Ministry for Foreign Affairs of Finland

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ENVIRONMENTAL MANAGEMENT SUPPORT PROGRAMME IN LAO PDR, PHASE I

Final Evaluation Report

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Final Evaluation Report

Ministry for Foreign Affairs of Finland

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
ASEAN	Association of South East Asian Nations
AusAid	Australian Agency for International Development
CEP	Core Environment Program (ADB)
CEP	Core Environment Programme
DESIA	Department of Environmental and Social Impact Assessment
DONRE	Department of Natural Resources and Environment
EIA	Environmental Impact Assessment
EMSP	Environmental Management Support Programme
EPF	Environmental Protection Fund
EPL	Environmental Protection Law
EUR	Euro
GDP	Gross Domestic Product
GIS	Geographical Information System
GIZ	German International Cooperation
GOF	Government of Finland
GOL	Government of Lao PDR
IEE	Initial Environmental Examination
IMA	Independent Monitoring Agency
ISO	International Organization for Standardization
ISP	Integrated Spatial Planning
LENS	Lao Environment and Social Project
LFA	Logical Framework Approach
LUP	Land Use Planning
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MFA	Ministry for Foreign Affairs
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MTR	Mid-Term Review
NEAP	National Environnemental Action Plan (NEAP)
NGO	Non-Government Organisation
NREI	Natural Resources and Environment Institute
PDR	People's Democratic Republic
PEAP	Provincial Environmental Action Plan (PEAP)
PEI	Poverty Environment Initiative
POIC	Provincial Department of Industry and Commerce

PONRE	Provincial Department of Natural Resources and Environment
PWREOs	Provincial Water Resources and Environment Office
SEA	Strategic Environmental Assessment
SEM	Strengthening Environmental Management (Programme)
SubCAW	Sub Committee for the Advancement of Women
SUFORD	Sustainable Forestry for Rural Development
TA	Technical Assistance
USD	United States Dollar
WB	World Bank
WREA	Water Resources and Environment Authority

Interviewing a resettled community

1 EXECUTIVE SUMMARY

Background

The Environmental Management Support Programme (EMSP) commenced in October 2010. It is a continuation of SIDA's two-phased Strengthening Environmental Management (SEM) programme. The total budget of the programme (Oct 2010-Sep 2014) was EUR 9,960,000, of which EUR 460 000 was to be contributed by the Government of Laos (GOL) (EUR 162 000 in cash, the rest as in kind contribution), and EUR 9,500,000 by the Government of Finland (GOF). The Programme has been granted a budget neutral extension of one year until September 2015. Initially the programme was implemented by the Water Resources and Environment Agency (WREA), but after the first year of implementation it was merged into the new Ministry of Natural Resources and Environment (MONRE).

The present report concerns the Final evaluation of Phase I of the EMSP, whose overall objective is: "to prevent unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans implemented in Lao PDR".

As per the Terms of Reference (TOR), the main purpose of the Evaluation is to provide a better understanding on what has been achieved by the Project, and what can be learnt from it. Initially it was planned that, the findings of the evaluation would be taken into account in the draft programme document for the second phase of EMSP. However, during the kick-off meeting, the Ministry for Foreign Affairs (MFA) informed that the EMSP will not be continued, this was due to the policy decision to freeze funding in the Mekong region. The MFA decision partially redirected the focus of the Final Evaluation so that more emphasis is given to the achievements, short term recommendations for the Programme exit and longer term recommendations on future support in the environment sector in Lao PDR, as well as the main lessons learnt.

The evaluation methodology follows the EOCD/DAC evaluation criteria. The evaluation mission took place in three main phases; i) Inception Phase, ii) Field Phase and iii) Reporting Phase.

Programme Assessment

The goals and objectives of the EMSP is well in conformity with the Finnish development policy, as well as in well in conformity with the Seventh Five-Year National Socio-Economic Development Plan (2011-2015.) of the government of Laos. The programme is well embedded within the Government of Laos administrative structures and processes in the MONRE. The Programme have effectively achieved most of the planned Programme outcomes as revised after the 2012 Mid Term Review. The Evaluation Team considers that the Project remains highly relevant to the present and future needs of the Government of Lao PDR in supporting environmental management. MONRE has kept the EMSP **relevant** by accepting support to the activities relevant to its direct mandate, and which MONRE and its departments already have on their agenda but which needed further capacity development. By directing the support towards current issues within the Ministry, the relevance has been maintained through flexibility and ability to adjust with changes to the external conditions

Effectiveness: The Programme has produced important achievements under each component ranging from decree and guideline drafts to strengthening the compliance monitoring and inspection functions of the Ministry of Natural Resources and Environment, the Ministry of Investment and Commerce, application of Standard Social and Environmental Obligations as part of Concession Agreements, as well as systemizing the water quality monitoring. The main impacts of the environmental sector support which EMSP is part of, are associated with the successful systematic and long term

empowerment of WREA and MONRE in full filling its legal mandates especially in relation to EIA and IEE regulations and compliance monitoring.

The ability to deliver the planned results through a series of activities chosen by the programme management, has improved over the timespan of the Programme.

Component 1 focused on providing the legal basis for Strategic Environmental Assessment including guidelines and some field testing. The first version has been completed but MONRE has not, with the available programme support, been able to make the final adjustments that would ensure political, institutional and technical sustainability. As the support to introduction of Strategic Environmental Assessment has already been going on for a very long time, it is questionable whether even a second phase would be able to ensure the internal dedication that is required.

Component 2 is supporting solutions to present day's work problems for the Department of Environmental and Social Impact Assessment staff. The central and provincial staff are still technically challenged when reviewing environmental assessments (EIAs, IEEs) for the advanced projects, or for the projects which have complex environmental or social impacts. DESIA has set time limits for the stipulated processing time. These targets are increasingly met and the consequential Environmental Compliance Certificates (ECC) are mostly issued in a timely and technically correct manner. Introduction of Standard Environmental and Social Obligations (SESO) into concession agreements is now a standard. Data bases for EIAs are in place and are in principle operational but the actual registration of assessments in the systems does not reflect the necessary priority or institutional capacity allocated to this task. Plans and systems for project monitoring are in place but the systems applied are far beyond the capacity – human as well as financial – to be carried out to its full extent.

Component 3 was refocused in 2012 to include support to further development and introduction of the integrated spatial planning originally introduced by SEM II. This methodology has in many quarters become the face of the programme and is very popular at provincial and district level for recording natural resources. MONRE has not yet been able to introduce the methodology as a standard and it is not equally supported by all government agencies.

EMSP support has also been rendered to establishment of a national water quality monitoring system with regular sampling at 116 stations. Actual sampling is still in its infancy and has suffered from periodic lack of operational funds. There has under this activity been an option for popular involvement as sampling is carried out together with the participation of local communities, but the opportunity has somehow not been taken fully as the communities do not get the results in return.

Component 4: Most government agencies have by now introduced web based communication between themselves as well as the tools for communicating with the public. MONRE and 16 district level Departments of Natural Resources and Environment have received EMSP support for its web-pages but EMSP has also established its own web-site. This may in some way be seen as counter-productive but it has enabled MONRE – through the Technical Assistance at EMSP - to publish reports and other information, which would have been difficult to publish at a pure government portal. The web pages are well designed and user friendly at a professional level. However, the web pages needs updating to include relevant information for the communities.

MONRE has also received EMSP support to the establishment of an Environmental Data Management System. This database system is operational, operators are trained and data entry is ongoing. This system development is in line with the support given to the installation of local area networks (LAN) in MONRE.

Component 5: Extensive EMSP support has been rendered to the establishment of a central National Environmental Laboratory within the National Environmental Research Institute (NERI) plus three regional laboratories, mainly for support to provincial water sampling and field based analysis. The Evaluation Mission has its reservations about NERI's strategies for semi commercial, ISO 17025 certified laboratory centrally. High quality equipment has been procured and staff have been trained and are centrally working effectively under the guidance of a highly motivated Technical Assistance advisor. At regional level, the laboratory in Luang Prabang is in disarray and not functioning while the one in Pakse is well established but with no dedicated staff even though training has been given.

Several important steps towards ISO certification and of commercial contracts for the national level laboratory have been taken but it is unclear if the targets can be maintained.

Efficiency in terms of direct expenses been entirely in the hands of the national management, who have applied all appropriate safeguards to maintain a high level of efficiency. The Technical Assistance mainly has a responsibility in activities and methodology selection, which again affects efficiency. The quarterly report in the provinces visited point out the challenges in achieving timely disbursement of funds. Lack of funds has caused delays and inability to reach targets, e.g. inability to collect the full set of samples. Accounting is one of the means of managing efficiency. Before 2012,there were concerns regarding accounting capacity within MONRE, thereafter the task of accounting was successfully transferred to the Technical Assistance.

Impact: The project objective is the prevention of unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans implemented in Lao PDR by strengthening WREA (MONRE) and the provincial environmental authorities to become more sustainable, qualified, interactive, and capable of using updated tools and methods. EMSP has succeeded to establish and deliver relevant systems and provided the capacity building to staff, the programme has limited activities targeting local levels of governance (districts and villages) and people affected by development. The influence that EMSP has had on affected peoples' income or health or access to environmental administration remains unclear owing to lack of baselines or benchmarks regarding health and socio-economic data.

Sustainability: The termination of MFA support to the Environmental sector in Laos was unexpected. There is a need to identify other donors to ensure that the EMSP results are not lost. There is a positive attitude to budget increases but weather this is sufficient remain to be seen. The level of local ownership is high. The activities are actual activities of the Ministry, and the results are approved by local authorities, who also are going to implement them. The Evaluation team considers the EIA, IEE, ECC, ISP, SESO to be sustainable, i.e. they will in time be fully integrated into Laotian environmental management. Sustainability of the Strategic Environmental Assessment and the development of the national or regional laboratories will depend on MONRE dedication to these activities.

Cross Cutting Objectives of the Finnish Development policy are; gender equality, reduction of inequality, and climate sustainability. These objectives are meant to penetrate all planning and decision making and to be mainstreamed as an integral part of all the Finnish supported development cooperation interventions. Although the programme has not strategically focused on Human Rights Based approach by its design, the programme supported processes of e.g. SEA and EIA in their nature imbed principles of peoples' equal right to participate to development projects and processes that will have an effect on their natural, social and/ or economic environments. Similarly, the processes include the right and access to information and justified compensation on any negative impact on their lives and environment. Objectives such as gender, ethnicity and vulnerable groups are less prominent but have been taken into account when analysing internal target groups in training and other institutional capacity building events. Climate sustainability has occupied a very small space in the activities and results supported through the EMSP.

Networking. The Finnish support is well known within the narrow circles of MONRE centrally and in the provinces, but both, MONRE's activities and the Finnish support are inadequately known or appreciated outside these circles. The EMSP related staff have good linkages to most environmentally oriented programmes, which have taken EMSP results into consideration although they may not have adopted them partially of fully. The EMSP Technical Assistance staff have also ensured good relation to the large development projects where for instance the Programme approach was mentioned positively by the Hongsa Mine Senior staff.

Recommendations

The recommendations of the Evaluation Mission are divided into two parts; recommendations to the programme management concerning the exit of Finnish support and the recommendations particularly to the Government of Lao PDR on how to continue without Finnish support. The exit strategy concerns dissemination of results, consolidation and a final push for sustainability by demonstration of the potentials of the results. The long term recommendations to the Government of Lao PDR concern continued donor support through existing programmes and general simplification of approaches.

Exit Strategy. The Programme Management is recommended to establish an exit strategy for all EMSP supported activities. The exit strategy shall focus on dissemination, consolidation and sustainability, particularly institutional sustainability. The final evaluation includes a number of pointers for the Programme management to consider. The exit has been made easier as there is no handing over of responsibility and no closure of activities as the ownership is already with MONRE and the activities are ongoing and recurrent activities within MONRE's mandate. Exit just means exit of Technical Assistance and external funding from Finland.

In summary, Technical Assistance should in the remaining period not attempt to finalise issues that already have taken too long time to solve. This refers to any form of systems development (SEA processes, data base development, ISP process improvement), legal definition (decrees, guidelines), and provincial environmental action plans. Instead, Technical Assistance should ensure results are provided in cases where such processes are implemented, e.g. provision of ISP related maps, a simple demonstration of a full EIA application, data entry into data bases, synchronization of data bases.

The Technical Assistance should use the remaining time to demonstrate what commonly is meant by people's participation in planning on selected SEA, ISP or PEAP activities. This could be done through disclosure events or hearing processes.

All results must be disseminated thoroughly. The Programme needs to make further promotion of itself among agencies outside as well as inside MONRE and to all donors operating in this field. In this context, the Programme results must physically or virtually be deposited in the correct libraries and the EMSP website transferred to MONRE.

In particular, for the component 5, the environmental laboratory, the programme management and the Technical Assistance are advised to critically review certification plans, business plans, scope of services, and staff development/retention. The Evaluation team also recommends a critical consideration of abandoning regional laboratories that still have not been properly established and that MONRE considers transfer of equipment from these laboratories to e.g. the laboratory at the National University of Laos.

Long Term Recommendations

The long term recommendations to the Government of Lao PDR concern its commitments to continue environmental management activities and mandate by building on the results achieved with EMSP support. This work would benefit from continued external support, both technically and financially. Hence the Government is encouraged to firstly assess which existing projects or programmes can

adopt the activities previously supported by EMSP. Secondly, donors should be approached to ensure support in the period it takes before the Government can sustain the results. Donor representatives from the WB, the German Embassy, the UN system have already expressed positive attitudes towards increasing their support to MONRE.

The Evaluation team recommends the Government to simplify approaches to better suit realistically the human and organisational capacities of its Departments. In this context, career planning for individual staff members should be included in institutional arrangements to ensure staff stability. While simplifying scope and organisational requirements for e.g. Strategic Environmental Assessment, EIA and IEE, the Government should place emphasis on relevant issues such as cumulative impacts, good governance, and other cross cutting objectives.

The recommendations emphasize the need for demonstrating results in the field in order to increase public awareness and to gain public support. The need for improved inter-department cooperation and data sharing, merging of data bases and dissemination of results in ways appropriate to different target groups is equally emphasized.

Lessons Learnt

Five major lessons have been drawn from the design of the EMSP and the implications of these designs on implementation and achievement rates.

Firstly the level of national ownership and drive in the programme has been significant and has been the basis for maintaining relevance and direction. *Secondly*, the level of flexibility within keeping the Programme direction by all parties, i.e. the Government of Lao PDR, the Government of Finland and the Technical Assistance may be ascribed a large part of the success in maintaining relevance. *Thirdly*, this programme has clearly demonstrated the necessity of ensuring staff stability and the risks posed by temporary staff or frequent staff transfers. *Fourthly*, The Programme, and thus also MONRE would have benefitted if there had been a minimum of tangible field and community linked results and consequential enforcement to back up other results. *Fifthly* and last, to ensure sustainability, popular support is necessary. The present programme has not had sufficient public participation elements to ensure this.

2 INTRODUCTION

2.1 Background, scope and purpose of the final evaluation

2.1.1 Acknowledgments

The Evaluation Team wishes to express its sincere appreciation of the assistance provided to it by the Government of Lao PDR and involved institutions as well as the Embassies of Finland in Bangkok and Hanoi together with the Coordinating Office in Vientiane. We are especially indebted for the excellent assistance in arranging the visit schedule and during the field trip, and we would like to thank everyone met during the mission for sharing their knowledge, experience and views with the team.

2.2 Methodology

2.2.1 Inception and Desk Study Phase

The evaluation team was provided with key documents on planning and progress, which were used for obtaining necessary understanding of the context and issues of the Programme before arriving in Laos. This enabled the team to further develop their approach, particularly in relation to the evaluation questions and institutional processes to be addressed.

An Inception Report was submitted to the Ministry for Foreign Affairs of Finland before the mission left for Laos.

2.2.2 Field Phase

The visit to Lao PDR was divided into three sub-phases, each of one week's duration. During the first week, the team concentrated on Central Government agencies to learn how the programme was embedded into Laos policy, administrative processes and governance. The second week was dedicated to visit provinces and districts in the North as well as the South – the team was divided into two sub-teams – to learn how programme results were being applied and to what degree the programme was addressing issues of local importance.

The sites for visits were selected based on the Terms of Reference requirement to cover areas that had been in the programme's focus as well as areas, which had not. In addition, it had been proposed during the Inception Kick-off meeting that the team should also visit one or two mega projects, which had been subjected to Environmental and Social Impact Assessment procedures.

Champassak and Luang Prabang were selected as representatives for initial focal programme areas while Oudomxai and Luang Namtha represented areas that had become in focus at a later stage.

Attapeu was selected as non-focal province during the Environmental Management Support Programme. While Attapeu had substantial support during the SEM II phase including ISP creation, only 3 activities were reported considered relevant for the Programme under provincial and district levels of the Department of Natural Resources and Environment in 2013-2014 (water quality monitoring, inspection of plantation / factory and waste management guidelines). Important for the selection of provinces were the results of the key activities such ISP usage, provincial laboratories, the water quality monitoring, EIA/IEE compliance monitoring and how districts and villages had been engaged.

The Xayabouri Mekong dam and the Hongsa Power Plant/Lignite Mine were selected as representatives of mega projects. The team also visited resettlements from these projects.

Figure **Error! No text of specified style in document.**-1 Hongsa Power Plant

In Attapeu, the evaluation team saw various projects such as rubber plantations, sand mining, agro-industry and the new airport, however, without being in a position to discuss further with the developers or the affected communities. A visit to XeSet 3 hydropower plant in Champassak, however, provided for a meeting with the developer and the affected communities with openness and transparency.

A village in Luang Namtha was consulted as the community was actively engaged in river management through fisheries regulation. The Department of Natural Resources and Environment was visited at provincial and district levels for interviews of activities undertaken. The provincial laboratories in Luang Prabang and Champassak were also visited by the team.

During the third week in Laos, the team concentrated on management and coordination issues by meeting other donors and projects as well as spending time with the Programme Management, staff and advisors before briefing the Ministry of Natural Resources and Environment about the preliminary findings.

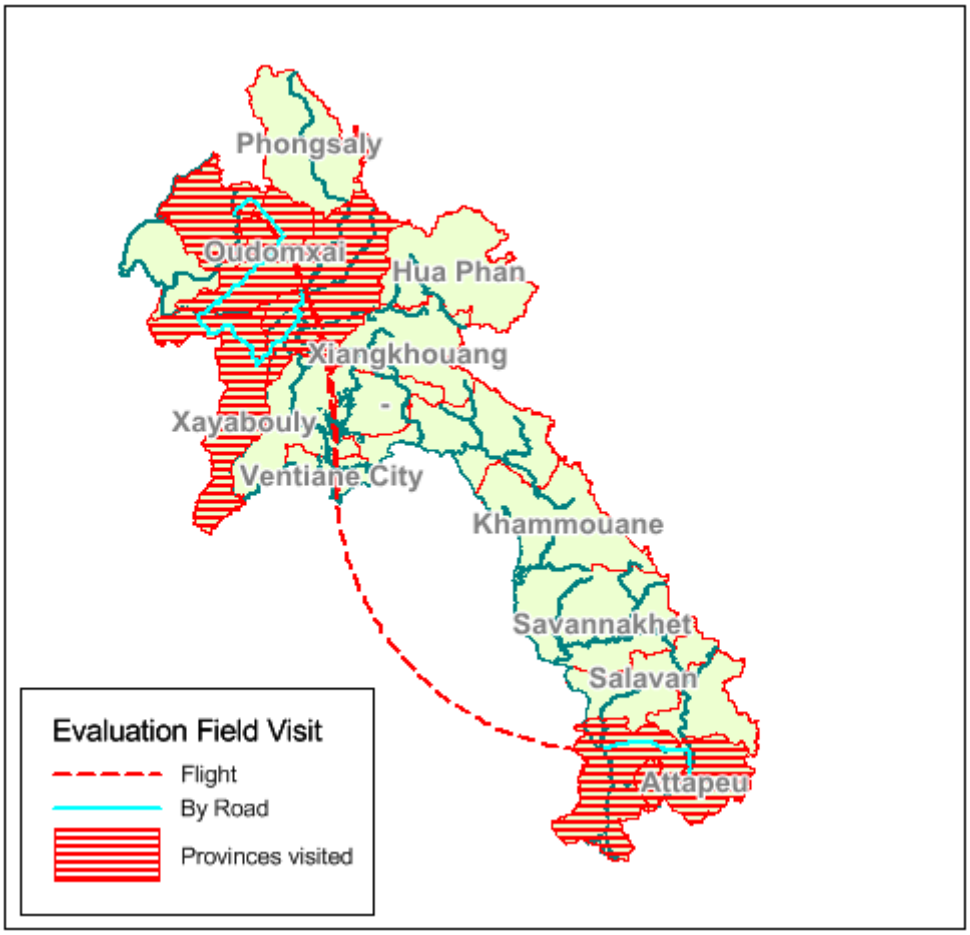


Figure **Error! No text of specified style in document.**-2 Field visits

The Evaluation team used both secondary and primary data sources during the Field Phase. Analysis of project related documentation from the relevant stakeholders as well as focus group discussions and semi-structured interviews were applied. Adhering to the participatory approach, most relevant stakeholders identified were consulted comprising both duty bearers at central and district levels and rights holders at community level. Each Output was assessed and subsequently recommendations provided based on the secondary and primary data collected.

Preliminary Findings and conclusions based on the stakeholder consultations at all levels including the desk review were presented and comments were recorded in the main stakeholders meeting that took place in 26th March.

