercial mind-set in those institutions, formal contractual agreements should be used where possible.

## 2. Use the same CTA for different projects in one region on part-time basis

Using the same CTA on a part-time basis for different projects in the same region resulted in significant economies of scale and scope. This is a good alternative to hiring a full time CTA for relatively small-scale projects in countries where partners still have limited institutional and/or technical capacities and significant capacity building and project management input is needed.

# Annex 1: List of Persons and Organizations met

Date/Time	Organization/Persons met		
May 4, Sunday	Briefing Meeting in Hanoi (Vietnam)		
12h00 – 14h00	Dr. Heinz Leuenberger, Director Energy and Cleaner Production Branch		
June 09, Monday	Attending CP-Seminar		
09h00-10h30	Meeting PMU (Mr. Verasack Chundara, NPC; Mr. Thongphet Phonsavath,		
091100-101130	Deputy NPC; Mr. Somphong Soulivanh, Director Industrial Environment		
	and Chemical Division, Lao Cleaner Production Programme)		
June 09, Monday			
11h00-12h00	<b>Lao National University</b> , Department of Mechanical Engineering, Faculty Engineering: Assoc. Prof. Korakan, Head of Energy Technology Division;		
111100-121100			
In a OO Man lan	Mr. Phangky Panekeo, Deputy Head Vocational Training Div.		
June 09, Monday	UNIDO Office in Vientiane		
13h30 – 14h30	Mr. Kheungkham Keonuchan, Head of UNIDO Operations		
June 09, Monday	Meeting National Experts: Mr. Boutsabong Thongsavath (Lao Digital TV);		
15h00 – 16h30	Mr. Bounleuam Sodakak, Lao National University		
June 10, Tuesday	Lao National University, Environment. Study and Development Centre		
08h30 - 10h00	Assoc. Prof. Souphap Khouangvichit, Director		
June 10, Tuesday	Swiss Agency for Development and Cooperation (SDC)		
10h30 – 11h30	Mr. Rémy Duiven, First Secretary Development and Cooperation		
June 10, Tuesday	Prime Minister's Office, Water Resources and Environment Administration,		
15h00 – 16h00	Environment Research Institute		
	Ms. Monemany Nhoybouakong, Director General		
June 11, Wednesday	SME Promotion and Development Office (SMEPDO), MoIC		
08h30 - 09h30	Mr. Manhohack Rasachack, Deputy Director General		
	Mr. Sayasith Khamphasith, Director Productivity Division		
June 11, Wednesday	Ministry of Foreign Affairs		
10h00 – 11h00	Mr. Latsami Keomany, DG of Economic Affairs		
June 11, Wednesday	Lao National Chamber of Industry and Commerce (LNCCI)		
13h30 – 15h00	Mr. Phouttasone Phomvisay, Chief of Trade, Investment and SMEs		
	Promotion Division		
June 11, Wednesday,	Savannahket Chamber of Commerce and Industry		
18h00 – 19h00	Ms. Songbandith Nhotmankhong, Board Member		
June 12, Thursday	Ministry of Industry and Commerce (MoIC), Dep. of Industry: Mr. Vang		
09h00 – 10h00	Phommasak, Director General; Mr. Soutchay Sisouvong, Deputy Director		
	General; Mr. Somphong Soulivanh, Director, NPD		
June 12, Thursday,	Visiting Export Garment Factory		
10h30 – 11h30	Ms. Varaporn Tonkla, Administrative Manager; Mr. Sombat Ngamcharoen,		
	Washing Manager; Mr. Bounthavy Choumaly, HR Manager		
June 12, Thursday,	Visiting UKs Printing Factory (silk-screen printing)		
13h30 – 15h30	Ms. Kingkeo Southannalangsy, Assistant Manager		
June 13, Friday,	Visiting Xangpeauk Noodle Factory (Chinese Noodels)		
08h00 – 09h30	Ms. Khouanchay Oudone, Owner; Mr. Visayadeth Amalathiphada,		
	Production Manager; Ms. Syanong Mouangthy, Quality Assurance		
June 13, Friday,	Ministry of Industry and Commerce (MoIC)		
10h00 – 11h00	H.E. Mr. Somboun Rasasombath, Vice-Minister		
June 13, Friday,	<b>De-briefing at PMU:</b> Present preliminary findings, conclusions and		
14h00 – 15h30	recommendations		
June 16, Monday	UNIDO Regional Office (Bangkok)		
13h30 – 14h30	Ms. Ayumi Fujino, Head of Office; Ms. Sooksiri Chamsuk, NPO		
July 7, Monday	Debriefing at UNIDO Headquarters in Vienna Descentation of proliminary findings, conclusions and recommendations		
L	Presentation of preliminary findings, conclusions and recommendations		

# **Annex 2: Reference Documents**

#### Lao PDR

## **Project Documents:**

- UNIDO/GoL/SECO: Project Document December 2003;
- Dr. Permod Kumar Gupta: Draft Project Document Phase II;