2.2.3 Reporting Phase

Final analysis of gathered data was done during the reporting phase and the Draft Final Evaluation Report submitted for stakeholder comments through MFA on April 24th. Stakeholder comments will be taken into consideration in the final evaluation report.

2.3 Focus

As all programme activities have been fully based within the Ministry of Natural Resources and Environment, and because impacts "spill over" from one activity to the next, it is not always possible to clearly distinguish between "Programme activities/impact" and the general environmental

management procedures in Lao. The present evaluation therefore takes a broad and holistic view on the Programme and the environmental management in Laos. Topics are described, which may not be directly credited to the programme, but which have been or could have been influenced by the existence of the Programme within the Ministry.

2.4 Evaluation constraints

The evaluation mission was positively facilitated by several parties, both during planning and implementation. Vehicles and drivers were provided by the programme both in Vientiane and for the field visits.

A large amount of background information was provided to the team during the Inception Phase and during interviews. However, some key documentation proved difficult to locate and could be delivered to the team in Laotian language only at a very late stage after the field visits. This did to some degree hamper gaining a broad understanding of the programme processes and achievements including the reasons underlying the set geographical scope and the selected interventions, and the identification of beneficiaries (Project Document vs. practice).

Similarly, it prevented any close assessments between the results indicated by the supporting materials received from the TA team in central level against the results gained in the provinces. Eventually, all requested material was received at a stage that left very limited time for the first comprehensive draft report submission.

Government officials, i.e. the national Programme Management, accompanied the evaluation mission which was split into two sub-teams to the provinces and participated in all meetings at local level. While these officials to a great extent facilitated a successful schedule and did not in any way directly interfere with the team's role as an independent entity, it is not clear whether their mere presence had impact on the outcome of the interviews.

While the evaluation team that was concentrating on the northern provinces had access to all parties including project developers, affected communities and communities implementing environmental management on their own, such free access to field verification was not fully available to the evaluation team concentrating on the southern province.

3 CONTEXT OF THE PROGRAMME

The Lao PDR is a land-locked country with a population of some 7 million people. It has achieved impressive economic growth over the last years much, largely on the back of export-oriented policies based on the exploitation of natural resources such as mining, timber, rubber and hydropower. According to the National Assembly, in 2013 the projected GDP growth was 8.3 percent and GDP per capita reached US$1,460. GNP more than doubled from 2000 to 2008. This growth has resulted in poverty reduction: the official proportion of poor people fell from 46 percent in 1992 to 27.6 percent in 2008 (however, 33.9 % are still estimated to live with less than USD 1.25 per day). Lao PDR has also made steady progress in raising overall human development and is on track to achieve half of its Millennium Development Goals (MDGs) of halving extreme poverty by 2015.

However, inequalities are on the rise and there are widening gaps between rich and poor, women and men, ethnic groups, and residents of different regions of the country particularly among ethnic groups living in remote, mountainous and forested areas. Lao PDR has 49 recognised ethnic groups in total.

Despite of its growth and progress, Lao PDR still faces major vulnerabilities and challenges: more than 70% of the population still lives from subsistence farming and inequalities are growing. Much of the growth is not redistributed or reinvested in the country and currently FDI have limited broad gains in

the domestic economy. Furthermore, Lao practices of its natural resource exploitation face a real sustainability challenge, while the economy is exposed to volatile commodity prices.

Laos aspires to graduate from its Least Developed Country (LDC) status by 2020 and to become a 'Rule of Law' state with national legislation and enforcement progressively aligned with international legal obligations, including universal human rights standards. The Government attaches high importance to its membership within ASEAN. Lao PDR boasts good development results, but with no signs of willingness for political reform.

The key policy framework is the Seventh Five-Year National Socio-Economic Development Plan (NSEDP) (2011-2015). It identifies seven 'directions' to respond to the above challenges: National economy; Rural development and poverty eradication; Educational reforms and human resource development; Better public administration, rule of law, fighting corruption; National defence; Increasing labour skills and; Industrialization and modernization. Environmental concerns have been incorporated in the National Socio-Economic Development Plans since the 6th such plan. The challenges particularly mentioned have been

- Improving governance;
- Human resources development in the environmental field;
- Transparent management of natural resources; and
- Benefit sharing.

Lao PDR grows on the back of its natural resources and needs to sustain them for further prosperity. Lao PDR's forests cover some 40.3% of the total land area, down from 70% in the 1940's. The natural capital and ecosystems in Laos can be threatened by developments applying unsustainable practices including agricultural expansion, as well as land concessions for economic purposes like hydropower development, mining and plantation. Illicit practices are an additional challenge, illegal logging being a prime example. Forest loss and degradation also lead to high levels of greenhouse gas emissions.

A key development challenge is to strive for improved governance based on rights, as well as manage the growth and investments in a way that these do not place an unsustainable burden on the country's precious natural resources and threaten inequitable human development.

4 THE ENVIRONMENTAL MANAGEMENT SUPPORT PROGRAMME

The Environmental Management Support Programme, which commenced in October 2010, is a continuation of SIDA's two-phased Strengthening Environmental Management (SEM) programme. The total budget of the programme (Oct 2010-Sep 2014) was EUR 9,960,000, of which EUR 460 000 was to be contributed by the Government of Laos (GOL) (EUR 162 000 in cash, the rest as in kind contribution), and EUR 9,500,000 by the Government of Finland (GOF).

The Programme has later been extended by one year, i.e. until September 2015, at no additional costs.

Comparative to MFA Finland's other programmes in the region; a special characteristic of the programme is that in addition to Technical Assistance (EUR 5.2 Million), Finland provides on-budget financial assistance for programme management and running cost through the Ministry of Finance (EUR 4.3 Million). This financial arrangement is adopted from the SEM programme.

The programme started with WREA as the main implementing agency, but later it merged into the new Ministry of Natural Resources and Environment (MONRE) after only the first year of implementation. This led to serious delays and necessary changes due to the un-clarities on mandates and weak

capacity of the newly formed ministry. The TA team was given more responsibilities on management as MONRE was still working out its structures, responsibilities of different departments and administrative capacity.

The Overall Objective of EMSP as defined in the Project Document is:

> *"To prevent unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans implemented in Lao PDR.*
>
> The main programme purpose is *to strengthen WREA [currently MONRE] and the provincial environmental authorities to become more sustainable, qualified, interactive, and capable of using updated tools and methods in ensuring*:
>
> a) *That environmental aspects are merged into national strategic plans and that WREA's [currently MONRE's]role in this is recognized by Ministry of Planning and Investment and other concerned line ministries (Component 1)*
> b) *That the social and environmental impacts of major mining, hydropower, industrial and infrastructure projects are properly regulated and monitored by WREA and PWREOs [currently MONRE and Provincial Department of Natural Resources and Environment] (Components 2, 3 and 5)*
> c) *Delivery of relevant environmental messages and information services to WREA partners and stakeholders (Component 4)*
> d) *Provision of environmental laboratory services (Component 5)*
> e) *Financial sustainability (Component 2 and 5)"*

The EMSP is composed of six components, which in the 2010 project Document were defined as:

> Component 1: Integrating environmental issues into strategic planning
>
> Component 2: Environmental permitting, monitoring and enforcement
>
> Component 3: Strengthening of environmental management at the provincial level
>
> Component 4: Communication and information services
>
> Component 5: Environmental laboratory services
>
> Component 6: Programme Management

The same six components were later – 2012 – redefined as

> Component 1: DEQP - Department of Environmental Quality Promotion: Building capacity for SEA and NEAP
>
> Component 2: Department of Environmental and Social Impact Assessment: Building capacity in licensing and inspection
>
> Component 3: Provincial Departments of Natural Resources and Environment: Strengthening environmental management at the provincial level including new ISP activities
>
> Component 4: DEQP and Natural Resources and Environment Data Information Centre: Capacity building for high quality information services

Component 5: NREI: The Natural Resources and Environment Institute: Environmental laboratory services

Component 6: Programme Management

The new definition of the components and their sub-components/results/activities made the project more specific and targeted in its approach. The scope was made somewhat narrower, in an effort to maintain the programme at a realistic and achievable level.

The Mid-Term Review undertaken in 2012 provided altogether 17 main recommendations including suggestions of some revisions to the expected results especially for components 3 and 5.

The Environmental Management Support Programme is truly embedded into the Ministry of Natural Resources and Environment, supporting this ministry's mandate and activities. The implementation budget is managed by the Government of Lao PDR even though the Technical Assistance provides staff for financial administration and external annual audits.

References to "the programme" shall therefore be taken as references to a selection of activities within the Ministry of Natural Resources and Environment, which receives Technical Assistance services as well as budgetary support from MFA Finland. Internal coordination of the activities of the Environmental Management Support Programme is thus one of the points on the agenda for the monthly coordination meetings within the Ministry. The Technical Assistance team were at times invited for these meetings. This is logic as the activities were seen as normal ministry activities and advisors are considered outsiders.

While this has been instrumental in ensuring ownership and authority to set directions in a national context, it may have also caused some trade-offs and delays in programme implementation. This was for instance noticed in the issue of not receiving budgeting for planned EMSP activities in time in the Southern provinces. It may also have prevented the Technical Assistance in more aggressively pursuing or introducing ideas and principles in line with international – or particularly Finnish – development principles.

Coordination with the advisors has been seen as part of daily routines. Coordination meetings between the national programme management and the advisory team have occurred at frequent but irregular intervals. This has also resulted in some informal practices for programme implementation such as assigning TA experts to certain tasks (for example laboratory support) based more on cooperation between local project staff and the advisors than following formal recruitment procedures. Such practices may have contributed to the sub-optimal results achieved within the laboratory component.

5 KEY FINDINGS

5.1 Introduction to Findings

This chapter combines findings from literature, interviews in Vientiane and interviews in selected provinces with direct observations and discusses these in relation to the objectives and targets set by the Programme's base planning documents.

The bullet lists of achievements as reported in the Programme's latest progress report are included separately in Annex 3.

5.2 Overall achievements of the Programme

5.2.1 Component 1: DEQP - Department of Environmental Quality Promotion: Building capacity for Strategic Environmental Assessment and National Environmental Action Plans

Purpose: Ensuring that environmental aspects are merged into national strategic plans and that MONRE's role in this is recognized by the Ministry of Planning and Investment and other concerned line ministries

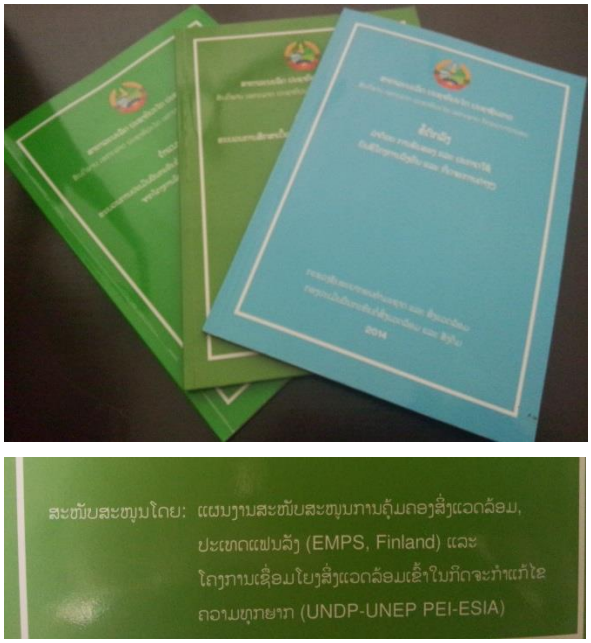


Figure **Error! No text of specified style in document.**-3 Ministerial instructions on IEE, ESIA together with the list of activities subject to environmental assessment

Achievements:

- A draft SEA decree and associated guideline produced in 2012 and later refined under Ministry of Natural Resources and Environment Leadership.
- Successful cross sector ministry cooperation in developing the decree
- The draft SEA decree and guidelines have been applied for agricultural, industrial and tourism development potentials in Oudomxai.
- SEA screening of the Natural Resources and Environment Strategy 2015 and successful cross sector cooperation with several ministries for setting MONRE's strategic objectives.

The Purpose of Component 1 is to ensure that Environmental aspects are merged into national strategic plans, and that MONRE's role in this integration is recognized by line ministries and by the Ministry of Planning and Investment. The achievements of Component 1 have been set to be measured with indicators related to Strategic Environmental Assessments and Environmental Action Plans of 2006-2020 as per the National Environmental Action Plan.

The Component has not completely achieved its original targets as it has been constrained by institutional and human resources issues larger than originally anticipated. The Programme Document focuses on human resources development/capacity development, not taking into account the need for

process development and approvals in the form of decrees, instructions and guidelines. The Programme has had to address these issues parallel with staff capacity development.

Result 1.1: Government of Lao PDR capacity in Strategic Environmental Assessment is developed and utilized by the Ministry of Natural Resources and Environment, the Ministry of Planning and Investment and line ministries

- A total of 397 participants are reported having received SEA training (225 male, 172 female).
- Large number of participants from MONRE, DONRE and line ministries involved in Golden Triangle SEA and the Oudomxai demonstration project SEAs, and development of SEA guidelines.
- No known use of existing successful SEA models or results in Laos such as Golden Quadrangle Tourism SEA (under ADB's Core Environment Programme) and Mekong Mainstream Hydropower SEA (under Mekong River Commission) was noted.
- No recent requests for MONRE SEA support to other agencies.

Result 1.2: The Environmental Action Plans for the National Environmental Strategy to 2025 are prepared and implemented in a participatory way

- The National Environmental Action Plan has been approved.
- Natural resources and environmental strategy 2016-2025 and vision towards 2030 ready in draft form prepared successfully with cross-sector participation between ministries.
- Provinces have PEAPs in place as strategic plans but their planned implementation has remained partial and incomplete in 2010-2015 in some provinces supported by EMSP (Attapeu, Champassak)
- Staff capacity on strategy development noticeably improved.

Result 1.3: Strategic Environmental Assessment is applied in preparation of the socio-economic plan, urban and sector planning at the national level, according to agreed procedures

- The SEA decree and guideline drafts including procedures for public involvement are in final comment rounds for completion.
- The formal application of SEAs still requires legal endorsement and technical implementation capacity which is not achievable within the remaining EMSP implementation timeline.

Based on the implementation indicators set for Component 1, the main progress with Strategic Environmental Assessments has focused on basic capacity development, drafting the Strategic Environmental Assessment decree and Strategic Environmental Assessment guidelines as well as supported two study tours to learn from Strategic Environmental Assessments in Vietnam and Thailand.

While both the Strategic Environmental Assessment decree and the guidelines have been drafted and internally approved, the formal legal endorsements are still to take place. Strategic Environmental Assessments are also referred to in the English version of the Environmental Protection Law (2012 revised in 2013) but the terminology in the Laotian version is unclear in its reference to Strategic Environmental Assessment. The guidelines and the degree are currently being subjected to further improvements as some shortcomings have been identified during training events and other dialogues.

Several training events have taken place targeting a total of 219 officials. These officials are trained to a level, where they have an understanding of the processes and implications but not all of them to a level, where they independently can carry out a strategic environmental assessment. Within MONRE, only three MONRE staffs are considered proficient in full application of Strategic Environmental Assessment methodologies. However, the guidelines for Strategic Environmental Assessment have only been applied once as the National Environmental Action Plan has been subjected to a screening process.

None of the previous Strategic Environmental Assessments that are in existence in Laos, such as the Mekong mainstream hydropower dam SEA under the Mekong River Commission launched with Finnish support in 2010 or the Golden Quadrangle SEA undertaken by ADB's Core Environment Programme in 2010, have been recognized or used as models by the Environmental Management Support Programme. As a stakeholder, MONRE is well informed of the Mekong mainstream hydropower dam SEA that suggested additional studies before more hydropower projects are built. Several hydropower dam sites are already within EMSP's target areas and provinces. The Golden Quadrangle SEA focused more on tourism which is outside MONRE's mandate.

These strategic assessments were not brought forward by anyone interviewed by the mission. This may indicate either a pure oversight or that these assessments were not known/considered. From technical point this remains a significant oversight where EMSP may have failed to assess, utilize and mobilize existing models and lessons learnt. Given the technical capacity for Strategic Environmental Assessment still is weak within Laos despite the lengthy support provided in EMSP, it seems that the support to Strategic Environmental Assessments has had an ineffective approach. Instead of assessing existing models, looking how to utilize these or what lessons could have been learnt, EMSP has proceeded in undertaking two study tours and continued developing draft guidelines on its own without a systematic and continued build-up of capacities. Oudomxay provincial Department of Natural Resources and Environment received capacity building from the Programme in regards to the SEA process. However it was reported by the provincial department that they still were not skilled and confident enough to carry forward SEA processes. As part of the capacity building they took part in the study tours (one taking place in Vietnam the other in Thailand). The Province has developed a draft Strategic Environmental Assessment for the tourism, industrial and agriculture and forestry sectors; however they had not received support on follow up of the drafts from MONRE/ the EMSP Technical Assistance and thus the functionality of SEA process was questioned by the provincial authorities.

With EMSP's support, the first National Resources and Environmental Strategy (NRES) 2025 including MONRE Vision Toward 2030 and a National Environmental Action Plan (NEAP) 2020 have officially been drafted and approved by MONRE in consultation with several other ministries. This has clarified its organizational aims for 2015 and set an action plan until 2020. When strategy was subjected to the screening process of the SEA it was concluded there is no need for full assessment as no negative impacts were expected.

Given Strategic Environmental Assessment (SEA) has been within the scope of the Programme from 2010 onwards and existing models created with Finnish support have been in existence in Lao PDR from 2010-2011 onwards, the overall progress made in Strategic Environmental Assessments has been very slow and weak indicating the Ministry of Natural Resources and Environment (MONRE) has not seen any immediate need for such planning although there has been sufficient time and resources available with the Environmental Management Support Programme. The statements of MONRE staff suggest that Strategic Environmental Assessment will emerge as a planning tool only in some 5 years' time. Currently the total staff number having experience in the whole SEA process remains at 3 in MONRE despite substantial the training efforts and the two international study tours.

The ADB funded Core Environmental Programme has in this view engaged a specialist in strategic assessment to assist Luang Namtha province strengthening the general capacities for Strategic Environmental Assessment. The client for this endeavour is the Department of Environmental Quality Promotion. One of the aims of this will also be to demonstrate Strategic Environmental Assessment in relation to the Socio-Economic Development Planning that remains mandated under MPI.

Provincial Environmental Action Plans (PEAPs) have earlier been established with the support of SEM II in Attapeu and Champassak where the ISPs have not been updated during the EMSP owing to not budgets having not been received. In these provinces the Integrated Spatial Plan (ISP), which was developed and introduced during the SEM II, was linked directly with PEAPs at provincial level for the intended implementation of the action plans in 2011-2015. However, when compared to reality of development and the aims of ISP in these two Southern provinces, the PEAPs remain as strategic plans whose implementation have not been aligned with ISPs. Several important development projects that have taken place in 2011-2015 such as airports and hydropower projects are not recognized or reflected in any relation to ISP.

Based on the sample of the consultative workshop reports on NRES for relevant sectors at central and district levels, the gender aspects had been integrated into the workshop group work themes, as well as initial strategy statements.

The Environmental Management Support Programme is currently supporting the revision of the Strategic Environmental Assessment decree and the preparation of the Strategic Environmental Assessment guidelines. By definition, the Strategic Environmental Assessment decree is issued to avoid adverse effects caused from the implementation of any Policies, Strategies and Programs developed and to avoid or mitigate impacts on the social or natural environment as well as avoidance of threats to climate sustainability. Consequently, the draft Strategic Environmental Assessment guideline has been prepared and it considers the socio-economic effects as part of environmental effects. The effects on e.g. vulnerable cultural heritage and effect on livelihoods are taken into consideration in the Strategic Environmental Assessment decree and guidelines. The Strategic Environmental Assessment decree also stipulates that the National Front for Construction (interest group for ethnic groups) as well as any other mass organisation relevant to the sector policy, strategy and/or programme development shall be entitled to take part in the process.

Nevertheless, neither the guideline nor the decree promotes in detail how to take gender or vulnerable groups (such as disabled) into consideration when assessing people's livelihoods. The guidelines for Strategic Environmental Assessments (SEAs) include a requirement to produce a non-technical summary of the report in order to have the key issues and findings accessible in easily understandable format for the general public. Similarly, the Strategic Environmental Assessment includes access to services as part of the environmental governance measures to be taken into consideration, promoting peoples' right to access to information and services. Public hearings with people directly and/or indirectly affected are part of the SEA process. However, the SEA decree and guideline drafts at the moment do not yet specify the exact process steps when public hearings are to be held and that those should include all segments of the communities including fair representation of women, vulnerable groups, etc. However the evaluation mission notes that the received documents are still in draft formats.

Only a screening of the Natural Resources and Environment Strategy process has been conducted so far. Therefore it is not possible to evaluate the extent to which the vulnerable and ethnic groups were involved into the whole SEA process.

The shortcomings of Component 1 lie in the lack of practical application of the Strategic Environmental Assessment processes, both in relation to policies/strategies and to spatial planning. Lack of

competent national advisors, the extensive use of volunteers in government service and the constant rotation of permanent staff are cited as major factors contributing to this problem.

Summary of findings:

- Currently SEAs remain as future planning tool waiting for full legal endorsement and in need for more capacity allowing implementation.
- While the preparation of the first National Resources and Environmental Strategy (NRES) 2025 including MONRE Vision Toward 2030 demonstrated good cross-sector cooperation, only the screening process was undertaken in the exercise.
- Given that Lao PDR has existing SEA models that have not been utilized for 4 years and the SEA related staff capacities remain weak after lengthy implementation of EMSP focusing on SEA, it seems that SEA has not been considered an essential planning tool by MONRE, and therefore it requires no immediate support during the remainder of EMSP.
- Simplified pilots are recommended after EMSP given SEA has potential and political backing for future usage.