## Project reports/publication:

- Dr. Permod Kumar Gupta: Cleaner Production Promotion Activities, Presentation held to a Swiss press delegation in June 2008;
- Lao Cleaner Production Programme: Annual Reports 2005/2006/2007;
- Lao Cleaner Production Programme: Work plans, Indicators, Monitoring Reports 2005/2006/2007;
- UNIDO: Monthly financial report as of July 7, 2008 (last updated on 30.6.2008);
- Lao Cleaner Production Programme: Case studies established under the project (reviewed during field mission), two publications on file;
- Lao Cleaner Production Programme: Two sample presentations held by participating enterprises in the CP-workshop on 14.6.2008 in Vientiane;
- Lao Cleaner Production Programme: Summary of CP Results 2007;
- Lao Cleaner Production Programme: Mini-guide to Cleaner Production.
- Vientiane Times, June 12, 2008: Article "Cleaner production aims to boost industry growth".

## Other documents:

- Department of Development and Transition SECO: Strategy 2006, March 2002;
- UNIDO: UNIDO forging ahead, Milestones achieved 2006 2007;
- GoL: Decree on the Promotion and Development of Small and Medium Sized Enterprises (GoL, 2006). Provides legal basis for establishment of SMEPDO;
- GoL: Environmental Protection Law (1999) and Constitution;
- GoL: Strategic Plan on Governance, 2006 2010;
- GoL: National Environment Strategy 2020 and Action Plan 2006 2010;
- GoL/United Nations Country Team: United Nations Common Country Assessment (CCA), Vientiane, June 2006;
- GoL: National Biodiversity Strategy to 2020 and Action Plan to 2010 (partially established with assistance of the Swiss Agency for Development and Cooperation, SDC);
- The World Bank Office in Vientiane: Lao PDR Economic Monitor, April 2008;
- Brochure Small and Medium Enterprise Promotion and Development Office (SMEPDO);
- APO: Brochure;

- APO: Report by Expert Mission to Lao, Review of Green Productivity Demonstration Project (GPDP), Proposal in Vientiane Lao PDR;
- GoL: The Ninth round Table Meeting 28-29 November 2006, Vientiane. Recent Developments, Annual Plans and Budget, Aid Effectiveness, Vientiane, Nov 2006;
- Lao National Chamber of Commerce & Industry: Directory 2008 2009;
- UNIDO: Integrated Programme of Cooperation between the Lao PDR and UNIDO, Phase II, 2004 2008, November 19, 2004;

# Cambodia<sup>32</sup>

### **Project Documents:**

- UNIDO/GoC/SECO: Project Document December 2003;
- Dr. Permod Kumar Gupta: Draft Project Document Phase II;

#### **Project Reports:**

- Cambodia Cleaner Production Programme: Annual Reports 2005/2006/2007;
- Cambodia Cleaner Production Programme: Various Fact sheets and promotion material published under the project;
- Cambodia Cleaner Production Programme: Work plans, Indicators, Monitoring Reports 2005/2006/2007;
- Cambodia Cleaner Production Programme: Case studies established under the project (reviewed during field mission), one publication (Food Processing) on file;
- UNIDO: Monthly financial report as of July 7, 2008 (last updated on 30.6.2008).

## Other Documents:

- Asian Development Bank: Hang Chuon Naron, Recent Macroeconomic and Financial Sector Developments, February 2008;
- Craft Network Cambodia (an initiative established by the International Finance Corporation, IFC): brochure on activities.

<sup>&</sup>lt;sup>32</sup> Selected information of those reference documents for the evaluation of the UNIDO/SECO Project "Promotion of Industrial Cleaner Production in the Kingdom of Cambodia (mission from 16.6.2008 – 20.6.2008) was also used as a basis to establish this report.

# Annex 3: Terms of Reference

## Terms of Reference Independent Terminal Evaluation of the UNIDO Project(s):

## US/LAO/03/049 PROMOTION OF CLEANER INDUSTRIAL PRODUCTION IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC

## US/CMB/03/048 PROMOTION OF CLEANER INDUSTRIAL PRODUCTION IN THE KINGDOM OF CAMBODIA

## I. BACKGROUND

The projects aim to support Lao PDR's and Cambodia's efforts to achieve the Millennium Development Goals, especially those related to poverty eradication and environmental sustainability that were adopted at the United Nations Millennium Summit in 2000. This support is offered in the context of UNIDO's CP Strategy, which is based on a holistic and sectoral approach.

The project assists the Governments of both countries to improve the productivity and competitiveness of its growing industry, as well as improve its access to international and more local markets, through the application by export-oriented enterprises of cleaner production techniques and technology. The support was planned for a period of four years, during which time activities will focus on building national capacity in cleaner production through awareness-raising, conduction of in-plant demonstrations sectors within the food processing sectors.