5.2.2 Component 2: Department of Environmental and Social Impact Assessment: Building capacity in licensing and inspection

Purpose: The social and environmental impacts of major mining, hydropower, industrial and infrastructure projects are properly regulated and monitored by MONRE

Achievements:

- Renewed ESIA and IEE regulations have been endorsed and disseminated broadly.
- The continued support provided by Finnish and Swedish support to strengthening the ESIA regulations have empowered MONRE's and PONREs' DESIA successfully in undertaking environmental management as per their mandates for over 15 years as a continued positive environmental sector impact.
- DESIA is practicing ESIA and IEE compliance monitoring including selected staff assigned to conduct on-site compliance monitoring.
- Industrial self-monitoring guidelines and industrial inspections of MOIC have been strengthened significantly through guidelines and inspection trainings.
- EIA database is in place and accessible freely through the internet although it covers currently less than 30% of known investments with EIAs.
- Water Quality Monitoring has been reformulated under EMSP's support including a national water sampling scheme put in place
- A grievance system is in place within MONRE (DESIA) and the National Assembly.

The Component has largely achieved its target of strengthening the government agencies internally even though there still are some limitations in particular in relation to regular monitoring. Guidelines have been written, Environmental Impact Assessment procedures (including Initial Environmental Examination and Environmental and Social Impact Assessment) have been imposed on new as well as on existing projects, public complaints have been dealt with.

While the procedures and guidelines may be well described, even established, at central level, staff at provincial level will struggle understanding the complex environmental issues surrounding large projects. The provincial and district staff will also struggle dealing with resettlement issues and livelihoods restoration activities as their background is mostly technical.

Result 2.1: Good practices in preparing environmental certificates are in place in MONRE

- An increasing number of ECCs are issued annually using an improved model structure.
- SESOs have been applied in some 20 concession agreements providing functional basis to put more SESOs into practice.
- SESO development has gained significant level of attention but the ongoing drafting process has been lengthy and slow.
- All new large Hydro power and mining concession agreements negotiations are reportedly based on inclusion of SESO.

Result 2.2: Sustainable inspection and compliance enforcement system for environmental conditions and standards is in place in MONRE

- Inspection guidelines have been completed and is in active use since 2012 (77 projects)
- Self-monitoring guidelines have been successfully developed for MOIC in cooperation with prominent large industrial companies and the Ministry Of Health.
- Draft Public Involvement Guidelines have been prepared. The majority of monitored projects report public consultations.
- The annual requirements for ESIA and IEE compliance monitoring are followed but they impose heavy burdens for staffing and financing.
- Ten DESIA staff have been employed to conduct on-site compliance monitoring.
- Currently the companies being inspected fund each of the inspection visits reducing independence and financial sustainability of the monitoring.

Result 2.3: Polluting industry is practicing self-monitoring and using environmental management systems to control hazardous emissions

- Only large and prominent industrial companies have self-monitoring schemes in place.
- MOIC estimates that in total some 20 factories have self-monitoring schemes in place featuring tobacco, brewing, electronics, agro-processing (cassava, rubber, sugar) and steel production.

Result 2.4: Financial sustainability of compliance monitoring has improved

- Companies are providing the funds for the inspection visits and can refuse inspections based on insufficient funds or even by being simply busy.
- MONRE is yet to develop an internal model for funding inspections although there are technically suited models for this like the Environmental Protection Fund that collects money from developers and decides on the activities it funds.
- While the major companies fully finance monitoring inspection of themselves, they only contribute a small amount of funds for MONRE's total monitoring activities.

Compliance monitoring or "Environmental Audit" is a check whether the project operator has implemented the mitigation measures as stated in his Environmental Certificate of Compliance. This can be slope stabilisation measures, construction of sedimentation ponds, payment of compensation etc. Monitoring of residual impact is e.g. monitoring of water quality, air quality, changes in livelihoods. Unacceptable levels residual impacts indicate either non-compliance or insufficient mitigation measures, e.g. the sedimentation pond may be constructed as required but it proves ineffective as it is designed too small.

An environmental certificate (Also referred to as an

Environmental Compliance Certificate) is a legal document, which approves an Environmental and Social Impact Assessment or an Initial Environmental Examination and associated Environmental and Social Management and Monitoring Plans, which must be complied with by the project developer. There are other documents regulating the mitigating measures such as the Standard Environmental and Social Obligations, which are annexed to the Concession Agreement.

The Programme has supported the procedures carried out by the Ministry of Natural Resources and Environment and in particular the Department of Environmental and Social Impact Assessment. The support (Programme result) has included guidelines for private sector consultants to follow when performing Environmental and Social Impact Assessments. It has been commonly commented that the quality of these assessments leaves much room for improvement but unfortunately, efforts to support improvements of reports have been limited to comments given during the review and approval procedures. The guidelines established by programme support are comparable to those used in other ASEAN countries. The guidelines are also mostly in line with the International Finance Corporation performance standards and the Equator Principles of the major private international banks. Of importance is a requirement for the developer to provide training for government staff to bring them to a level where they are qualified partners in monitoring and supervision. The guidelines are strict in requiring people's participation but less strict in applying international conventions or supply chain assessments.

Much of the Pogramme's support to the Department of Environmental and Social Impact Assessment's development has been through dedicated training. A large number of 1-3 day training events have each year been provided parallel to on-the-job training. The scope of the training events has been wide covering all aspects of the DESIA's mandate and even a bit more. However, looking at the training schedule, the schedule does not seem to systematically have followed or supported the EIA process of screening, scoping, Terms of Reference, review, licensing, monitoring, and follow-up. On-the-job training is listed in progress reports as having taken place on 2-4 specific dates for each intervention instead of having been part of a long-term relationship between the beneficiaries and the Technical Assistance team.

While the number of training events and the scope is commendable, the results have not sufficiently manifested themselves. The Programme does correctly report that there is an issue of lack of true training impact but at the same time, it seems as if the Programme has failed taking the training schedule and methodology up for serious review as a result. The DESIA staff are still not proficient in EIA review and management, the laboratory staff are still not proficient in test procedures, the MONRE staff are still not proficient in SEA processes.

Monitoring is to be carried out by the Department of Environmental and Social Impact Assessment (DESIA). There is no strict distinction between compliance monitoring (audit) and monitoring of residual impact and there seems not to be any strict procedures for dealing with non-compliance or with residual effects exceeding acceptable limits due to insufficient mitigating measures. Also, there seems not to be provisions for increasing the recognized zone of impact if impacts later are recorded outside the originally accepted zone for e.g. compensation. The department does not have capacity to monitor all projects every year but has to rely on sampling, i.a. based on companies' willingness to pay for the monitoring. Public consultation is a requirement during monitoring inspection visits.

For monitoring visits to have any significant effect, monitoring staff must be equipped with sufficient knowledge and tools. It may therefore be questioned whether it is realistic to believe, government agencies in the long run can undertake this task at a reasonable and effective level.

The ESIA and IEE monitoring poses heavy requirements for DESIAs in MONRE and provincially where the annual requirements can exceed 13,000 working days in total (see page 46 as an example).

Meeting such heavy monitoring regime requirements in terms of staffing indicate significant sustainability issues remaining in meeting the legal requirements for compliance monitoring. The EIA and IEE monitoring is currently financed fully by the developer who invites the PONRE monitoring staff to their site for monitoring. Would this be funded from GOL's budgets, it would be pose significant financial constraints for MONRE and especially PONREs.

Whether a review of the monitoring system has been within the purview of the Programme or not is questionable but it remains a fact that the current system does not effectively function and it is highly inefficient in terms of cost per monitoring outcome. DESIA and related organisations – and that includes the Environmental Management Support Programme – should have critically looked at the necessity of having delegations of ministry or department staff conducting monitoring or whether it would have been more realistic focusing on the same staff's capacity to scrutinise monitoring reports (compliance as well as residual impact) made at a technical level.

Lao PDR does also rely on a system for self-monitoring, which can be done by the project developer himself or by private consultants such as the approved EIA consulting firms. It is the ,mandate of the Ministry Of Commerce and Industry (MOIC) to monitor industrial self-monitoring and Environmental Management Systems (EMS) by the factories. MOIC has for this purpose received EMSP support for 6 focused training events, 4 workshops and support to factory inspections undertaken. The trainings have also included officers of the provincial Departments of Industry and Commerce (POIC).

The overall capacity in MOIC for self-monitoring inspections remains the responsibility of 9 staff. These staff reportedly currently oversee 20 factories who currently implement self-monitoring schemes. These factories have large production capacities and feature cement, cassava, steel and beer production. Small factories remain outside the self-monitoring schemes. The overall number of factories in remains unknown preventing any reliable estimations of the extent to which EMSP has contributed to strengthening of the self-monitoring. However, the overall staff capacities and coverage of 20 factories within EMSP suggests that only a minute fraction of the industrial production has been within EMSP's influence. The trainings and operational models provided, however, are sound technical examples that have served as pilot models for future strengthening of the sector.

The Programme has supported the first rounds of self-monitoring. It is, however, a very small amount of the companies, who actually do the monitoring and submit reports. During these self-monitoring activities, it became obvious that Laos has a problem concerning hazardous waste generation and handling. The Environmental and Social Impact Assessments often do not distinguish between hazardous waste and any other waste and it has not been a requirement in the guidelines. The Programme and the Technical Assistance has in this context initiated cooperation with the Ministry of Industry and Commerce to propose designated landfills for hazardous waste, incinerators for hospital waste and the use of cement kilns for incineration of biological, hazardous waste. Waste oil is recycled and Laos even imports waste oil for treatment and resale as fuel. Private information (verbal and anecdotal) as well as newspaper articles indicates a serious need for regulation in this field.

A comprehensive hazardous waste audit has taken place in 27 pre-screened companies. The companies were selected based on reported incompliance and/ or problem received from communities. The result was an estimate of annual production of hazardous waste in Laos to be in the range of 56,000 tonnes per year. This has led to a draft road map for management of hazardous waste and agencies such as the Ministry of Industry and Commerce, and the Ministry of Public Works and Transportation pushing for a dedicated facility for disposal of hazardous waste. JICA has supported the waste management efforts within the Ministry of Natural Resources and Environment / Pollution Control Department.

Under the principles of general user payments and “the polluter pays’ a provision for payment towards monitoring “services” by the government is incorporated as a requirement in the Standard Environmental and Social Obligations annexed to the concession agreements for large and medium projects. During 2013-2014 this contribution amounted to about 8 billion LAK (1 million USD), most of which was spent on monitoring activities together with about 2 billion LAK provided by the Government of Lao PDR. The principles are sound but it may be necessary to introduce a high level of transparency in the use of these funds to satisfy the need for public participation.

EMSP has supported the revision of the Standard Environmental and Social Obligations (SESO). These set the requirements which the developer has to take into consideration for mitigating or compensating any environmental and social adverse impacts of the intended project. The Standard Environmental and Social Obligations (SESO) document has integrated appropriate inclusion mechanisms on gender, ethnic groups and social aspects incl. securing the right to access the information concerning the development at all levels of administrative structure all the way to communities (e.g. at specific information centres and village committees). The SESO requires the developer to assign, budget and implement specific watershed management plans and biodiversity offset plans. The plans can and could be utilised locally as part of climate sustainability planning and implementation of adaptation measures. The example given was assessment of flood prone areas when resettlement sites are assessed and assigned. The SESO also sets the Grievance Redress Mechanism for the communities to make complaints regarding the resettlement impact and/or compensation.

Affected communities visited during this evaluation mission were had been relying on verbal communication on their rights during the consultative meetings which are normally attended by heads of the families (i.e. Lao speaking men). Unfortunately, the districts visited only have English versions of the documents detailing such rights. This may have caused some misinterpretation or incomplete communication due to lack of English skills. This creates a risk that the compliance monitoring consultations may not be conducted in a fully informative and broadly participatory manner.

Nevertheless, a number of complaints have been lodged every year: 2011-12: 21 complaints, 2012-13: 4 complaints and 2013-14 10 complaints. These deal with resettlement issues, compensation issues, and water and air quality amongst others. Most have been solved amicably but the systematic recording of the complaints and the solution processes are reported to be weak. Some complaint processes could be confirmed in Attapeu and Champassak where complainants had signed meeting minutes discussing compensations. However, how some environmental pollution incidents such as fish deaths reported by villagers were actually inspected and solved, remained unclear where vague references were made to MONRE taking action on central level instead of PONRE’s or POIC’s being able to undertake inspections of the facilities on-site.

Based on the field visits to the provinces concerns should further be raised on the issue that in practice district authorities play often the role of village committee in submitting the complaint to higher administrative authorities, thus the communities may lack possibility to direct follow up of the process. Similarly, some complaints related to the Xayabouri hydropower plant were reported to have been submitted in connection with the compensations to be received by the affected people but that these were yet to be solved. The communities seemed to be aware of the procedure of complaints, but there seems to be lack of timely follow up of the reported cases. Province level Livelihood and Resettlement Committees are in place chaired by the Governor and having representatives of all sector agency heads. In practice village heads raise villagers’ concerns representing the villages where affected households have also their representation typically through with the household head joined by the spouse. The Livelihood and Resettlement Committees handle complaints keeping participant

lists. PONRE's facilitate defining the compensation units taken typically from a similar project in the province without national level support received for example from the EIA database.

The affected communities interviewed (of Hongsa power plant and Xayabouri dam) have been consulted during the EIA process. The EIA documents have not however been readily available and accessible to the public. Although the Environmental Management and Monitoring Database (EMMD) currently contains 96 EIA projects, only few links connect the projects to the EIA summaries. Users without computers can access EIA information only by sending a letter to the Ministry of Natural Resources and Environment or Provincial Department of Natural Resources and Environment. The party requesting EIA information typically receives 1-5 pages summary of the EIA.

Provincial Departments of Natural Resources and Environment are still quite weak in capacity to conduct compliance monitoring especially for the mega projects. The mission found that there is lack of knowledge in use of the equipment, reading the English Concession Agreements etc. especially in the Environmental Management Units. Furthermore, project developers having highly skilled and educated staff have provided training to the staff of the Department of Natural Resources and Environment in using monitoring and testing equipment.

Compliance monitoring is done by an inspection visit by a large group of ministerial and department staff. The expenses, including allowances, are paid by the project to be monitored. So far, only hydro power plants and the Hongsa and Phubia mines have been subjected to this inspection. It is not always entirely clear for the participants what and how they shall perform the inspection/compliance monitoring/environmental audit, which in many instances doubles as an opportunity for institutional and staff capacity building exercises. Monitoring of residual impact (ambient monitoring) is confined to water quality except for noise level monitoring at Hongsa and Phubia mines.

Where monitoring could have been implemented by a few well-trained technicians, the large group of higher ranked "inspectors" may have hampered an effective and targeted monitoring visit.

The management of EMSP informed that the social obligations issue for protecting rights of local communities and affected households is gradually being developed within developed in the Standard Environmental and Social Obligations (SESO) and other guidelines and regulations such as the resettlement compensation cost guidelines. However, the Ministry of Natural Resources and Environment does not have adequate capacity to do this to a satisfactory level. The Department of Environmental and Social Impact Assessment sees the need to have a specific unit for Social Obligations. This unit will initially require external specialist assistance helping them to verify and monitor the implementation of the Standard Environmental and Social Obligations (SESO). The guidelines on resettlement compensation cost are important tools used by the Resettlement Committees for dealing with each specific developer and affected households will normally adapt the national guidelines on compensation cost according to specific location's practice and market price of land taking the references for compensation unit costs used typically directly from a similar project within the same province. In assigning the

> The compliance monitoring of Environmental and Social Impact Assessment as per the EIA is conducted twice a year by the Department of Environmental and Social Impact Assessment staff located in the provinces. The Programme has trained 10 DESIA staff members who are located in selected environmental management units in the Provincial Departments of Natural Resources and Environment, which have sizable hydropower plants and mining. The staff trains the environmental management unit (EMU) and participate in the compliance monitoring both for social and environmental aspects.
>
> Although there have been efforts from the Programme to train the EMUs, their capacity to perform compliance monitoring is rather weak. EMU staff do not have good knowledge of English which seems to constrain their work as the Concession Agreement and related documents are only provided in English by the project development.

costs, provinces do not use the central level information or ESIA database to assign the compensation unit costs.

Efforts are made by the authorities represented in the resettlement committees to protect the rights of local communities and affected households to get fair compensation as and when appropriate. However the active, participatory role of local communities, men and women, in setting compensation rates is limited. The affected communities just accept the practice and receive the compensation. The grievance mechanism is explained in the guidelines including clarifications on how to lodge complaints. In reality government authorities represent the views and interests of the affected communities when compensation and support levels are negotiated with the developers. The human rights-based approach is thus not fully in practice.

However, if the Standard Environmental and Social Obligations (SESO) are fully implemented and properly followed up by compliance monitoring, they can be a means to provide for protection against adverse impacts to communities and environment.

EMSP is currently supporting DESIA in revision of the Resettlement and Livelihood Decree. The Standard Environmental and Social Obligations (SESO) (especially part three, on Resettlement and Compensation) is hence also presently being revised with the support from EMSP to align it according to the Resettlement and Livelihood Decree. The Entitlement Matrix has been introduced to the SESO by EMSP. It defines in a structural manner the minimum entitlements project affected peoples on e.g. loss of land, structures, livelihood/ occupation, annual crops, public areas, cultural resources etc. providing a good tool for compensation process.

The Programme has seen an opportunity for including climate sustainability into the Environmental Impact Assessment process by assisting the Ministry of Natural Resources and Environment developing "Environmental Guidelines for Biomass Removal from Hydropower Reservoirs". These guidelines provide step-by-step guidance for both the developer (on planning and implementation) and for the Ministry / the Department of Environmental and Social Impact Assessment (on review, approval and monitoring) of biomass removal on large areas for water reservoirs. The guidelines recognise the potential emission of large amounts of greenhouse gasses, particularly Methane, in the process of turning vegetated areas into reservoirs. Furthermore, the guidelines provide solutions and suggestions how to best utilise the biomass to further mitigate and limit greenhouse gas emissions and provide livelihood benefits for the surrounding communities e.g. using biochar as a means to sequester carbon to soil thus providing a solution for reducing greenhouse emission as well as providing a solution for communities to improve soil and productivity of land (efforts towards improving local food security).

Awareness on climate sustainability issues, however, seemed weak as such issues were never in the forefront of any discussion held with the evaluation mission.

Summary of findings:

- EMSP's results are highly relevant for the need to strengthen ESIA and IEE compliance monitoring that remain as the core of environmental management of Lao PDR.
- Main concerns with the ESIA / IEE framework with regard to gaps noted are related to i) the capacity of PONREs to deal with IEEs as these have been provinces' responsibilities since 2013, ii) the accuracy and availability of the data that is

Biochar refers to charcoal when used for e.g. soil treatment. Charcoal, which is close to pure carbon is extremely stable and chemically inactive, meaning that it can be stored in the soil for centuries, thus avoiding the carbon being released as greenhouse gas if the debris had been burnt or left for decomposition. Biochar has a number of beneficial properties such as increasing pH value of acid soils and water purification.

centrally collected from EIAs and investments in MPI and MONRE's DESIA, iii) the heavy monitoring burden requirements on DESIA and PONRE staff and iv) the financing of inspections originating still directly from the companies per inspection visit.

- No penalties have been issued in Lao PDR to any development companies this far. This may be taken as an indication that the technical and budgetary requirements for monitoring and enforcement have not been duly considered when approving the environmental management and monitoring systems. The staff of MONRE and MOIC will in most cases not have sufficient technical knowledge to engage with the project operators and to make matters worse, government staff do not enjoy free access to project sites for inspections. The inspections are financed and their timing is decided by the company that is being inspected. In practice the inspectors can be denied access to premises for which several explanations ranging from budgetary reasons or even hurries can suffice. This is clearly undermining the key functional operations required for enforcement.

- Inclusion of Standard Social and Environmental Obligations (SESO) in Concession Agreements is a promising and technically well placed process whose operationalization requires still time. However, inclusion into the concession agreements – and so far this has reportedly happened in about 20 cases - is not the same as being agreed to by all parties involved as the agreements are still under negotiation. The Standard Social and Environmental Obligations have gone through more than 20 drafting rounds and no updated version of the Standard Environmental and Social Obligations (SESO) agreement draft has been signed as of yet. The outstanding issues of the SESO concern legal basis as well as insufficient scope of the requirement. Insufficient involvement of non-government stakeholders such as the project operators and representatives for affected communities may equally have contributed to blunt or inoperational requirements.

- As hazardous waste reportedly often is insufficiently dealt with at Environmental Impact Assessment level, there is a need for stressing to environmental consultants to be innovative in their thinking, compare the methods to those in use elsewhere in the world and to define mitigation measures to remove or minimise the risks. Environmental management plans and subsequent monitoring plans should specifically identify hazardous waste, discharges or emissions.

5.2.3 *Component 3: Provincial Departments of Natural Resources and Environment: Strengthening environmental management at the provincial level Including new ISP activities*

Purpose: DONREs capable of conducting their tasks according to their legal mandate in an effective manner

Achievements:

- Complaints mechanisms implemented and complaints received in focal provinces (Champassak, Luang Prabang, Xyayabury, Xiengkhuang, Huaphan and Bolikhamxay). Virtually all complaints have been recognized as received and processed.
- PONREs have basic capacity composed typically of 1-3 staff in place for EIA, IEE processes and Water Quality Monitoring.
- ISP has been actively supported at provincial and district levels in 6 provinces aimed at governor's decision support with a high level of completion of data collection with ISPs signed by governors at both levels.

- ISP remains a strategic tool having strong political backing used mainly for data collection. However, ISP is still missing formal recognition in relation to legal planning and Socio Economic Development Planning process which belongs to MPI (where MONRE and PONREs have apparently included this as an internal tool without securing full cooperation with MONRE's Land Use unit).
- PONREs are facing mandate and operational challenges with regard to on-site inspections of environmental pollution reported by local communities. These are successfully dealt with at the central level through cooperation between PONRE and MONRE.
- There are pending challenges concerning introduction of standard ECC models as some reportedly may not have been issued in strict compliance with existing legislation.

Much of the Department of Natural Resources and Environment's provincial and district level focus and adaptation to circumstances is driven by issues brought forward by complaints. The proper dealing with the complaints requires site investigation before the matters are resolved. The Ministry and Departments at local level have therefore been in need of support to establish accountable and transparent procedures for case registration, investigation and resolution. The central data bases offer relevant support in this direction but locally, in the provincial offices, the operation of casefiles seems not to be sufficiently detailed or systematic. Neither do the local systems support basic requirements for transparency in the administration.

It has also been increasingly obvious that the Department of Natural Resources and Environment was in need of a tool to compile spatial, environmental information and that such tool already existed in the form of the integrated spatial planning (ISP) introduced by SEM II. Particular support to this tool was not part of the original programme document for the Environmental Management Support Programme has therefore been included as part of the adjustment done to the Logical Framework Approach in 2012.

The increased capacity obtained from site inspections and the use of integrated spatial planning (ISP) and provincial environmental action plans has been expected to enable the Department to professionally engage in the processes of approving Initial Environmental Examinations.

Result 3.1 DONREs prepare and implement provincial environmental action plans in selected environmental issues and selected Result provinces have developed integrated spatial plans as a basis for environmental management

- Provinces have been undertaking several ISP activities focusing on 6 provinces from 2012 onwards resulting in ISPs being used for data collection and strategic planning aimed at supporting governors' decision making.
- Provinces have Provincial Environmental Action Plans in place as strategic plans but their planned implementation has remained partial and incomplete in 2010-2015 in some provinces supported by EMSP (Attapeu, Champassak)
- 17 provinces have approved environmental action plans.
- Older ISPs for years 2010-2015 have been successfully established with governors' signatures but their influence over the actual development planning has remained very limited in the Southern provinces (Champassak, Attapeu).

Result 3.2 Selected DONRE staff have adequate compliance monitoring and sampling skills

- PONRE staff actively undertakes ESIA and IEE compliance monitoring including public consultations and facilitation of setting the compensation units having typically a minimum of 1-3 key staff with sufficient operational skills.
- Compliance monitoring has increased as indicated by the increased number of monitoring reports in 2014
- At least 2 staff from each province have repeatedly been trained in water quality sampling ensuring sufficient capacity exists for the provincial water quality monitoring
- National water quality sampling scheme has been harmonized under EMSP and set into operation starting in 2013

Result 3.3 Updated baseline maps and data, planning maps and local/national regulations are available and in use by the DONREs in connection with daily environmental administration such as IEE review and certification

- Although no baselines or benchmarks have been defined in EMSP, systematic data collection practices have been established successfully for ISP and Water Quality Monitoring.
- About 60% of ISP related maps and data collection have been completed.
- Environmental Compliance Certificates are being issued based on the Initial Environmental Examinations. However, since the procedures are not often followed, the guidelines are being reviewed.

Result 3.4: Basic working conditions and skills in all provinces

- Distribution of vehicles and basic administrative and IT equipment has been completed
- Some provincial staff have basic English skills and IT skills. The activity has been considered completed.

Much effort has been dedicated to establishment/finalisation of provincial environmental action plans and integrated spatial planning (ISP). These activities were already ongoing many places before the inception of the Environmental Management Support Programme. The activities have thus been continued, updated and refined. A large number of government staff has been trained.

For many organisations or individuals, the Integrated Spatial Planning (ISP) has almost become synonymous with the Environmental Management Support Programme. While the Integrated Spatial Planning (ISP) seems a popular tool in the districts and provinces aimed at decision support it collides to some degree with the Land Use Planning (LUP) system in use by the Department of Land Planning and Development and overlaps with the spatial planning done in connection with the Socio-economic Development Planning cycles in MPI as supported by GIZ.

Sector specific users of ISP system such as the Sustainable Forestry for Rural Development (SUFORD) project have not found ISP directly usable for their needs to account for landscape level planning as was expected owing to ISP's intended provincial coverage. Instead, the priorities identified in ISP did not correspond with the priorities identified within the forest sector governed by Ministry of Agriculture and Forestry. The Land Use Planning system under the mandate of Department of Land Planning and Development in MONRE recognizes 8 main land categories and sets future plans on all levels of governance for the next 1-3 and 5-10 years pending on the governance level (1-3 years on village and district levels; 5-10 years provincial and national levels) as well as zoning. The Department

of Land Planning and Development does not predict any long life for the Integrated Spatial Planning (ISP) in spite of its popularity and decisions signed by governors at province and district level.

The ISPs undertaken in South, where PEAPs and ISPs were developed together in 2010 to guide provincial development in 2011-2015, have remained more as strategic plans than effectively followed planning guidelines. It is worth observing that LUP in Laos follows a participatory land use planning manual signed by donors including SIDA and GIZ where ISP is not recognized.

The integrated spatial planning (ISP) is currently useful as a tool to collect physical and biological data but has not yet been fully used for social data or environmental impact data such as water quality and pollution levels. It currently runs on ArcGIS software, which is powerful but expensive, whereas other GIS systems in Laos such as the spatial planning in the Ministry of Planning and Investment runs on the open source Quantum-GIS (Q-GIS). Use of the ArcGIS requires licenses and training, both of which are in short supply. Each Province may have only one staff proficient in GIS and in most case none or only one legal GIS license.

The Provincial Environmental Action Plans (PEAP) have been long time underway and do not include much information at action-level apart from a list of existing projects to be supported. However, as a basis for dialogue, they have been valuable.

As the name implies, the plans concern the environment, i.e. the physical and biological environments and their reserves of natural resources. They do describe issues such as health and education and their aim is to improve human livelihoods and health but otherwise, they are weak in requiring good environmental governance principles. Some actions are, however, defined for local Departments of Natural Resources and Environment under the Provincial Environmental Action Plans (PEAP). One example is the Luang Namtha river management, where the Department of Natural Resources and Environment supports local communities in managing water quality and fish stock in the Tha River by clearing debris and waste and by regulating fisheries on selected river sections. This has received programme support for one year and has shown positive results at community level. The importance in the present programme context is not so much the river management *per se* but the fact that the Department of Natural Resources and Environment at provincial level has initiated such initiative in several communities and that they had success.

Figure **Error! No text of specified style in document.**-4 Villagers demonstrating the healthy fish from Tha River

Governmental stakeholders within the Ministry of Natural Resources and Environment state that integrated spatial planning, like Strategic Environmental Assessment, is likely to become relevant in the future when it can be applied in *strategic planning for natural resources management*. This, however, is not necessarily equal to what is meant by *integrating environmental concerns in all decision making and planning*. Likewise some provinces seem to see integrated spatial planning as a tool for integrating tourism into projects such as large dams rather than a tool for integration of environmental concerns. The integrated spatial planning is seldom used for site selection for large projects. This is normally done only based on the developer's own feasibility studies.

There are other planning processes, where the integrated spatial planning is used for inclusion of environmental topics according to the mandate of the Ministry of Natural Resources and Environment. The Ministry of Planning and Investment, for example, identifies environmentally sensitive areas when performing its socio economic planning at district level. These sensitive areas include for instance Protected Areas where cooperation is done with Land Planning and Development Department of MONRE for data collection. Some joint activities focusing mostly on GIS trainings have been undertaken in Bokeo province. This has been cooperation between the Environmental Management Support Programme and the GIZ supported by the Land Development Programme in the Ministry of Planning and Investment. Given Ministry of Planning and Investment's mandate for socio-economic development planning, this ministry remains the true decision maker with regard to the inclusion of environmentally sensitive areas in the actual district and province level socio-economic plans set for the next 5 years.

Particularly sampling for water quality monitoring is delegated to district and provincial level Departments of Natural Resources and Environment. There are 116 permanent water quality monitoring sites in the country. Sampling requires a fair amount of knowledge and skill, wherefore raining has been provided for a large number of staff from all provinces. There is an attempt to involve local populations in monitoring their own environment wherefore some individuals from communities near the sampling points have been selected to participate in the sampling procedure. Ideally the test results – which are made in Vientiane – would be returned to the communities and the implications explained. This practice, however, has not been applied yet.

Basic equipment, office equipment and vehicles have been distributed to enable the provincial staff carry out their duties. They have also received training in a variety of issues from review of Initial Environmental Examination to proposal writing. Training does not seem to cover governance and livelihoods issues.

There seems to be still confusion and lack of knowledge at the District and Provincial level at least in Northern provinces visited on integration of climate change adaptation aspects to the Integrated Spatial Plans. The climate change was only understood from mitigation point of view (reduction of waste burning etc.) and not using the ISP for planning of adaptation measures to cope with possible impacts. The ISPs reviewed did not demonstrate specific indication that they would have integrated climate change adaptation practices in the plans, although the integrated spatial planning guidelines recognise the importance of adaptation planning as part of ISP.

Social sustainability principles are to some degree included in the ISP guideline. However there has been no clear evidence that e.g. NGOs would have been included into the planning processes. Nevertheless, other mass organisations have been included into the meetings related to the process e.g. Lao Women Committee, Youth Committee and Lao Front of National Construction (interest organisation of ethnic groups).

Summary of findings:

- While key individuals working in provinces have been successfully trained in inspections and sampling, the overall the provincial environmental management capacities for these functions remain still constrained and limited stemming from inadequate budgeting and staff rotation.
- ISP is considered beneficial for information collection and mapping aimed at improved decision making when considering environment and strategic natural resource management, although the legal status and practical usage of ISP remains unclarified affected by overlapping planning mandates.
- Earlier Provincial Environmental Action Plans (PEAPs) and ISPs outside the current main target provinces done in SEM II have not been updated and their guiding influence on development in 2011-2015 has remained limited. The ISPs done during EMSP are more detailed and have been signed by Governors which may lead into enhancements in ISP application for strategic planning in the future.
- The provincial level implementation of Provincial Environmental Action Plans (PEAPs) undertaken in SEM II for 2011-2015 signed by governors were considered relevant in 2010 by provincial Departments of Natural Resources and Environment. They seem to have remained as strategic aims but not having an overriding effect on provincial development or environmental management.
- Training provided for monitoring and sampling has established basic capacity levels in provincial Departments of Natural Resources and Environment for selected tasks such as water quality and EIA compliance monitoring. These provincial departments have national and local regulations available mostly as hard copies.

5.2.4 Component 4: DEQP and Natural Resources and Environment Data Information Centre: Capacity building for high quality information services

Purpose: MONRE is able to deliver high quality, relevant and timely environmental messages, and data and information services to MONRE partners and stakeholders

Achievements:

- EMSP website functional and including most programme related results.
- Environmental Data Management System is operational and operators trained.
- Environmental Management and Monitoring Database (EMMD) established and accessible through the internet.
- Websites for 16 DONREs
- Local Area Networks(LAN) installed

Good governance is an important component of the Finnish development policy and has increasingly been in focus by Lao authorities too. For Lao PDR, issues such as people's involvement, grievance mechanisms, gender and vulnerable groups are listed in various guidelines. Good environmental governance includes disclosure of risk, participation, access to justice, transparency, accountability, equal access to benefit etc. In other words, Good Governance requires e.g. the Ministry of Natural Resources and Environment to be mandated to and capable of delivering information and services to the public and to other government agencies.

Result 4.1: MONRE is regularly feeding productized environmental information and data into national planning processes

- Material has been downloaded by other line agencies regarding e.g. EIA legislation/decree and guidelines, ISP material, web-mapping, monitoring date, SEMII material and EMSP material

Result 4.2: MONRE is efficiently disseminating information about environmental law, its services, donor interventions, achievements and findings of environmental monitoring and research

- About 250,000 hits so far on the MONRE website

Result 4.3: MONRE is actively supporting partnerships and engagement of different target groups (including ethnic or vulnerable groups) in environmental information dissemination and awareness raising

- Drafting of guidelines on communication planning done
- Public Involvement guideline draft produced
- Some staff trained in communication planning.
- 3 provinces have conducted awareness campaigns targeting "vulnerable" groups (remote villages, hospitality staff in Luang Prabang).
- Celebration of World Environment Day at central and provincial levels.

EMSP has supported establishment of databases for EIA projects and their monitoring through *Environmental Management and Monitoring Database (EMMD)* accessible in the internet (www.emmd.monre.gov.la) and by Water Quality Monitoring database. Which indicators are in place and monitored by MONRE and EMSP with regard to the state of environment remain largely unknown.

In addition to the Environmental Management and Monitoring Database (EMMD), the web pages of EMSP (http://emsp.monre.gov.la/) provide information of EMSP results and selected regulations such as EIA Degrees (2010) and Environmental Standards (2011) as well as information sharing procedures. Most of the updates indicated in EMSP web pages are between years 2010-2013 with little information found uploaded after 2013. In addition to being somewhat outdated regarding uploaded materials, the EMSP web pages refer only to six target provinces (Bolikhamxay, Khammouane, Luang Prabang, Sekong, Vientiane Province and Xayabouri) although the progress reports have a wider geographical area of activities. The MTR findings referring to MONRE's National Information Centre (NIC) being linked into the web pages has not taken place. The contents of the web pages for intranet users has not been assessed as the evaluation team at that time had not requested/received the appropriate access code. The ideas in MTR referring to the web pages serving as an information centre for all environmental planning in Lao PDR and application of Geo-network database created under SEM II Project have not materialized. In relation to EMSP databases, the IT system procured by MONRE maintains the web pages and Environmental Management and Monitoring Database (EMMD) through a server while some EIA and IEE related data sits also in selected computers.

There is no general awareness raising plan made for the EMSP. The awareness raising and information dissemination activities have been provided mostly through the many consultative workshops and training events (approximately 272 training events (incl. on-the job-training) held between 2010-2014 related to the environmental tools development, project management processes at central and provincial level). Several posters on the main environmental and social management and monitoring tools, such as ESIA and the Standard Environmental and Social Obligations (SESO) as well as process charts of DESIA mandate, monitoring and fee collection have been produced in Lao language.

Some non-web based awareness material has been produced incl. radio forecast to raise awareness in environmental protection and educational video on water quality monitoring has been produced under the programme support.

EMSP has further made an effort to disseminate some of the project results e.g. the Natural Resources and Environment Strategy in the sector working groups coordinated by the donor community.

With regards to dissemination of gender related information it is the mandate of Lao Women Union within the government to disseminate policy and the law on Protection and development of women. EMSP has provided support to consultative workshops on gender where these gender related documents have been disseminated. Four workshops since 2012 have been held (at central and provincial level) related to gender issues.

EMSP supported the Lao Women's Union in MONRE to organize the gender workshop on Environment for Northern and Southern provinces (August-September 2013). The main objective of gender trainings in the North and South was to develop the knowledge of trainees on women's role on environment. The head of PONRE and female staff in each division under the PONRE took part in the training, as informed by Vice President of Sub Committee on Women's Advancement (SubCAW) in MONRE. The training report which might inform the training modules and the list of participants was not found for evaluation team to verify the given information. A consultation workshop on data collection for drafting MONRE Women Advancement Strategy was carried out in July 2014. At the workshop, MONRE women learnt about draft of 8th the National Socio-Economic Development Plans, draft NRES to 2025, draft National Women Advancement Strategy 2016-2025, mandates of MONRE Women Advancement Committee, and example of other women advancement efforts. At this workshop, participants developed jointly the baseline data (gender and position) of each MONRE department; participants also work together for drafting the milestones, key programmes and actions for women advancement for each department.

Women actively participate in training events sponsored by the Programme, who reports participation in disaggregated data on gender from the events. The participation is not based on gender but rather on a needs and merit based on the topic offered for training. Training is not part of any career planning and the Programme is not in a position to propose or pursue promotions for staff following its training activities. Promotions are the sole responsibility of the Personnel Department, which refers directly to the Party. It is therefore understood that the Programme's only avenue to consider gender equality is through participation in training. The internal programme guidelines for training planning, it is recommended to ensure gender balance and to ensure also gender equality in discussions and voicing of opinion.

Figure **Error! No text of specified style in document.**-5 MONRE Homepage

The author of this section of the evaluation report was visitor 307,986 on the MONRE/EMSP web page.

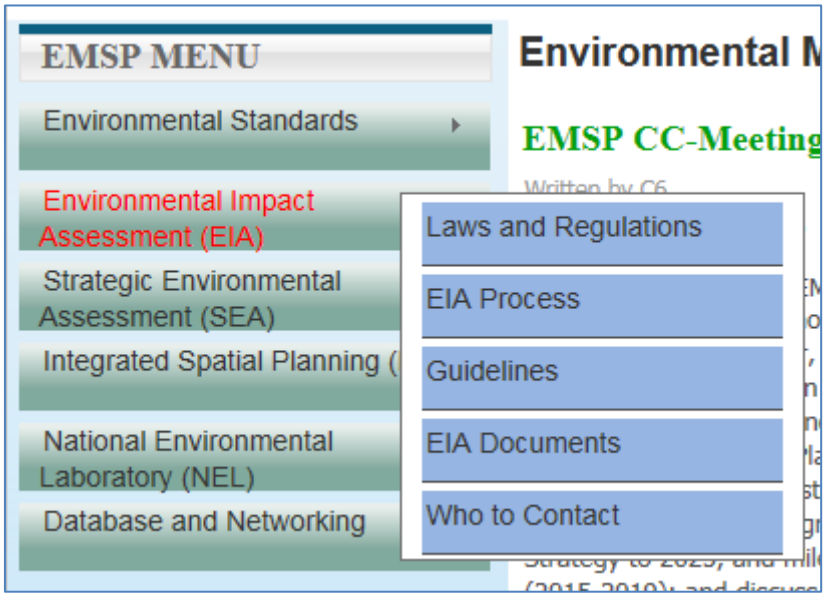


Figure **Error! No text of specified style in document.**-6 Papers to download

Support has concentrated on the web page plus on celebration of the World Environment Day.

Some discussions have been held e.g. concerning the limits for disclosure as it was not found appropriate by Lao standards to publish monitoring data originating from compliance monitoring of individual projects. Impact assessments or monitoring reports, whether compliance or residual impact monitoring, thus remain inaccessible to the general public. Only the systematic, governmental, monitoring from the fixed monitoring stations may readily be published.

The Programme website has suffered from not clearly defining its target group and scope. There has not been a clear division of what belongs on the Ministry's site and what belongs on the programme site. Now that the Programme is coming to an end, the contents must all be located in MONRE's website with specific Programme information included for historical purposes.

The Programme web page is not very well updated. The page would benefit, even in these last months, from a cleaning procedure, where progress and technical reports are uploaded and obsolete material deleted. The page would benefit from having links to external bases.

The target group for the webpage is not clear. The language and mode of presentation seems to be directed towards professionals rather than the general public or rural communities.

The data sharing between government agencies benefits from foreign aided projects, where data often is shared in a less formal manner. The Environmental Management Support Programme is no exception and particularly integrated spatial planning data is well shared.

Summary of findings:

- EMSP and MONRE web pages contain several materials with regard to regulations and EMSP activities. Important databases such as Environmental Management and Monitoring Database (EMMD) and Water Quality Database add into the selection of information available within MONRE and for MONRE's partners.

- EMSP web pages would benefit from more frequent updates of contents regarding activities and materials as most updates are dated before 2013. The current coverage of data the databases within MONRE and the access to databases by provincial Departments of Natural Resources and Environment is very limited requiring further and continued strengthening.
- More focus on gender mainstreaming has taken place after the Mid-Term Review. EMSP has supported gender mainstreaming and awareness raising within MONRE by organising workshops and disseminating related strategy papers.

5.2.5 *Component 5: NREI: The Natural Resources and Environment Institute: Environmental laboratory services*

Purpose: A certified National Environmental Laboratory (NEL) is operational in MONRE and providing services for compliance monitoring on a financially sustainable basis

Achievements:

- A national environmental laboratory functional as currently equipped and staffed in temporary building.
- About 6000 samples and 35 parameters alone in the period Oct 2012-September 2013.
- Commercial contracts have been established with the Mekong River Secretariat and a few other major clients as well as with about 65 minor regular clients.
- During Oct 2013- Sept 2014, 5,538 water samples for 35 water quality parameters; namely alkalinity, ammonia, BOD5, chloride, COD, conductivity, cyanide, dissolved oxygen, nitrate, nitrite, sulfate, calcium, magnesium, potassium, sodium, antimony, cadmium, chromium, copper, iron, manganese, nickel, lead, zinc, arsenic, selenium, total mercury, oil and grease, pH, phosphate, total hardness, total phosphorus, total solids, total dissolved solids and total suspended solids. All analysis procedures in accordance to ISO/IEC 17025.

A national laboratory for environmental testing is operational with programme support within the compound of the Ministry of Natural Resources and Environment. Space is scarce but a new building is under construction paid for by the World Bank. All equipment and chemicals are provided for by the Finnish support. Unfortunately, there have been some significant delays in constructing the building so some equipment delivery had been cancelled for the simple reason of lack of space.

The idea is to establish a semi-commercial ISO certified laboratory offering services to private and public clients locally as well as regionally. This laboratory will be supported by a number of provincial laboratories, which can make simple water quality testing of natural parameters of ecological importance.