All project activities are undertaken by national staff under the supervision of UNIDO, with the assistance of experts from the Viet Nam Cleaner Production Centre as well as other international and UNIDO experts. By the end of the project, it is expected that many export-oriented enterprises will have increased their productivity and competitiveness as well as their environmental performance through greater resource efficiency; because of this, they will be in a position to obtain greater access to international markets. Furthermore, national capacity will be in place to ensure replication of cleaner production practices and methods, and to ensure that cleaner production concepts are also applied to new industrial investments.

## OBJECTIVES

The immediate objective of the projects is to increase the adoption of cleaner production concepts and practices in manufacturing enterprises, especially those that are export-oriented.

## **II. BUDGET INFORMATION**

Project No.	Total Allotment (USD)	Total Expenditure (USD)	% Total Implemented
US/LAO/03/049	838,000	686,014	
US/CMB/03/048	848,000	720,038	
Total	1,686, 000	1,406,052	83%

Source and date of information: UNIDO InfoBase, February 2008

## III. PURPOSE

The purpose of the independent **terminal** evaluation is to enable the Governments, UNIDO and donors to:

- (a) Assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact and sustainability.
- (b) Assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities.
- (c) Provide an analytical basis and recommendations for the focus and design for the possible continuation of the project in a next phase (if applicable).
- (d) Draw lessons of wider application for the replication of the experience gained in this project in other projects/countries.

## **IV. METHODOLOGY**

The evaluation is conducted in compliance with UNIDO evaluation policy as an Independent **Terminal** Evaluation.

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

The evaluation will be carried out through analyses of various sources of information including desk analysis, survey data, interviews with counterparts, beneficiaries, partner agencies, donor representatives, programme managers and through the cross-validation of data.

The thorough analysis of the relevant facts includes the review of inputs used, activities carried out, management mechanisms applied (in particular planning, monitoring and self assessment) and project specific framework conditions (in particular policy environment, counterpart capacities, related initiatives of Government, donors and the private sector). The analysis of these facts is essential part of the evaluation work and provides the evidence base for the assessment of the project.

While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties. It will address the following issues:

## Ownership and relevance

The extent to which:

- (i) The counterpart(s) has (have) been appropriately involved and are actively supporting the implementation of the project approach.
- (ii) The outputs as formulated in the project document are still necessary and sufficient to achieve the expected outcomes and objectives.
- (iii) The national management and counterparts were able and willing, to contribute (in kind and/or cash) to project implementation and in taking an active part in funds mobilization.

### Efficiency of implementation

The extent to which:

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

#### Effectiveness

Assessment of:

- (i) The relevance of the outputs produced and how the target beneficiaries use the outputs.
- (ii) The outcomes, which have been or are likely to be realized through utilization of outputs.

#### Impact and sustainability

(i) Identify what long term developmental changes (economic, environmental, social) have occurred or are likely to occur as a result of the intervention and how far they are sustainable.

#### Project design

The extent to which:

- (i) project design reflected Government/counterpart needs
- (ii) project design was coherent and facilitated achievement of objectives

### Project coordination and management

The extent to which:

- (i) The national management and overall field coordination mechanisms of the project have been efficient and effective.
- (ii) The UNIDO HQ based management, coordination, quality control and technical inputs have been efficient and effective.

- (iii) Monitoring and self-evaluation was carried out effectively, based on indicators for outputs, outcomes and objectives and using that information for project steering and adaptive management.
- (iv) Coordination envisaged with any other development cooperation programmes in the country has been realized and benefits achieved.
- (v) Synergy benefits can be found in relation to other UNIDO activities in the country.

## Recommendations for next phase (if applicable)

The extent to which proposals put forth by the project team for the next phase:

- (i) are relevant to Government priorities in the future;
- (ii) compatible with currently available implementation capacities;
- (iii) are based on logically valid means-ends relationships and take into consideration factors to mitigate likely risks.

## V. EVALUATION TEAM

The evaluation team will be composed of an international evaluation consultant and one national evaluation consultant in each country (to be endorsed by UNIDO and the respective Government).

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

All consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions attached to these terms of reference.

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

UNIDO Field Office in Vietnam will support the evaluation team. Donor representatives from the bilateral donor representations will be briefed and debriefed.

## TIMING

The evaluation is scheduled to take place in the first semester of 2008. The field mission for the evaluation is planned for June 2008. After the field mission, the international evaluation consultant will come to UNIDO HQ for debriefing. The final version of the evaluation report will be submitted 6-8 weeks after the debriefing at the latest.

## REPORTING

A separate evaluation report will be prepared for each of the two projects. The evaluation reports shall follow the structure given in annex 1. Alternatively, the format used in for country reports in the ongoing CP Programme evaluation can be applied. Reporting language will be **English**.

**Review of the Draft Reports:** Draft reports submitted to UNIDO Evaluation Group are shared with the corresponding Programme or Project Officer for initial review and consultation. They may provide feedback on any errors of fact and may highlight the significance of such

errors in any conclusions. The consultation also seeks agreement on the findings and recommendations. The evaluators will take the comments into consideration in preparing the final version of the report.

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