Result 5.1: Laboratory is equipped with appropriate technology which are used for delivering services in national water quality and compliance monitoring

- Equipment procured, installed and operational at central laboratory.
- New building under construction
- 18 provincial and district Departments of Natural Resources and Environment supported with Laboratory services
- Laboratory equipment purchased and basic staff capacity built for the DESIA PONRE staff in selected provinces (Champassak, Luang Prabang). So far, there is no permanent laboratory staff in the provinces .

Result 5.2: Laboratory staff are trained to the level of international certification and using their new skills

- All relevant central and provincial staff have received basic training.
- Central staff fully proficient and working.

Result 5.3: Water quality sampling is credible and reliable

- Staff trained, national sampling scheme in place and sampling ongoing.
- Water quality are samples sent routinely to NREI central laboratory for analysis of 20 parameters.

Result 5.4: Laboratory is operating on a semi-commercial basis and a preparation for an accreditation of ISO/IEC 17025

- A business plan is produced
- Service agreements agreed with some major clients.
- About 65 medium and minor clients are regular.
- Trainings provided with proven skills set developed
- Laboratory operational processes planned currently according to ISO 1705 requirements

Result 5.5: Results of first national water quality survey are available and capacity exists to replicate

- National sampling (Mekong river) and provincial sampling now a continuous ongoing process.
- National water quality database is in existence in MONRE

The Laboratory currently employs about 17 permanent staff including 8 volunteers. These have all been intensively trained in analytic procedures using the highly sophisticated equipment provided through the Finnish funding.

Operational procedures, individual job descriptions, organisational arrangements have all be brought in place and documented as a preparation for ISO certification. This certification requires proficiency in a large number of parameter tests, a level that is almost reached. The laboratory is frequently subjected to proficiency tests by the accreditation organisation in Thailand. These have been completed with a high degree of success.

An accreditation institution has been identified in Thailand. The language issue and proximity has been leading factors in the selection. The idea is to have the laboratory accredited already in the present location and then apply for an update once the laboratory has been relocated.

The Programme has supported the establishment of regional laboratories in Luang Prabang, Xieng Khuang and Champassak. The regional laboratories fill an important role as being centres for field sampling and field testing. The original idea was that field sampling was organised through these regional centres and that common parameters, which could not be tested in-situ were tested here. Only the more complex tests would have to be referred to the national level laboratory in Vientiane. The evaluation mission visited the regional facilities in Prabang and Champassak.

All staff has received substantial training but the resulting level is not fully satisfactory. One reason for the unsuccessful training is reported to be delayed delivery of chemicals and training material in spite

of a timely delivery contract. The other outstanding issue is that the laboratories do not have assigned laboratory staff but the trainings have been provided to PONRE staff having also other duties.

In Luang Prabang, the organisational arrangements for staff and laboratory are not entirely solved, wherefore effectiveness and dedication have suffered. Some equipment has not been distributed to all field laboratories due to logistics considerations. This may be wise as the current facilities are inappropriately in a protected (World Heritage) building where nothing may be changed and where the equipment already there are not properly taken care of or utilised. This of course hampers daily work and a seemingly lack of institutional understanding and support. The staff in Luang Prabang have been trained at the same level as all other regional laboratory staff but lack of management and guidance has left them insecure and thus unable to test any parameters independently.

The laboratory in Pakse (Champassak) is established in a suitable building and the equipment provided by the Programme well installed. The laboratory has operational readiness to carry out monitoring of fifteen water quality parameters although this does not happen yet. The laboratory has been supported by EMSP by 34,000 Euro for equipment. The province has in addition provided 2,700 Euro funding for the laboratory repair thus demonstrating strong sense of ownership and commitment to take charge of water quality monitoring and IEE and ESIA compliance monitoring.

All 15 DESIA staff in Pakse have received basic laboratory trainings, however the laboratory has neither staffing on its own, nor the operational and business plan. Hence, the regional centre is not yet operational. There has been a request for future support for the operationalisation of the laboratory through a business and a staffing plan. Pakse has an existing health laboratory, which may be a competitor. There is therefore a need for coordination between local line agencies with regard to mandates, purpose and analysis capacities to avoid overlap and unconstructive competition.

In the neighbouring province, Attapeu, the water quality monitoring staff were not aware of the regional laboratory existing in Pakse so they send water samples directly to Vientiane. This is not cost-efficient and seems to be going against the commitment of Attapeu province to develop the laboratory into operational unit. It is therefore recommended to assign Pakse laboratory support for the staffing and operationalization of the laboratory through business planning.

The type of equipment provided by the Programme is state-of-the-art for both wet and electronic testing. All equipment seemed to be in use and staff seemed confident in their use, particularly at central level.

A fair number of private customers including the Mekong River Commission are regular users of the facility.

Summary of findings:

- The capacity to provide laboratory services remains essential underlining the high relevance of the environmental laboratory operations where capacity has been strengthened successfully. However, several pragmatic constraints have been met and risks remain for the longevity and sustainability of the laboratories supported.
- Of the provincial laboratories, Luang Prabang laboratory is in an unsuited building and staff are not capable of carrying out tests independently. The entire laboratory in Luang Prabang should be reconsidered and if continued, it needs to be relocated and a firm organisational and operational structure must be in place.

- In Pakse, the laboratory spaces is small (25 m^2) but otherwise suited. The existing basic staff capacities are enough to turn the laboratory into a small functional service unit that could specialize in selected ESIA project monitoring investment projects. The unit may also potentially satisfy the needs for analysis services supporting the systematic water quality monitoring in the South which would be more costs-efficient than sending samples from neighbouring provinces to Vientiane.

5.2.6 Component 6: Programme Management and Administration

The programme management and administration has initially been through a period dominated by ineffectiveness and inefficiency. However, all involved parties, i.e. the Government of Lao PDR, the Government of Finland and the Technical Assistance service provider have all shown flexibility and determination to jointly find workable solutions. The final management composition and systems have been operating very smoothly in a manner that not only ensured results and accountability but which also ensured a sense of national ownership to the results.

The Technical Assistance has clearly respected its advisory and supportive role. Plans, budgets and reports may physically have been established using Technical Assistance skills and manpower but the contents have all been in line with the wishes of the national management.

The same counts for financial administration, where the Technical Assistance has been readily available for accounting procedures, but where the actual funds management and disbursement has followed Lao standard procedures and where the Lao management has disbursed the funds and controlled procurement. It may be argued that the Technical Assistance team have not fully taken all opportunities for influence or transfer of skills and knowledge at management level but the Technical Assistance management has considered the present level of influence and interaction as being the most appropriate to the local conditions.

As a donor requirement, external audits have been made and financial reporting has been made to the Ministry for Foreign Affairs of Finland.

Technical Assistance has been managed by the consulting company Grontmij AS, Denmark, but the national management has had a natural influence in planning timing and Terms of Reference for consultants. Initially, national consultants were engaged by the Government of Lao PDR over the budget provided to the Government of Lao PDR by the Government of Finland. For administrative reasons, this responsibility was later transferred to Grontmij AS.

Technical Assistance services has been delivered as and when necessary and Grontmij AS has visited the programme about twice per year.

There has not been an internal monitoring and evaluation system *per se,* but monthly staff progress reports combined with regular programme level progress reports have enabled the programme management to be constantly updated. This has been utilised in the regular management meetings within the Ministry of Natural Resources and Environment.

The Coordination Committee (corresponding to Project Steering Committee elsewhere) has held meetings every six months. The committee has been active in providing guidance to the management. Reporting to the meetings has been by the National Programme Director, who has sought Committee approval for all important decisions concerning programme planning and implementation. The Committee was thus very active in the reformulation of the Logical Framework Matrix 2012.

There has not been any formal training of managerial or administrative skills to the national management but working every day with the international Technical Assistance staff has effectively contributed to transfer of knowledge and skills.

Summary of findings:

- Planning and budgeting procedures and delivery of related reporting has been satisfactory
- Internal M&E has not been formalized/institutionalized
- Managerial and administrative capacity building /transfer of skills for programme managers and senior staff has not been sufficiently included
- Capacity building in fundraising has been successful
- At provincial level, there has been some dissatisfaction that financial transfers have been too segmented and centrally managed (funds are transferred in small batches instead of for entire activities)
- Increased inclusion of district levels would have been beneficial.

5.3 Programme design

The Programme has been traditionally designed with a joint programme management and a number of technical components, each managed by a national component coordinator. The national coordinators occupy leading posts within the government departments targeted by the components. Technical Assistance staff has not been assigned exclusively to components but have been providing services across the Programme in accordance with their professional field and experience.

The programme management has considered and partly implemented the programme without strict division into components as the management have seen all activities as correlated and intermingled. This has led to a broader understanding at all levels of the complexity of environmental management.

There have similarly been national coordinators and at provincial level working with the provincial and district staff and environmental management units. This has supported the true embedding of project support into national structures. What may be called programme results are in fact national government results, which just happen to have received financial and advisory support through the Government of Finland. Approval of such results – e.g. integrated spatial planning (ISP) – has therefore been a task for the provincial authorities and not the Coordinating Committee.

The Programme Management has as far as possible adjusted the programme scope and approach after the recommendations of the Mid-term Review. No significant omissions have been found.

5.4 Relevance

The main goal of the Finnish Development Policy 2007 in force at the start of the Environmental Management Support Project (EMSP) was to eradicate poverty and to promote sustainable development in accordance with the UN Millennium Development Goals agreed jointly in the United Nations. Finland's development policy was built on the economic, social and ecological sustainability based on the United Nations Conference on Environment and Development in Rio in 1992. The Finnish thematic cooperation also focused on sectors of specific importance to Finland, especially on the promotion of sustainable development, such as promotion of environmental sustainability according to the Finnish Development Guidelines for Environment (2009). The following cross-cutting themes under the Development Policy were supported:

- Promotion of the rights and the status of women and girls, and promotion of gender and social equality;

- Promotion of the rights of groups that are easily excluded, particularly children, people with disabilities, indigenous people and ethnic minorities, and the promotion of equal opportunities for participation;
- Combating HIV/AIDS; HIV/AIDS as a health problem and as a social problem.

When the Ministry of Natural Resources and Environment was established, the project was adjusted accordingly to integrate the policy goals of the Finnish Development Policy of 2012. The overarching goal of the Development Policy of 2012 is strengthening the position of the poor and the reduction of inequality, and striving for the reduction of poverty in absolute terms.

The priority areas of the current Finnish Development Policy 2012 are:

- A democratic and accountable society that promotes human rights;
- An inclusive green economy that promotes employment;
- Sustainable management of natural resources and environmental protection; and
- Human development.

Finland pursues human rights-based approach to development. Its aim is that everyone, including the poorest people, knows his or her rights and is able to defend these just as the authorities are aware of their obligations towards the rights-holders and able to implement them.

The cross cutting objectives of the Finnish Development policy are; gender equality, reduction of inequality, and climate sustainability. These objectives are meant to penetrate all planning and decision making and to be mainstreamed as an integral part of all the Finnish supported development cooperation interventions.

The overall objective of EMSP is to prevent unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans implemented in Lao PDR.

The objective of EMSP is aligned with the Finnish Development Policy 2007 and also in conformity with the Policy 2012. Although the programme has not strategically focused on Human Rights Based approach by its design, the programme supported processes of e.g. SEA and EIA in their nature imbed principles of peoples' equal right to participate to development projects and processes that will have an effect on their natural, social and/ or economic environments. Similarly, the processes include the right and access to information and justified compensation on any negative impact on their lives and environment.

After the MTR review the programme has demonstrated improved focus on mainstreaming gender aspects into the programme planning and implementation.

Although project has supported activities that address climate sustainability, there has been lack of systematic follow up and support on the mainstreaming climate sustainability into practice.

The EMSP goals and objective are well in conformity with the Seventh Five-Year National Socio-Economic Development Plan (2011-2015). The plan names poverty reduction as the primary objective by targeting to achieve the Millennium Development Goals (MDGs) by 2015 and graduate from Least Developed Country status by 2020.

Similarly, the **Programme is aligned with the Four Breakthrough goals** set to achieve the Seventh Five-Year National Socio-Economic Development Plan by developing the human resources of civil servants and supporting the strengthening of governance and management.

The Environmental Protection Law (02/99/NA) is captured in the essence of the programme. The goal and objectives of the EMSP I are well in conformity with the Lao development policy programme.

EMSP remains highly relevant with regard to the main national policies, strategies and priorities of Lao PDR which is reflected by the recognition of the main strategies and planning frameworks such as Socio-Economic Development Plan, Provincial Environmental Action Plans (PEAPs) and MONRE's Vision and Strategy in the form of Natural Resources and Environment Strategy 2015 and the Five Year Action Plan 2020 that was established by the support of EMSP. Several decrees are being drafted in relation to EMSP's results. The implications for wide ranging tools such as Strategic Environmental Assessment and integrated spatial planning need further alignment with existing procedures. These tools are therefore still not yet formally recognized and are waiting for legal endorsement. While several donors showed an interest in these topics and tools, no specific commitments were made by any. JICA has been mentioned at a late stage of this evaluation but this avenue has not been further investigated.

The programme recognizes the Environmental Protection Law (EPL 2012 and as revised in 2013) as one of the main national legislations and strengthens existing environmental management instruments recognized by EPL such as Environmental Impact Assessments (EIAs) and Initial Environment Examination (IEE). The strengthening of the EPL implementation has been done through targeted activities such as environmental monitoring and other requirements from development projects where selected tools such as EIA compliance monitoring, Water Quality Monitoring, Standards for Environmental and Social Obligations (SESO) as part of Concession Agreements for hydropower in the Environmental Compliance Certificate (ECC) and Self-monitoring inspections have been supported in EMSP.

However, the status of some of the key environmental management instruments promoted by EMSP and SEM, such as SEAs, ISP and Water Quality Monitoring, remain still unrecognized within Laotian legislation rendering their role and use as part of the environmental management system unclear and unsecured with regard to mandates and their actual application in environmental planning and management.

5.5 Impact

The project objective is the prevention of unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans implemented in Lao PDR by strengthening WREA (MONRE) and the provincial environmental authorities to become more sustainable, qualified, interactive, and capable of using updated tools and methods.

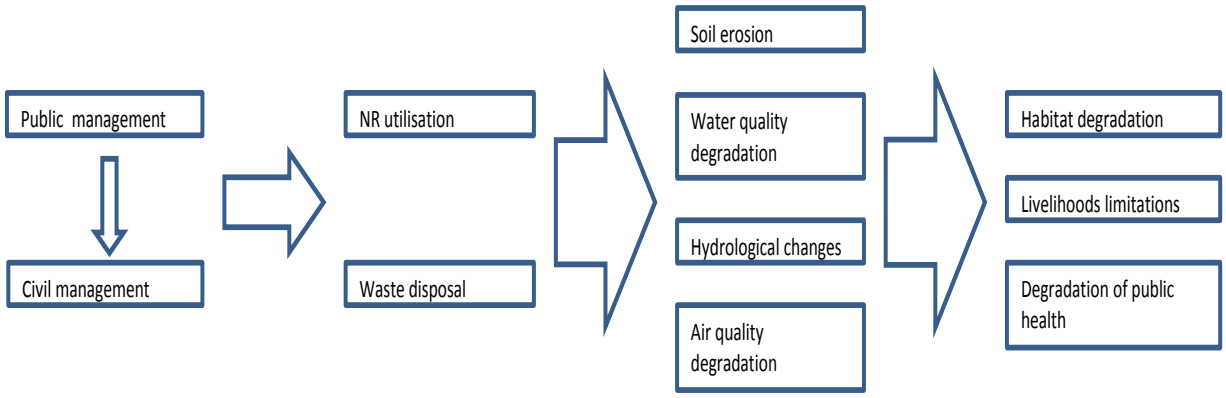


Figure **Error! No text of specified style in document.**-7 Functional Theory of Change

A generic example of a **functional theory of change** applicable in programme implementation is depicted in Figure Error! **No text of specified style in document.**-7: The environmental degradation is primarily caused by excessive or uncontrolled utilisation of natural resources either in commercial projects or pursuit of rural livelihoods as well as through improper waste management. The Government guides and regulates these damaging activities, i.a. through a partnership with the general public and project developers. The latter will require substantial awareness raising by Government institutions.

The Government agencies have had weak structural or human capacity to neither guide nor monitor the impact of development, which has been one of the focal issues for the Environmental Management Support Programme. The focus has included not only the organisation and technical skills of the government agencies but also their capacity to provide information to the public as well as cross-sector cooperation to enhance environmental management. In doing so, the agencies have provided services as and when needed and included relevant parties including other ministries and even companies in doing so.

The main stakeholders of EMSP have been the governmental counterparts in MONRE, Ministry of Industry and Commerce (MOIC) and PONREs with limited activities targeting more localized levels of governance (districts and villages) and people affected by development. In MONRE the main impacts have been achieved through support provided to EIA compliance and monitoring based on Environmental Compliance Certificate (ECC) requirements, Standard Environmental and Social Obligations (SESO), EDDM database, compliance monitoring activities and Water Quality Monitoring. In MOIC EMSP supported Self-monitoring schemes and their inspections. Laboratory services and capacity building have been supported at central and at provincial levels. EMSP has within the Ministry of Industry and Commerce supported self-monitoring schemes and the associated inspections. These activities follow the mandates and environmental management requirements set for the environmental sector and are founded on stakeholder requirements.

These requirements have been through a rapid development and it has been realised that in order to control both large multinational investment projects and small local land use and land conversion projects, the Government must possess new knowledge and skills within planning, assessment and monitoring. The government staff must also acquire additional theoretical understanding of physical, chemical, ecological and social processes and analysis to engage in an equal level dialogue with developers of technically complex projects.

The Programme has in its focus taken these **issues of present and future needs** into account by particularly application of strategic planning and assessment plus very detailed chemical monitoring skills and analysis.

While the technical foundations are well in place in meeting the governmental authorities' needs, the overall quantity of the monitoring practiced remains very limited in terms of the total number of activities undertaken for compliance monitoring, inspections, sampling and the capacity needed. For instance, more detailed ESIA compliance monitoring supported by EMSP is practiced only in 10 selected projects in which one MONRE staff has been assigned to be also trained for monitoring partly in cooperation with the company developing the project. The Water Quality Monitoring (WQM) has been undertaken systematically only after 2013 with the support of EMSP accounting for 3-4 sampling rounds in the provinces. The current monitoring scheme is composed of a quarterly schedule testing four parameters each time and a six-month cycle where twenty parameters are tested..

The provincial Departments of Natural Resources and Environment (PONREs) have to rely on a large number of volunteers (professionals, who work as interns for little or no remuneration in hope one day to get a job) to carry out its monitoring mandate. This is due to general governmental limitations

for recruitment. Concerning water quality monitoring and laboratory services at provincial level, only very limited number of key staff (typically 1-3) were recorded to have skills satisfying the full technical requirements in spite of intensive training.

The SEA component was reported to have only 3 staff in MONRE having full knowledge of the SEA as application as a planning tool, methodology and the full SEA process in spite of intensive training of several staff.

With regard to some key technical areas within EMSP focus such as waste management, pollution control and ISP, overlapping mandates were noted which may have prevented the full adoption of the developed tools within MONRE and efficient technical coordination related to EMSP's activities. In brief these mandate matters noted relate to

- Pollution Control Division in MONRE having responsibilities for pollution of air, water, noise and also household waste management
- Land Use Planning (LUP) done by MONRE's Land Planning and Development Department on all levels of governance include development zonation set for 3-5 years (following the socio-economic development plan) and spatial planning related socio-economic development plans undertaken in MPI which is supported by GIZ

There has not been a standardized set of indicators of environmental health in use in Laos except for the water quality monitoring system that has been in existence for the past 15 years and which now, with Programme assistance, has been systematically implemented. Since previous indicators differ from the ones currently in use, a net impact on the actual state of the environmental health cannot be effectively verified. Other programmes such as the Core Environment Programme (CEP) of ADB have earlier introduced their own sub-set of indicators but these have neither been used in the Government's Environmental Outlook, which was carried out by MONRE with UNEP financial support.

The only noted systematic environmental monitoring practiced is for water quality. The water quality monitoring , which comprises 4 quarterly monitored parameters and 20 parameters analysed in the laboratory twice a year has only been undertaken since 2013 with the support of EMSP (in total 3-4 sampling rounds in 116 permanent stations nationally).

Before EMSP's support, water quality monitoring has been undertaken at least for 6 years in provinces and by the National Agriculture and Forestry Research Institute and goes back more than 15 years in Lao PDR within Mekong River Secretariat (MRC) but possible technical linkages / cooperation between the National Agriculture and Forestry Research Institute and the Mekong River Secretariat, who have been engaged in water monitoring through donor support of Finland, AusAid, GIZ and ADB programmes, remained unknown.

Finnish supported forest sector cooperation in Laos has been covered mostly by the SUFORD programme under the Ministry of Forestry and Agriculture where references were made to forest cover baselines existing in years 2002 and 2012. The Environmental Outlook of 2012, however, refers only to forest cover changes between years 1992 and 2002. Biodiversity related studies are not undertaken by MONRE or PONREs. Such information has not been utilized in EMSP or in MONRE in relation to environmental monitoring.

When asked to assess environmental improvements over the years, most interviewed provincial Departments of Natural Resources and Environment, stated only water quality as an indicator of environmental health improvements. These departments could report that pollution levels from dangerous substances such as cyanide and mercury in the rivers had subsided to be within the national standards for water quality over the past five years. Air quality monitoring capacity was stated to be non-existent within the provincial Departments of Natural Resources and Environment.

According to the provincial Departments of Natural Resources and Environment the forest cover targets set for 2015 (in the Southern provinces 70-75% area coverage) were stated being met with forest cover estimated at 65% in 2013 for Attapeu and also at 65% in Champassak. However, the team received very mixed responses in reference to environmental quality that included also cleaning of waste surrounding the streams suggesting the capacity of PONREs to account for environmental terminology may remain weak. It is also worth noting that the forest cover definition applied accounts for all forest areas including concessions and plantations.

The influence that EMSP has had on affected peoples' income or health or access to environmental administration remains unclear owing to lack of baselines or benchmarks regarding health and socio-economic data. Process wise Livelihoods and Resettlement Committees operate in provinces dealing with the complaints of affected people. The committees are composed of Provincial Governor or Vice Governor (chair) and all sector DGs including PONRE who facilitates community consultations required for setting compensations that are conducted following the Public Consultation Guidelines by DESIA. In practice PONRE also assists in defining compensations where similar development projects are used as references setting the compensation units to the affected people. Village heads are the key people engaged in the process from villages.

The site visits provided some anecdotal evidence received in selected project sites regarding compensations and health aspects. A ISO certified and transparent hydropower company building 23 MW hydropower generator was met having paid compensations to 190 affected people currently worth of 700,000 USD through a consultation process. The sum was based on estimated losses of coffee production and housing with the overall compensations expected still to reach 1 M USD after more than 20 rounds of consultation rounds. The compensation units used originated from the adjacent hydropower plant already established. The villagers had received also a road and were expressing some of needs that had not been met such a larger school. The pending compensation sum originated from an outstanding dispute of land user rights vs. land titles where the people affected by the hydropower area had been cultivating coffee with temporary land use rights of which land taxes had been paid. The unclarity stemmed from missing land titles that can be considered also as illegal land use. The company was ready to compensate for the land as it had been actively used but is expecting decision makers to settle the issue of compensation unit which has been in the process now for 2 years.

Affected people have been successful in raising complaints to PONRE and MONRE on water quality with regard to having rash and noticing fish deaths in streams. These have been recorded and lead into responses in MONRE and PONREs. However, actual factory inspections or water sampling have not followed such complaints. This raises concerns of the operational capacity and formal responses of the authorities.

DESIA and their provincial divisions in the Department of Natural Resources and Environment have responsibilities to undertake compliance monitoring for EIAs and IEEs stated to be twice a year for MONRE, quarterly for PONRE DESIAs and for districts weekly or even daily (during project preparations) suggesting a need for very extensive capacity but remaining weaknesses in key functions such as carrying out inspections in response to actual complaints. The ESIA compliance monitoring and compensation process recognizes penalties for developers and court cases by the affected villagers. However, this far no penalties or court cases have actually taken place in Lao PDR.

With this shortage of monitoring and subsequent enforcement capacity, ultimate impact on the water, air and biological indicators is yet to be seen. There is no doubt this will happen one day if the current momentum is sustained. The villagers managing the Tha River can see the results of their own enforcement but nation-wide, this will still take some time.

Most impacts attributed to the long term support of the environment sector through SEM and EMSP are related to the successes gained in setting the legal basis, mandates and main operational procedures for the environmental administration of Lao PDR through development of environmental laws, degrees and guidelines for their implementation. This has materialized also in EMSP through the revisions of the Environment Protection Law and the activities focused specifically on ESIA, IEE and industrial compliance monitoring.

In considering the main achievements of the long term support by Finland and Sweden in the environment sector of Lao PDR, the systematic institutional development has lead into the gradual build-up and operationalization of the Laotian environmental administration, establishment of its legal mandates as well as some main operational modalities such as EIA regulations.

SEM and EMSP have together contributed significantly to the existence of the environmental administration in Lao PDR from STEA to WREA and the current MONRE with sustained cooperation in empowering the administration through developing environmental management legislation, methods, tools and capacitating the administration in using these for meeting its legal mandates.

The Programme is designed to take a path targeting impact at government institutional level: Legal instruments, organisation, Human resources capacity, enforcement, governance, assuming eventually will lead to positive impact on the environment and livelihoods.

Next level of targeted impact has been on developers of large investment projects. The impact on these has had direct implications for communities directly affected by the projects: Compensation of losses, access to justice, sustained livelihoods, food security, improved health, protection of basic rights, equal treatment of all groups (ethnic, gender, social, age, health)

It is therefore not a weakness from the part of MONRE or the Programme that there is little discernible poverty reduction, health improvement, food security, social equality as a result of the Programme. There is a sequence to be followed, and the time has not yet come for significant changes at grass root level.

Two issues have improved: 1) The right to complain has been cemented and the government does receive relevant complaints even though they mostly deal with individual matters, and 2) Water quality in the rivers is under increased control to the benefit of the river dependent communities.

5.6 Effectiveness

Effectiveness, i.e. the rate at which the selected activities lead to the expected results, has in general been acceptable. But true effectiveness also requires the results are being brought to the expected use.

Substantial efforts have been invested in establishment of the basis for **Strategic Environmental Assessments**. It is therefore somewhat discouraging to note that they never have been brought to real use. A single attempt was made when subjecting one policy to the screening process but as the process resulted in the estimation that the policy would have little or no negative environmental impact, the process was never taken further. The main progress with SEAs has focused on basic capacity development, drafting the SEA degree and SEA guidelines as well as supported two study tours to learn from SEAs in Vietnam and Thailand.

As part of the training, EMSP assisted Oudomxay Province with three case SEAs as a combined training and experience gaining. This case work was done by three groups of officials from different sectors and each group produced an SEA report on a particular planning issue. The case work went through the main steps in the SEA process.

The study tour to Thailand conducted in July 2013 was arranged as a combined training and awareness raising event. During the training workshop an SEA Expert from ADB's Core Environment Programme introduced the participants to SEA case work in Vietnam.

Of the SEA models the national TA team considered Vietnamese SEA as a functional model but no European practices or models were referred to. In all, MONRE states having currently 3 staff members who are proficient in the entire SEA cycle. In terms of actual SEA application, the tool is foreseen not being formally recognized as part of environmental management in near future with some MONRE staff describing that SEA implementation likely to require at least 5 years.

In connection to this, it has to be noted that the first SEAs concerning Lao PDR was designed and undertaken in 2010-2011 through Finnish support (Mekong River Commission, CEP). The finding from the field shows that, the results have not been studied, used or considered in EMSP implementation. Such SEAs have all been anchored with an aim to influence planning through legally recognized strategies, plans or programmes.

After EMSP, Lao PDR would benefit from simplification of the SEA process by focusing on application of selected pragmatic analysis tools such as Cumulative Impact Assessment as part of the SEA process. Given the long support to SEA process provided in EMSP not resulting into a single full SEA exercise being undertaken, strong government dedication is required for SEA to become a recognized tool in the future.

Recently the Core Environment Programme of ADB has hired one independent consultant on behalf of EMSP for the Department Of Environment Quality Promotion to undertake a SEA activity aimed at general capacity building and demonstrating SEA in connection to ISP and Socio-Economic Development Planning in Luang Namtha province (consultant hired in November with an unknown TOR, delivery date or results). Based on the current planning mandates and history of ISP in Lao PDR, several constraints are foreseen with such an intended activity including: i) ISP remains legally unrecognized and not guiding any actual planning in Lao PDR (with the Laotian legal term of EPL referring to "Integrated Provincial Environmental Planning"), ii) the previous provincial ISPs established for 2011-2015 in Attapeu and Champassak remain unused in practical planning despite governor 's signatures, iii) Socio-Economic Development Plans are mandated under MPI (supported by GIZ programme that focuses on spatial planning associated with the socio-economic development plans) whose engagement in the SEA activity is not confirmed, iv) operationalization of SEA has not happened as of yet despite earlier models, the development of the draft degree and draft guidelines, v) undertaking SEA process is considered technically complicated by the Government of Lao PDR counterparts and vi) SEA implementation suffers from very weak capacity.

MONRE has undertaken a sector vision and strategy setting in consultation with several other ministries with EMSP's support which has clarified its organizational aims for 2015 and set an action plan until 2020. PEAPs have been done with the support of SEM II sometimes even together with ISPs in selected provinces such as Attapeu. The usefulness of ISP is mostly associated as a data collection process in provinces while Land Planning and Development Department of MONRE see it as a potential additional source for provincial data only. The PEAPs done together with ISPs have remained in practice separate processes. Even districts have been undertaken ISPs where the exercise has been stated having been useful but for what purposes remains unclear.

The **integrated spatial planning (ISP)** was originally not included in the Programme but considered concluded during the SEM II period. However, after the MTR of 2012 the integrated spatial planning (ISP) activities were increased aiming at environmentally integrating planning supporting decision-making and institutional capacity within MONRE and the Departments of Natural Resources and Environment at more local levels. The reason for increasing the ISP activities remains unknown but a

generic reference was made to Steering Committee having made such a decision (remains unverifiable). It is also possible that MONRE seeks to gain increased visibility and provincial level political endorsements for the ISP concept to be used in integrated environmental planning before it is formally adopted although this remains speculative. Adoption of such operation lines come naturally with several risks that can materialize if and when the legally mandated units for spatial planning within MONRE and under MPI hold fast to their standard operations within their mandates.

The integrated spatial planning (ISP) has now been introduced in 8 provinces where it is seen as a cross-sectoral data gathering and analysis tool aimed at provincial decision support for planning. However, ISP's legal status and practical use in relation to other legally binding planning processes such as Land Use Planning (mandated also within MONRE), remain still unrecognized after more than 10 years of programme implementation. It therefore seems that application of ISP may have had reasons connected to MONRE and PONREs mandates intended specifically at enhancing environmental aspects of planning. When aimed more strictly at environmental planning, ISP could be developed further to account for environmental objectives and measures for different environmental issues emerging from development as part of planning on different levels.

The provincial ISP was considered not well-suited for selected sector planning such as forestry where MFA Finland supported SUFORD aimed to use ISP for landscape level forest planning. In general, it is worth noting that ISP is mentioned in the EMSP Project Document only 4 times where it is associated with the WREA's strategy established in SEM II. ISPs were not however originally mentioned in the expected programme results indicating technical inconsistency between the intended Project design and the activities implemented after MTR of 2012. Also the TA team is divided with regard to the aims and use of ISP. Overall it seems that ISP related activities have been continued due to the activities and results of SEM II, and to impose MONRE's authority over environmental planning, without checking or questioning how the results achieved in ISP will be eventually used.

The Southern provinces of Attapeu and Champassak had planned to update their ISPs (currently in place for 2011-2015) with assistance from the Programme. However, the budgets made available by the Programme for the update process reportedly fell EUR 5,000 short of the 15,000 Euro requested. The central level explanation was that these provinces had applied for the ISP budgets too late considering that the ISP update process takes one year.

So while certain provinces have been supported in establishing the first ISPs, some provinces with existing ISPs and internal capacities for the update did not receive such support. This raises questions over why the ownership and existing capacity for ISP did not lead to continued support. One of the reasons could be a technical disconnect between the ISPs and the actual planning in these provinces suggesting other planning processes being more important there. Another reason could be that the first ISPs remained as tests or pilots but if so, why had lessons learnt from these provinces not been better utilised? Based on the assessment of the ISP of Attapeu, it seems that the process could be significantly quicker than the indicated requirement for 1 year planning.

Laos is facing an increasing number of development projects and interests that MONRE and the PONREs are required to regulate and monitor as defined in the EPL and especially in the EIA and IEE regulations. The national database of EIAs and IEEs is now fully functional and staff in the Department of Environmental and Social Impact Assessment is entering the appropriate data for EIAs and IEEs. However there is still a considerable number of projects to be entered: The Environmental Management and Monitoring Database hosted by MONRE with EMSP's support lists altogether 136 EIAs and 203 IEEs (IEEs until 2013) nationally while Champassak province alone stated having 397 development projects with either EIAs or IEEs from 2010 onwards.

In total, MPI has approved 1112 projects nationally in Laos between 2010-2014 (year 2010: 469, year 2011: 441, year 2012: 96, year 2013: 69 and year 2014: 37). The MPI approved investments need to have Environmental Compliance Certificates (ECC) meaning that these would also have approved EIAs and /or IEEs. This leaves roughly 70% of the investments approved in MPI outside the current Environmental Management and Monitoring Database (EMMD).

The more detailed EIA compliance monitoring supported by EMSP through DESIA is practiced in 10 selected projects for training of DESIA's monitoring staff. It is also worth noting that the real number of investments may be even higher given the Concession and Investment survey published in 2012 by Bern University with the assistance of the Swiss Agency for Development and Cooperation listed 2642 investment deals made by 2012 in Lao PDR.

As a requirement, MONRE's DESIA needs to undertake compliance monitoring twice a year. This was described to be typically carried out by 5 staff from central level joined by 1-3 staff in both provinces and districts (in total 9-10 staff). PONREs are required to undertake monitoring quarterly with assumed 2-3 staff while districts were stated to have weekly or even daily monitoring requirements. For MONRE's DESIA to practice such monitoring regime with the support of PONRE and the districts in the field for the development programmes listed by MPI, this would have required 20,016 working days over the 5 year period or 4003 working days in a year nationally assuming 1 day is used for a monitoring visit.

For the provinces alone, the quarterly monitoring requirement means 8896-13344 man days (with 2 or 3 staff respectively) spread out nationally. Using the example of Champassak that recognized 397 projects as a practical example, the quarterly monitoring requires 3176-4794 man days a year (with 2 and 3 staff respectively) from PONRE. Champassak Environmental Division of PONRE has currently 15 staff meaning that each staff would be required to spend 211-319 man days in a year with EIA and IEE monitoring duties alone. Noticing that PONREs have also other duties, and the staff has different profiles and skills, the requirements that PONREs are facing in terms of EIA and IEE compliance monitoring requirements remain extremely challenging to meet.

Meeting such heavy monitoring regime requirements in terms of staffing indicate significant sustainability issues for meeting the legal requirements of compliance monitoring. The ESIA and IEE monitoring is currently financed fully by the developer who invites the PONRE monitoring staff to their site for monitoring. The current financing model does not ensure independent monitoring but subjects it to follow the developer's terms with regard to timing and financing.

Ideally the monitoring and inspections would require to be funded irrespectively of the developing company where certain funds and/or the Government of Lao PDR's budgets ought to be used. One of the existing mechanisms is the Environmental Protection Fund (EPF) that receives some budgets annually from ESIA projects. Similar mechanism should be designed and put into place directly for DESIA's use preferably in close cooperation with MPI who are receiving the investment proposals. Fees collected from different services, such as application handling and ESIA processing, using cost estimates based on average work inputs required, could be applied in defining service fee rates charged directly from the companies by the Government of Lao PDR as part of investment application and/or concession agreement processes. Alternatively an Independent Monitoring Agency (IMA) could be hired specifically to undertake monitoring for which the Government of Lao PDR needs to assign sufficient budgets which could be done when defining the costing for ESIA compliance monitoring during the ESIA application processing.

Industrial Self-monitoring of Environmental Management Systems (EMS) of factories is mandated for Ministry Of Commerce and Industry (MOIC). MOIC has received EMSP support for 6 focused training events, 4 workshops and support to factory inspections undertaken. The trainings have also included

POIC officers. The overall capacity in MOIC for self-monitoring inspections remains the responsibility of 9 staff nationally. MOIC stated 20 factories having currently self-monitoring schemes. The factories have large production capacities and feature cement, cassava, steel and beer production. Small factories remain outside the self-monitoring schemes. The overall number of factories in Laos remains unknown preventing any reliable estimations of the extent to which EMSP has contributed to the self-monitoring. However, the overall staff capacities and coverage of 20 factories within EMSP would suggest that only a minute fraction of the industrial production has been within EMSP's influence. The trainings and operational models delivered in EMSP, however, provide sound technical examples as pilot models for future strengthening of the industrial inspections.

The success and sustainability of the application of integrated spatial planning (ISP) at district and province level depends on availability of technicians with an advanced level of GIS capacity, good data collection quality control and the application of a software that not only is legal but which also allows easy data sharing and seamless application across geographical and institutional borders. Good and easy data sharing facilitates regulatory data sharing requirements, support decision-making of the management, facilitates society at large (e.g. research) and provides improved access to government services. Currently, the integrated spatial planning (ISP) is based on ArcGIS whereas e.g. the Ministry of Planning and Investment is using Quantum open-source GIS for their district level planning. The Evaluation Mission did not verify licences for ArcGIS. Fortunately, Quantum is designed to read a large variety of file formats including ArcGIS shape files.

The lessons to be learnt from the application of GIS based applications at district level is that it is popular to be able to visualize local – and thus understandable – information and structural cause-effect mechanisms. It should, however, not be forgotten that the maps in GIS are only a reporting format, whereas the real power lies in the underlying data bases and the analytical tools that follow. To fully unfold this world, substantial transfer of skills and knowledge is still needed.

The Programme has been effective in supporting capacity building within the issue of reviewing Environmental Impact Assessments and issuing the subsequent environmental certificates. With Programme support, the Ministerial Instructions for conducting Environmental and Social Impact Assessments, Initial Environmental Examinations and the subsequent environmental permitting by issuing environmental compliance certificates (ECCs) have been finalized and approved by the Minister for Natural Resources and Environment by the end of December 2013.

All large-scale investment projects in Lao are now subjected to Environmental and Social Impact Assessments and the Standard Environmental and Social Obligations (SESO) are annexed to all concession agreements. This progress is not only attributed to the regulations being introduced by the Ministry of Natural Resources and Environment but may equally be attributed to the effectiveness of the International Finance Corporation in imposing its "performance Standards" and the private banks introduction of the "Equator Principles". These standards and principles simply prescribe that it is impossible to borrow for large projects unless stringent procedures for Environmental and Social Impact Assessment and environmental management are followed. What have been visibly missing are efforts to improve the standard of the private environmental consultants establishing the Environmental and Social Impact Assessments.

While the impact assessments and the licencing gradually have been introduced to cover most large scale activities, the subsequent monitoring seriously lacks behind. The solution has been **self-monitoring** but only few major projects have taken up the gauntlet. Again, the consulting firms approved for establishing Environmental and Social Impact Assessments could have been fielded for monitoring purposes but this has not happened. Monitoring therefore remains as one of the most pressing issues in Lao environmental management.

Whether it may be attributed to the Programme, to the Ministry of Natural Resources and Environment or to the general development in the population as the information wave hits the country is hard to measure but it is a fact that environmental awareness at all levels is on the rise and that environmental issues now are taken seriously in virtually all transparent planning decisions. This has reportedly lead to improved access to budgets at all levels and to establishment of e.g. the Environment Protection Fund, which receives funds from e.g. development projects and international donors. Funds ae exclusively utilised for improving the environmental management in Laos.

One issue where the opinion of the Final Evaluation Mission may differ from the general opinion within the national project organisation concerns the laboratory services established with support from the Programme. The mission does not entirely share the optimism and business vision expressed by e.g. the Natural Resources and Environment Institute. Neither does the mission fully agree with the appropriateness of establishment of this service within the government services or the outlook for sustainability.

The main risks associated with the laboratory services are

i) Ensuring engagement of key staff needed to carry out the main responsibilities and tasks considering the large proportion of volunteers and the staff rotation. NREI's central laboratory has 8 volunteers out of the 18 staff suggesting a high risk for staff turnover.

ii) Sufficiency of clients to account for the operational costs and make profit remains questionable. NREI laboratory has currently less than 20 customers that include 4-6 donor programmes why increasing the client base is of high importance. This would benefit from a market survey and also assessing the laboratory's position in relation to other laboratories providing their services. It will, however, require a completely different attitude to and capability for timely material procurement and maintenance of both equipment and skills than presently has been demonstrated within the government services.

iii) Estimated equipment procurement costs and the significantly increased laboratory building budgets reveal a marked difference between the initial financial estimates and the reality in procurement. The laboratory building costs have increased from the initially estimated 700,000 USD to 1.3 M USD while the estimated 350,000 Euro needed for the outstanding equipment seems very high in comparison to the basic laboratory service set that has been build up with 25,000 Euro for instance in Pakse. It is worth checking what are the main services that the laboratory could provide with most profits, equip the laboratory accordingly and initiate market growth based on most cost-efficiency of the analytics applied. Cost of accreditation should be assessed against the actual needs of the market for laboratory services.

iv) The costs of maintenance and specific analytical methods can become a financial burden. Testing of some substances such as heavy metal require costly reacting agents whose supply can become costly. Similarly the equipment maintenance will be a standard cost item which needs specific attention in staffing and operational costing. Some donors have already noted in Laos that supported laboratories tend to struggle with equipment maintenance which has lead into decisions of using some laboratories only for training needs.

v) Other governmental laboratories and existing competition from private sector. MONRE's laboratories face competition already from the governmental Geological laboratory and Health laboratories. This will require internal assessments and possibly agreements on how to divide services. In addition, private laboratories in Thailand are able to provide

services faster than NREI currently. Private environmental consulting firms in Laos may take up the same path and be able to provide faster and more updated services than a government service.

The evaluation team assessed that currently the NREI laboratory operational budget vs. expected revenues means roughly a loss of EUR 10,000 annually. Overall the laboratory would benefit from additional support in a form of cost-analysis and market assessment needed to formulate the most cost-efficient market expansion strategy based on target client needs. This would then enable formulating a selection of services and analytical tests aimed at providing most profitability and ensuring establishment and gradual market expansion. Such an assessment would also need to assess staffing requirements in terms of positions and salaries as well as the costs of equipment maintenance and reacting agent supply.

There is no doubt that the services rendered now are noteworthy in terms of quality and that the demand potentially is high. However, again the private, consulting sector has been omitted from the equation and it is even clearly stated that the laboratory established through World Bank and MFA Finland support will be in direct competition to any private laboratory if such facility will be established. This attitude is not seen as being in line with neither World Bank nor Finnish general policies for business development.

There is a sincere need for a government environmental laboratory to set standards and to monitor accredited, private facilities. Such laboratory may be supported by provincial testing and sampling facility to be used in systematic monitoring of environmental health but not to monopolize the market for such services.

5.7 Efficiency

While the programme may not at all times have demonstrated efficiency by implementing according to time schedules and to balance financial disbursement with needs in the field, such issues have been drastically improved over the past years. About 80% of the disbursed funds have been spent over the past year without compromising quality.

There has been some dissatisfaction at provincial level that funds no longer have been disbursed in larger lump-sums but rather as smaller periodic tranches. This, however, has been based on the need for effective monitoring of spending.

The disbursement on provincial level was noticed to be an issue in the Mid-Term Review with recommendations to increase the activities in provinces. Some planned activities requested by provinces, such as integrated spatial planning updates in Champassak and Attapeu, could not be completed owing to not receiving or not being allocated sufficient budgets as and when requested by the provinces.

The sums in question for the integrated spatial planning are relatively small which raises a question whether granting an additional EUR 5000 for ISP could have been beneficial for achieving a broader geographical implementation reach by maintaining some of the key results achieved already in 2010 for which similar activities are underway in several northern provinces.

A similar situation was reported in Champassak and Attapeu where funding and timing of funding only allowed 3 of four planned water quality sampling activities.

On average, provinces have been allocated a budget of EUR 9,000 each for the entire National Water Quality Management Programme. This budget has covered all expenses for analysis chemicals, glass ware, sampling and transport. Considering the training element and the fact that 28 parameters are

followed constantly and that about 40 parameters are tested in the laboratory, such expense is reasonable and within the expectations for efficiency.

In addition to integrated spatial planning, the Water Quality Monitoring seems to have been hindered by the untimely budget availabilities, which for instance enabled only 3 monitoring rounds in Champassak instead of the planned 4 rounds. The provinces visited have been assigned budgets ranging from EUR 6,000-12,000 to undertake annual monitoring with 4 sampling rounds (4 parameters each time + 20 parameters twice) in a year in the provincial stations assigned. In Attapeu the monitoring is undertaken quarterly in 7 stations with EUR 6000 budget. The monitoring produces results from 28 constantly followed parameters and 40 parameters analysed in the laboratory annually. On average the monitoring costs remain high with roughly EUR 860 per each station and EUR 88 per sample.

The Water Resources Department estimates the total annual monitoring costs requirement to be in the in the order of EUR 250,000. The Department intends to request funding for some EUR 25,000 after the Programme support is terminated. That would enable focused monitoring only in 4 main catchments.

Resonating this in terms of noted expenditure, Component 3 under which the ISP and Water Quality Monitoring activities have been reported in the latest progress reports, show only 36% disbursement rates. This is in contrast with the Technical Assistance budget usage in 2013-2014 as reported in October 2014 showing the Technical Assistance expertise budgets are exceeded. This suggests that a more evened disbursement aimed at key activities such as integrated spatial planning and Water Quality monitoring would have been called for.

Taking notice that this is somewhat in line with Mid-Term Review findings, and recalling that the Programme has already gone through a budget neutral extension indicating serious hindrances in timely and planned disbursement, it seems that project management / coordination within the Programme has not been able to respond to the budgetary needs of the implementation in a timely fashion.

Component three is a good example of the improved disbursement rate. The component counts for more than one third of the entire financial assistance and up to April 1st, 87% of the component's budget was Total annual disbursement has since the programme over-haul in 2011-2012 been balanced and sound (See Table **Error! No text of specified style in document.**-1). The delays faced early in the programme history have been used to finance the budget neutral extension 2014-2015.

Table **Error! No text of specified style in document.**-1 Annual disbursement rates

2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	Total
6%	21%	24%	20%	16% up until 1 Apr	88%

Altogether, more than 80% of the total available budgets will at the end of the Programme have been disbursed on all components (see Annex 8 for further details).

The Programme has only been effective in promoting itself within a rather narrow circle of organisations closely related to the Ministry of Natural Resources and Environment or within the donor community. Within this circle, the programme has been well advertised and well respected. Outside this circle, the Ministry's activities are well known but little is known about the Programme *per se.* There has, however, been an expressed satisfaction with the efforts of the Ministry and thus with

the Programme. These efforts have included cross sectoral acceptance of environmental responsibilities, good environmental governance and efforts for cross sectoral monitoring of impacts.

5.8 Sustainability

The termination of MFA Finland assistance to the environmental sector in Laos has taken all stakeholders by surprise and therefore put the topic of sustainability in an entirely new light. Before this decision was taken, all players in the field anticipated a Phase II to be used for consolidation and simplification. Sustainability was therefore assumed a thing of the future.

Level of national ownership

As mentioned earlier, the level of local ownership is high. The activities are actual activities of the Ministry and the results are approved by local authorities, who also are going to implement them.

Economic elements

With the withdrawal of Finnish support, it will be necessary to identify other donors to ensure the results are not lost. There is a positive attitude to budget increases but the decision makers in this issue are rather remote from the realities in the Ministry.

Particularly the Laboratory, centrally as well as in the provinces, need continued support for quite some time if they shall achieve total independence in their present form and being sustainable technically and financial.

Institutional elements

With the high level of national ownership, all elements for institutional sustainability are there. However, prominent challenges remain. To begin with, there is no stability among staff as volunteers leave or permanent staff is transferred. There is a need for the Ministry to establish a staff development plan/career plan for individual staff members to ensure investment in skills and knowledge is sustainable.

There are gaps related to the core environmental management tools that are in extensive use in Lao PDR: ESIA and IEE application, compliance monitoring and inspections of factories. The support provided to compliance monitoring and inspections remains thin with only 10 staff undertaking more detailed ESIA compliance monitoring working on-site with the relevant companies virtually. There is no capacity in place to undertake inspections of companies and factories. The provinces have typically 1-2 staff undertaking inspections.

Overall, the staff quotas and required budgets are insufficient for meeting the legal obligations for which EMSP and MONRE would need to influence as a highest priority. Inspections that can assign penalties and fines are a key function that could still be operationalized. It is worth noting that this has direct influence to financial flow that can result from a company in breach of its licence.

With regard to the information of the volumes of ESIAs and investments, much can be achieved in short time by combining the databases in MONRE and MPI for which resources should be allocated.

The laboratory will be moved to the new premises in April 2016. The remaining concerns are within the capacities to formulate and operationalize the laboratory in a cost-efficient manner that will establish the laboratory within the markets. Support in the form of market surveys, operational cost-analysis and staffing needed are seen suited to lessen such concerns.

5.9 General issues on gender and gender mainstreaming

It is remarkable to note that the Ministry of Natural Resources and Environment has a high number of women at leading position at ministry level (-two female vice ministers who are in equal number with

two male vice ministers (50%); at department level, there are five female directors among the 17 directors (30%).

Basing gender baseline data provided to evaluation team, it is observed that most of departments in MONRE have the female civil servants represent not less than 50% of total number in each department. It is also noted that the TA team has two strong female consultants, one is on environment and another one is on environmental management laws.

The Mid Term Review identified gaps in the mainstreaming of gender to the programme. EMSP jointly with Lao Women's Union of MONRE have made progress in compliance the gender recommendations made by the Mid-Term Review 2012-2014. In response to the MTR the programme assigned the Associate Technical Advisor to support the gender mainstreaming in the programme and an EMSP Gender Strategy has been developed for 2012-2014. The strategy elaborates specific activities to be undertaken in each component to mainstream gender issues and provides detailed recommendations on how to better include gender issues in all EMSP components. In the gender strategy, the gender equality is considered as one of cross-cutting issues in EMSP. Referring to the EMSP Programme Document, it is defined that gender and social equality should be taken into consideration both in the organizations involved in the EMSP and in the assessment and management of projects and their impacts on the environment and livelihood.

The programme keeps record on training, workshop as well as seminar participants disaggregated by gender. Other disaggregation (by ethnic background etc.) is not performed. Although no quotas have been set for women for trainings etc. (as per Mid-term Review recommendations) women are generally promoted to take part into the trainings and given equal opportunity to participate in Programme activities. Opportunities for women to make presentations etc. within the Ministry of Natural Resources and Environment has been created by the Programme.

Gender mainstreaming activities budgeted relate to the consultative and information dissemination workshops conducted. The workshops aim to develop the awareness of participants about the meaning and significance of gender issue on natural resources and environment. Furthermore, EMSP has provided scholarships to female and male staff of MONRE for building their capacity in the field of environmental protection management. The selection was done based on each departments own criteria, no specific guidance on selection was provided by the programme (e.g. quota for women). Summary of findings:

- Overall, the programme has improved its focus on gender mainstreaming after the Mid-term Review. Measures to target gender within the programme have thus been taken by developing a Gender Strategy for the Programme. However, measures used for assessing achieved targets for Women's Advancement in environmental protection management are mainly limited to monitoring gender distribution among training and workshop participants, number of women at leading positions in the ministry and its departments, and number of female and male beneficiaries of EMSP scholarship for higher education.
- The programme has not been directly designed based on the human rights based approach defined by the Finnish Development Policy of 2012. However, the environmental policies, guidelines and strategies supported by the programme, especially the decrees and guidelines for the Standard Environmental and Social Obligations (SESO), Resettlement and Livelihood as well as the Environmental and Social Impact Assessment process capture the essence of safeguarding people's rights to e.g. access to information, livelihoods and natural resources, their entitlement to fair compensation for adverse impacts caused by development projects as well as to participation in decision making. The implementation and compliance of the above

mentioned decrees and guidelines however still lack proper enforcement to safeguard the rights of the right holders.

- The TA team consists of staff members from various different cultural background (members from neighbouring countries as well as ethnic groups such as Khmu and Hmong), which has been seen as a good example and way to promote social inclusion in MONRE.

5.10 Coordination, Complementarity & Coherence

The **Poverty-Environment Initiative (PEI)** funded by the UNDP has been supporting several departments and units within the Ministry of Natural Resources and Environment since 2009. Having overcome some initial difficulties, the support coordination and collaboration of the programmes has been effective, especially in relation to support to the Department of Environmental and Social Impact Assessment. A joint work plan for activities and collaboration and joint training and other capacity building activities have been implemented. EMSP-PEI hold regular coordination meetings and recently they have produced a project proposal together identifying further project support needs within MONRE to be submitted to the World Bank for financing through Lao Environment and Social Project (LENS). The evaluation team has not directly reviewed the draft proposal but many of the activities supported by EMSP in DESIA (particularly those related to the EIA, ESIA and Standard Environmental and Social Obligations (SESO)) are reported to be included to the proposal. It is good to note how the programmes are encouraging MONRE in the utilisation of the existing funding modalities (e.g. EPF/LENS). Similarly to the processes of EIA, ESIA and Standard Environmental and Social Obligations (SESO), activities, which are planned to be further supported by PEI in future, include database development or more specifically integration and sharing on information as well as a joint monitoring mechanism between the Ministry of Natural Resources and Environment and the Ministry of Planning and Investment.

The **Swiss Development Cooperation (SDC)** has supported PEI's current phase under UNEP by covering 70% of the funding. However, the Swiss Agency for Development and Cooperation is likely to reduce funding for the next phase of PEI starting after 2015 due to the slow pace of results. SDC is planning to assign funds in a new programme strengthening land administration which will focus on the land rights and land access in communities. The funding mechanism is composed of two funds and it has a regional coverage by including Lao PDR, Myanmar, Cambodia and Vietnam. Within PEI's activities of interest an investment database housed in MPI has been established. The database remains separate to the Environmental Management and Monitoring Database (EMMD) but it is worth considering joining the two databases to provide continuation to the Environmental Management and Monitoring Database (EMMD). Also land concession assessments undertaken by SDC's support in 2010-2012 remain in SDC's interests. Technically, however, no connections between EMSP implementation and the use of the investment inventory published in 2012 or its data were noticed.

The **German Embassy** and the World Bank are co-chairing the Natural Resources and Environment Sector Working Group chaired by MONRE. Germany has a large portfolio in Laos supporting especially processes related to REDD+, climate change, biodiversity protection and protected areas management. Land management and decentralised planning are other topics supported. Germany also directly supports the Ministry of Planning and Investment's spatial planning and strategy for socio-economic development planning until 2020. The GIZ supported programme and EMSP have carried out GIS trainings in Bokeo. Apart from that, the main cooperation remains indirectly through data collection. The GIZ supported programme works closely with the MONRE's land use planning department. However, neither the land use planning department nor the GIZ programme has had notable cooperation with EMSP and they do not recognize ISP as a formal planning tool but associate it with data collection. It therefore seems that the cooperation that could have been a key in linking ISP with

socio-economic planning has not materialized between the donor programmes supporting MPI and MONRE.

The **World Bank** has under the Lao Environment and Social Project Phase II (LENS II) pledged USD 40 million to be dispersed through the Environmental Protection Fund as smaller grants. Experience from LENS Phase I demonstrates that LENS was a positive instrument in providing funds to the provincial level departments. The Environmental Protection Fund and LENS II funds are a good avenue for MONRE and other governmental organisations to source future funding for their priority activities. Financing for e.g. Environmental and Social Impact Assessment, Strategic Environmental Assessment and monitoring activities, previously supported by the Programme, could be thus be consolidated through the use of funding through this channel. The upcoming project proposal by the Poverty Eradication Initiative and the Environmental Management Support Programme under the Department of Environmental and Social Impact Assessment is a good example how the available funding instruments can be utilised effectively. Furthermore, through the training on proposal writing skills by the Programme, the Provincial Department of Natural Resources and Environment of Xayabouri has been able to mobilise funds through several different donors including through EPF.

EMSP has had substantial cooperation with the Integrated Water Resources Management Programme – both the World Bank and the ADB supported components. The cooperation with the World Bank has had the tangible result that the building planned to house the National Environmental Laboratory will be built with World Bank funding while EMSP has funded the conceptual design and provided assistance to review of both the conceptual and the detailed design and a number of other related issues. The cooperation with the ADB components has mainly been in terms of water quality monitoring where EMSP TA has been part of the training teams on several IWRMP workshops.

EMSP has also cooperated with the World Bank funded HMTA Project. This has among others included supporting the Department of Environmental and Social Impact Assessment in coordination meetings with HMTA, meetings with HMTA consultants and providing technical comments to a number of draft guidelines and regulations.

Finland is supporting the **Strengthening National Geographic Services** project in Laos. The purpose of the project is to provide support to the National Geographic Department (NGD) to create, maintain, manage, provide and distribute reliable geographic data services to public and private stakeholders/clients and to plan, budget and manage its information services in Lao PDR. The project is producing aerial photos and base maps especially for the provinces of Savannakhet, Salavan, Champassak, Xekong, Attapeu and southern part of the Khammouan province. Such support – provision of aerial photos – has e.g. recently been requested by both the Department of Environmental Quality Promotion and the Natural Resources and Environment Institute.

Vietnamese support has been mobilised to fill the gaps in order to cover the entire Laos. So far there has not been any significant collaboration between the EMSP and the NGSP apart from a coordination of financial mechanisms. It is however paramount to promote data and information sharing between ministries, departments and projects who ultimately benefit from base maps produced by the National Geographic Department.

Finland is supporting **SUFORD in the forest sector but** with who EMSP cooperation remained is mostly in information sharing. It also supports the **Core Environment Programme** (CEP) of Asian Development Bank. The CEP used to maintain and publish environmental performance reports applying selected environmental indicators that are still available for the different countries within CEP including Lao PDR. The programme has also undertaken Strategic Environmental Assessments (SEAs) including Golden Quadrangle Tourism SEA covering Laos. However, SEA developed indicators have not been actively used in EMSP, indicating a limited scope of cooperation in 2010-2014. Overall, the cooperation

between EMSP and CEP has so far been limited. There are, however, significant changes underway with integration of the forest landscape planning methodology in the ISP for Luang Namtha.

CEP has been in dialogue with the Department of Environmental Quality Promotion from 2013 onwards on supporting the process of Strategic Environmental Assessment.

CEP has late 2014 hired one consultant to undertake SEA capacity building for Luang Namtha province targeting ISP and socio-economic development planning on EMSP's initiative. The TOR and expected deliverables of the assignment remain unknown. Overall it seems that the cooperation practiced between EMSP and CEP remains limited to this one ongoing consulting assignment and a study tour visit in Vietnam. Why EMSP has decided to use external consulting services after such a long period of time specifically through CEP instead of undertaking the assignment by hiring SEA consultants directly remains unknown.

AusAid is co-chairing donor sub-working group in water sector in Lao PDR. AusAid has supported the Water Resources Department through long integrated water resources management programmes, and Mekong River Commission's regional activities. Together with ADB, AusAid has promoted catchment level water resources planning. No known cooperation or information exchange has taken place between EMSP and AusAid or its programmes, although the Water Quality Monitoring provides in essence technical continuation of the work. The Australian supported programmes have established a training laboratory teaching sampling in the Water Resource Engineering Department in National University of Laos. Since Finland does not have a water sector coordinator in Laos, coordination of the activities has remained limited. AusAid have requested contact of MFA / EMSP in order to discuss how the relevant activities supported by EMSP such as Water Quality Monitoring and water quality database could be utilized in the future. The AusAid supported laboratory may be a qualified recipient of equipment supplied to the MREI laboratories but which remain underutilized.

6 CONCLUSIONS

Overall, this programme has achieved its purpose to a satisfactory degree.

The programme scope is wide as the term "Environment" is multifaceted. There is therefore always a risk, environmental programmes are designed ambitious and that the programme management are tempted to address all the issues challenging the environmental manager and to address these in all areas of their mandate.

Due to its high relevance at the time of inception and throughout the period of implementation, goals were set high. Success and available funding subsequently enabled the Programme to expand from few target provinces to virtually all of the country. This move may to some degree have diluted the effectiveness of the Programme but has also been a valuable tool for the Government of Lao PDR to set action behind the words.

Despite the theory of change applied has focused heavily on capacity building, the staff and organizational capacities in MONRE and in the Department of Natural Resources and Environment (centrally and in the provinces) still remain relatively weak in meeting the functions required for fulfilling their mandates. Major progress has been achieved during the period, where assistance has been rendered through first the Swedish SEM, then the present EMSP.

During this time, the Ministry, and in particular the provincial departments, have become focused on their purpose and tasks and there has grown a sense of urgency among staff.

Some existing foundations already established and practiced such as integrated spatial planning (ISP), and existing models tested in pilot projects such as Strategic Environmental Assessments, have however not become common practice.

The overall conclusion of the evaluation team is that the Programme has made a significant contribution to the development of the environmental management organisation and capacity of the Government institutions in Government of Lao PDR. There is still a long way to go but the government agencies and their staff are, due to the capacity building, fully aware of where the shortcomings are and that targeted development strategies are needed.

The Programme has provided a technical framework for environmental management, i.e. there are procedures for assessments and monitoring. This is seen from the point of view of government staff that need tools to overcome the daily burden of recording and monitoring physical changes to the environment and dealing with direct complaints from the people, balancing this with the need for development. It does, however, not fully solve the issues of environmental governance as the programme has not reached the grass root level. The FPIC concept (free, prior and informed consent) has seemingly not yet penetrated current day's land use planning and land allocation in Laos. Issues such as equitable sharing of benefits, access to justice, environmental remediation, environmental disclosure, impact assessment of supply lines, overall monitoring of environmental health other than water quality, etc. are together with climate sustainability among issues, which should be tackled in the near future.

While several tools are described as planning tools, it is the conclusion of the evaluation team that a vast amount of information on the existing environment is collected but there is little active planning *per se.* The provincial and national action plans contain very little coordinated directions for development, not to mention physical or spatial zonation and permitting. One aspect that affects this lack is the low level of inter-department coordination and information sharing.

The basics of a service organisation have been established. Now it has to deal with the clients: the people.

7 RECOMMENDATIONS

7.1 Short term recommendations: Exit Strategy

7.1.1 General

The Programme shall establish an exit strategy of consolidation that ensures project results can be sustained after external assistance in the form of funding and advisory services has been terminated. The programme activities are not completed *per se* as the programme was designed to support ongoing and never-ending efforts by the Government of Laos. The recommendations listed in this section are recommendations for topics and issues to be included in such plan. This section does not constitute such plan *per se.*

An exit strategy concerns primarily consolidation and sustainability but may also concern practical and administrative activities, which will be introduced at the time of preparing for the exit.

The most important issue in any exit strategy is handing over of responsibilities and ownership. This will not be an issue in this programme as responsibilities and ownership already rest with the Government agencies.

The practical exit strategy concerns what must be done while external support is still present, not what shall happen after the support is withdrawn.

7.1.2 Points to consider for an exit strategy for Component 1

- During the remaining EMSP implementation, the SEA process will not benefit from further assistance given the weak set of results achieved so far: Not one full SEA implemented and only very weak technical core capacity established within MONRE. The failure in achieving the technical uptake indicates either a lack of true dedication from the recipient's side or an inappropriate approach taken by the Technical Assistance. Otherwise, the required capacities and the demand for SEA would not still remain weak after more than 5 years of active SEA support including existing models in place in Lao PDR. No significant progress in SEA support can be expected in the remaining EMSP implementation.
- However, preparation of handing over and future SEA support activities with other TA support are recommended. In this EMSP should focus on simplifying the SEA mobilization by promoting pragmatic analysis tools such as Cumulative Impact Assessment (CIA) that belongs into SEA methodology and is able to attract World Bank future assistance.
- Given ISP remains still unrecognized and is used mainly as a data collection tool, the recommended promotion of SEA should focus on recognized spatial planning processes that can produce planning alternatives for *specific sector plans* (noting also that working with the mandates and land use planning related to Socio-Economic Development Plan of MPI have remained technically challenging within EMSP).
- Discussions with World Bank, a simple technical demonstration of Cumulative Impact Assessment as part of SEA as a case study and possible inputs into the planned Luang Namtha activity are recommended means for the handover and promotion of the simplified SEA mobilization.
- Identify a small number of outstanding PEAPs for finalization and apply participatory methods to set provincial goals and projects as a demonstration. The participation should involve and target also communities and vulnerable groups.The component 1 result is by the Programme Management considered mostly completed but a legal review is still ongoing on the text of the decree. The legal finalisation should be a task for the Government's legal offices.

7.1.3 Points to consider for an exit strategy for Component 2

It should be possible to achieve all programme targets for this component before programme termination.

The exit strategy shall therefore focus on dissemination of results.

To ensure sustainability and consolidation, results focusing on success stories should be disseminated through e.g. seminars, brochures, media articles, and if possible site visits.

The primary target for the increased awareness shall be the DESIA at all levels, major investment projects, external donors and their projects, environmental consultants.

Of success stories, the on-site monitoring of ESIAs undertaken by DESIA staff, examples of the hydropower SESOs that are applied in practice, the national water quality monitoring scheme, the industrial self-monitoring practices with their inspections and guidelines should be highlighted as positive examples.

In addition, the cross-sector cooperation achieved in setting MONREs strategy and vision is well worth highlighting as a high level participatory achievement that can serve also other high level cross sector planning processes in the future.

Of information management related results, the Environmental Management and Monitoring Database (EMMD) should be brought forward as an example as it is an advanced tool open for the public to access information. It also highlights some other important technical aspects for further cooperation such as data sharing and future development of the investment and ESIA related information management.

Given the lack of self-sustaining financing model for ESIA and IEE compliance monitoring and industrial inspections that greatly dependent on the company paying for the inspection visits, EMSP should provide MONRE and MOIC functional financing model for these core activities. Already existing models, such as the Environmental Protection Fund, should be studied as the basis of the recommended model. In the model, employing Independent Monitoring Agencies and the DESIA staff working currently with on-site monitoring should be given specific consideration as the agents specializing in these tasks.

7.1.4 Points to consider for an exit strategy for Component 3

While it is appreciated that the Programme has been extended to all provinces, an exit strategy shall carefully consider whether it is feasible to achieve sustainable results in all targeted provinces or whether it is better to achieve complete and solid results in a few provinces so that the Government may replicate these visible successes. The process development should be considered completed and the water monitoring should by now be considered an ongoing standard procedure. For the integrated spatial planning, Technical Assistance focus should be on what can be completed fully and thus used as demonstration for those that may lack behind.

Assist MONRE's DESIA department in defining budgeting and staffing plan using the planned support to be provided by the Environmental Protection Fund application process. Define main activities of ESIA compliance monitoring that can be supported by the Environmental Protection Fund.

Ensure that the 10 staff undertaking on-site compliance monitoring are maintained within MONRE and targeted for future trainings and inspectorate related career paths retaining this key staff within MONRE.

Discuss the water quality monitoring continuation with other active donors including Australia and ADB and define tasks to be handed over.

For the Integrated Spatial Planning, Technical Assistance has achieved a data collection procedure considered beneficial for strategic decision support which can be demonstrated further for those ISP processes that may lack behind. Disseminate existing ISP results including maps into other provinces that they can use in finalizing ISP related activities.

After more than 10 years of support to the ISP process, getting the tool recognized as a formal planning instrument with its current objectives anchored firmly to the spatial planning of the Socio-Economic Development Plans during the remaining EMSP period seems over ambitious. Instead, it is recommended that the environmental management objectives that should be driving the ISP process as per MONRE's mandate, are studied and highlighted for future development of ISP. This would mean that for example planning requirements imposed by waste management sites, nature conservation objectives of protected areas or specific climate change concerns (such as influence of flooding) are brought forward as case studies how environmental planning objectives associated with ISP need to be recognized in planning.

In undertaking the ESIA consultations for compensations through local community hearings, the Programme should demonstrate participatory approaches that include sound community involvement before Programme termination. Participatory approaches shall here be understood as active involvement of common people and ensuring their knowledge, experience, expectations and concerns

are included in the data and information collection and that these concerns are duly incorporated in the decision making.

The Programme could arrange a few community dialogues where not only community leaders are invited, where it can be demonstrated how local understanding and local concerns contribute positively to the definition of future strategies. It may require substantial efforts to bring forward an enabling attitude to listening to ordinary people and to accept their – sometimes very local – horizon.

The Programme should also, as part of the exit strategy, publish for other projects and agencies a list of geo-referenced data available from the programme data bases.

7.1.5 Points to consider for an exit strategy for Component 4

Dissemination strategy:

- The ongoing updating and transfer of all contents from the EMSP website to MONRE website should be intensified to ensure timely completion.
- Making sure that all printed programme results are distributed to relevant parties.
- Implementing dedicated seminars or similar for donors and projects so they are aware of all programme endeavours and what is needed to consolidate them.
- Implementing dedicated seminars for major investment projects and environmental consultants so they are aware of all programme results.
- Issue news releases and if possible follow up with media seminar.
- Establish cooperation between PEI to carry on with the Environmental Management and Monitoring Database (EMMD) development in cooperation with MPI's investment database.
- Define and enforce data sharing procedures within MONRE in close cooperation between Finnish supported programmes SNGS and SUFORD by writing simple data sharing guidelines including pricing, different data formats and different information user groups.

7.1.6 Points to consider for an exit strategy for Component 5

- Establishment of a clear timeline for ISO certification and identify potential sources of financial and technical support during this period.
- Reconsider the economic feasibility of tests of complicated parameters. Suggest alternative business and marketing plan based on the target market needs and cost-efficiency of the needed analysis for the NREI laboratory.
- Further improvements to the business plan, cost estimates for operation and maintenance, clarification of ownership of equipment and facilities.
- Ensuring a staffing plan, i.e. ensuring sufficient permanent staff may be retained.
- Relocate or disassemble Luang Prabang laboratory as it is defunct.
- Develop a simple business and staffing plan for Pakse laboratory based on specific ESIA monitoring needs in the province to initiate a minimum level of commercial sampling required for basic laboratory services and operationality.
- Consider proposing post-programme allocation of underutilised equipment into e.g. the sampling laboratory in place in National University Of Laos particularly from regional laboratories.

7.1.7 Points to consider for an exit strategy for Component 6

Administration:

- Audit of assets: Status and location of all assets.
- Assets, which are procured through the budgets provided by the Government of Finland, will remain the property of the Government of Finland until they formally are handed over to the Government of Lao PDR. After handing over, it is the prerogative of the Government of Lao PDR to decide how best to utilise the assets. The Programme Management may, however, make proposals for how to utilise the assets after handing over. The Evaluation Mission suggests the Programme Management carefully analyses the current level of use of all assets within the government organisations, who currently are the custodians of the assets and that the Management identifies underutilized assets and proposes recipients of such assets, who can make full use of the assets. For example, the Mission saw seriously underutilised equipment in the Luang Prabang field laboratory. Such equipment may be brought to better use if for example placed at the sampling laboratory of the National University of Laos.
- Establishment of files to be archived.

Staff Management:

- Phasing out of temporary staff (National technical assistance), assisting them in new job search: Advertise in the programme's network, train in CV and application writing, Interview techniques, career planning.
- Ensure professional and dedicated management and staff is assigned to the central laboratory.
- Establish a training and development plan for the key partner departments and agencies. Such plan should ideally define a short and a medium target for capacities in terms of independent natural resources, environment and spatial development planning (Policy, strategies, action plans), monitoring and follow-up. The short term plan should include training and capacity development plans - career planning - for individual staff.

Institutional:

- Ensure sustained budgets.
- Identify potential donors to support further development.
- Identify ongoing projects, which may absorb EMSP targeted issues. Such projects/donors could be:
    - DESIA Capacity building and support with regard to EIA processes and SESO: PEI.
    - Laboratory: World Bank/AusAid.
    - Environmental strategies: Germany.
    - Waste management: JICA. (This has not been further discussed with JICA).
- Propose a strategy for the role and capacity requirements for the registered private environmental consultants: EIA requirements, involvement in monitoring of compliance as well as of residual impacts (social and ambient monitoring).

7.2 Long Term Recommendations

The evaluation mission has, when making recommendations, taken into account that the Finnish support has come to an end. This means that the recommendations to the Government of Finland mainly concern the donor level exit strategy, recommendations to the Government of Lao PDR concern sustainability, and recommendations to the programme concern issues to be tackled immediately as part of the programme exit in order to consolidate programme results.

7.2.1 Recommendations to the Government of Finland:

- Actively support and participate in coordination of donor interests in sustaining EMSP activities and results
- Consider the option of maintaining support from the current budget to the central laboratory till the laboratory has moved into new facilities and to facilitate such transfer (Expected to happen in April 2016)

7.2.2 General recommendations to the Government of Lao PDR:

- Seek further donor support to particularly the laboratory and the strategic environmental assessment
- Support an exit strategy that allows for a gradual withdrawal of TA to activities
- Ensure a continuation of the EMSP support to the development of the MONRE Women's Advancement Strategy
- Redirect staff management to include career planning and sustaining investment in training and skills development by maintaining staff in positions where such training is required
- Increase extraordinarily the relative level of environmental governmental management budget

7.2.3 Recommendations to the Government of Lao PDR specifically related to ensure sustainability and consolidation of Programme results:

General

- Formulation of an exit strategy for external assistance including anchorage of programme results
- Hold a series of events to disseminate programme results and lessons learnt. The main focus of should be on the successes achieved such as undertaking factory inspections, water quality monitoring, ESIA monitoring and database as well as promotion of the guidelines produced. It is also recommended that these events will be used for enhancing cooperation between different development programmes such as UNEP's PEI and GIZ' programme under MPI to facilitate possible handing over of certain tasks such as the suggested joint development of the databases for ESIA and investments
- Use its network to notify relevant parties of programme staff, who now will look for new employment
- Create knowledge within MONRE on gender training and gender equality as a tool for dealing with gender equality promotion in practice
- Create knowledge within MONRE on gender training and gender equality to find out the satisfaction of female, male beneficiaries of scholarships distributed by EMSP e.g. satisfaction with selection criteria of beneficiaries of EMSP scholarship

- Organize workshop with Lao Women's Union and DESIA for women and men in MONRE to discuss the legal tools for environment management and to consider the equal rights of women and men, ethnic groups etc. within the developed legal tools

Related to Component 1:

1. *Consider significant simplification of scope and procedures for Strategic Environmental Assessment*

   Given the adoption of the SEA concept and the build-up of required capacity has been very slow and taken place in isolation to the existing SEA models in Laos, it is suggested that SEA strengthening is created by demonstrating the main assessment phases and processes gradually step-by-step.

2. *Strengthen assessment of cumulative impacts from multiple projects in connection with EIA procedures and local planning*

   Cumulative Impact Assessment falls within the ESIA and IEE regulatory framework that form the core of environmental management in Lao PDR providing a technically well established and understood implementation context. Using Cumulative Impact Assessment as an analysis for guiding integrated spatial planning to set environmental management targets would seem technically suited.

   Undertaking a Cumulative Impact Assessment either by itself, or as a tool used in a pilot SEA, is considered technically an easily achievable step based on the current skills levels and staffing assigned for ESIA and IEE.

   In addition, understanding the cumulative effects of several projects can be used in setting a more focused scope for local planning for different sectors on different levels..

3. *At the strategic level include participatory approaches at all levels and by all groups and the recognition of basic rights to information*

   How and to what extent the different stakeholders, especially districts, villagers and affected people and target groups, have been actually included in the environmental management supported by EMSP remains unclear (although the functions of Livelihood and Resettlement Units were explained and the Public Involvement Guidelines were received). The "Three Builds Policy" adds more emphasis to provincial, district and village implementation although the resources remain limited in all of these levels. No documentation aimed to assist participation of different groups in activities supported by EMSP could be found.

   Aimed at ensuring participation, it is recommended that the participatory approaches currently practiced by Provincial Departments of Natural Resources and Environment are promoted widely. The basic rights to information by the affected people and communities are recommended to be reviewed through an independent study. Also the Independent Monitoring Agent (IMA) concept could be tested in practice briefly by hiring a company to assess the participation in an ongoing complaint process.

   The information dissemination procedures and the participation processes of MONRE and its provincial departments are recommended to be developed further with regard to keeping records of the complaints and the letters received from affected people and other groups.

4. *Initially focus on strategic assessment of spatial plans rather than policy issues*

   Policy assessments are less concrete for Strategic Environmental Assessments than for instance map based assessments. While the former remains more abstract and complicated, the latter enables discussing different scenarios for development options and is more pragmatic for planning purposes emphasizing environment.

Related to Component 2:

1. *Assess the current capacities of provincial Departments of Natural Resources and Environment (PONREs) required for Initial Environmental Examination (IEE) in terms of adequacy of staffing and skills*

   Define the staffing, skills and funding needed for the PONRE's to efficiently meet the IEE handling and monitoring requirements. Undertake similar assessment for ESIAs in MONRE. Use the assessments to provide the Government of Lao PDR with pragmatic estimated requirements in terms of staffing and budgets needed to undertake these tasks annually. Provide MONRE clear guidance on how to utilize existing financial mechanisms (such as to collect funds from developers and setting it into the Environmental Protection Fund) and the needed annual budgets from the Government of Lao PDR, to cover the operational requirements of ESIA & IEE compliance monitoring and inspections.

2. *Further strengthen DESIA's and MOIC's inspection capacities*

   This may be done through defining the main responsibilities, procedures and tasks when undertaking compliance monitoring and carrying out inspections.

   Define tasks and procedures required especially to account for environmental accidents or activities that are breaching the permit. Strengthen penalising capacities by setting fining and other compensation mechanisms for enforcement procedures, undertake inspection drills and assign & collect fines when breaches are found.

   A systematic training approach following the ESIA process of screening, scoping, Terms of Reference, reviews, monitoring and follow-up where skills and understanding levels are clearly defined is recommended.

3. *Improve data sharing among Government authorities*

   Assure that free data access and exchange are in place between MPI's investment database and MONRE's EIA database and ensure that the databases are developed together in the future. Initiate data exchange and define IT design plan aimed at developing the databases together and jointly in the coming years by setting IT architecture composed of joint user groups, data storage and exchange practices and assigned user portal accessible within MPI and MONRE. The established Environmental Management and Monitoring Database that is accessible through the internet could be developed further as the basis for the user portal.

4. *Improve effectiveness of monitoring of compliance and residual impacts*

   Define a more pragmatic approach in meeting the ESIA and IEE compliance monitoring requirements given that the current heavy monitoring burden laid upon MONRE and PONREs staff remains unrealistic in comparison to the staff and budgets available. Test lighter but more

efficient monitoring / inspection schemes that can be carried out through selected highly skilled experts and/or contracted independent monitoring agencies. Options such as involvement of external monitoring specialists, or specialists needed for reviewing assessments and reports should be considered.

5. *Improve effectiveness of application of the Standard Environmental and Social Obligations (SESO)*

   For the updated SESO, define minimum practical levels needed for the operationalization of Standard Environmental and Social Obligations (SESO) and take it into practise by signing SESO agreements with 1-5 selected prominent companies for 1-5 SESO projects. Initiate the pilot SESO activities based on obligation levels that are agreeable to the companies. Consider assigning a scale for the obligations based on the company's production volumes, standardized certifications used and corporate image recognizing also Corporate Social Responsibility (CSR) budgets / activities.

   It has been proposed during a meeting of the Coordinating Committee to request PEI to absorb the responsibility for further development of the Standard Environmental and Social Obligations (SESO).

6. *Merging of databases*

   Accelerate the joint development of the PEI investment database within the Ministry of Planning and Investment and the Environmental Management and Monitoring Database (EMMD) to provide continuation to the EMMD. Given MONRE's mandate over ESIA, house the database in MONRE and develop EMMD further by including ESIAs from the PEI database.

Related to Component 3:

1. *ISP is recommended to be further developed so its objectives are legally binding at the provincial level*

   In order to successfully apply ISP in planning, its status as a truly binding planning document needs to be established. Given the target users of ISPs are governors and provincial line agencies, provincial by-laws or adopted provincial planning guidelines could be considered for getting the endorsement and level of engagement needed. Within their mandate, PONRE's would be the true designers and implementers of ISPs in the provinces.

   However, it needs to be noted that the mandate for socio-economic development planning remains within MPI. It is therefore recommendable to target ISP directly to environmental matters and objectives that are within MONRE's mandate. The term Integrated Spatial Planning (ISP) does not emphasize environment in specific so perhaps a more accurate term referring to environmental management related planning as per MONRE's mandate could be considered.

2. *ISP should strengthen its inclusion of socio-economic issues*

   Integrated spatial planning has particularly been introduced as a tool to include environmental considerations into the spatial planning process. It is still weak in including socio-economic issues such as demographic data, employment data, identification of particularly vulnerable groups, and informal land use or use of natural resources.

3. *ISP should better include proposals for new interventions for e.g. waste management, climate change and ecological /biodiversity issues*

   Given MONRE's scope and mandate, it is suggested that integrated spatial planning makes more and better use of the recognition of environmentally important planning objectives and enforces required planning measures in taking the concept further. For example waste management, climate change and ecology / biodiversity are all important and well-acknowledged matters requiring objectives and attention as part of development.

   Recognizing and setting long term objectives for these topics as part of planning in different forms (such as locating large waste management sites or hazardous waste management facilities, identifying and ensuring efficient protection measures are in place for wetlands and making provisions for nature protection sites based on biodiversity conservation), is an essential part of sustainable development. Given air quality monitoring, disaster risk management and climate change are still emerging in Lao PDR, addressing such topics could prove to be suitable for the future of ISP.

4. *In order to ensure sustainability of the current success level, ensure continued expansion of staff numbers and capacities*

   EMSP has established mostly basic capacity levels composed typically of 1-5 key staff trained and capable in carrying out the main supported responsibilities. This means that loss of even 1 trained staff member can have significant effects on the results achieved. In addition, external factors to EMSP such as internal staff rotation that happens in 4 year cycles and employment changes to benefit private sector impose risks to maintain the capacities established.

   Given the heavy monitoring requirements assigned for ESIAs and IEEs, and the economic importance and scale of the investments of the development projects, it is suggested that measures are taken aimed at increasing staffing (expanding staff quotas), enhancing organizational structuring and obtaining increased operational budgets needed to meet the legal requirements in MONRE.

   It is also important to implement measures for sustaining the investment into Programme related responsibilities. Ideally these key staff members would be recognized as trainers and/or assigned to provide services for specific functions according their experience levels (such as water quality monitoring, industrial inspections, laboratory analysis, compliance monitoring, Standard Environmental and Social Obligations (SESO) agreements). The provincial staff members receiving trainings in National University of Laos (NUOL) by the support of EMSP would be recognized as provincial champions for their respective activities.

   As one suggested priority action for the remaining EMSP implementation, the 10 DESIA staff working with monitoring in the development companies at the moment are suggested to receive more training aimed at occupying Environmental Officer/ Inspector / Compliance Monitoring position as part of MONRE. Currently the 10 DESIA staff are supporting ESIA monitoring on-site but in the future they are likely to be employed by the companies instead of the Government of Lao PDR. Given the weak capacities of PONREs', these staff should be maintained within the Government of Lao PDR and targeted for more training for the long term development of a highly skilled inspectorate. Their expertise could prove to be valuable also for Standard Environmental and Social Obligations (SESO) and inspections of self-monitoring.

5. *Include mapping of E(S)IA sites and monitoring activities in the ISP mapping and records*

   While the recent ISP maps do include EIA results, this is not yet a common feature. Mapping the ESIA projects with the assistance of MPI, and including the known investments and industries with self-monitoring, will provide ISP an additional information layer enabling also broader analysis (such as Cumulative Impact Assessments) helping in decision making.

Related to Component 4:

1. *Ensure transfer and integration of the EMSP website into the MONRE website.*

   The EMSP website contains different materials ranging from project implementation activities and results to legal documents. It is suggested that EMSP and MONRE together assess the contents of the EMSP web pages and include selected materials that are up-to-date and relevant into MONRE's pages. Important guidelines and drafts such made for SEAs and Standard Environmental and Social Obligations (SESO) and ministerial degrees should be stored for internal users of MONRE and published once they have been legally endorsed.

2. *Maintain relevance by more frequent updates of documents, data and topics*

   A procedure for maintaining and updating selected web sites should be provided for MONRE. Access to key legal documents such as Public Involvement Guidelines and the ESIA and IEE regulations should be promoted for the public.

   It is recommended that the Environmental Management and Monitoring Database (EMMD) be maintained and expanded to cover also the EIAs for the Ministry of Planning and Investment project. Specific resources should be assigned for such work to be initiated during the remaining EMSP period as a high priority.

3. *Include information relevant to local communities and ensure language and technical expressions are suitable for this target group (especially non-web based information to be produced)*

   The translations should be provided for the key legal documents such as Public Involvement Guidelines, the ESIA and IEE regulations. Support should be provided in explaining the basic rights of the communities and affected people, as well as how the compensations are set. Selected materials can be printed and disseminated into PONREs for public dissemination purposes.

4. *Include links to websites of development projects and government data bases and seek EMSP links embedded at these sites*

   Environment sector of Laos has several relevant development projects such as PEI, MPI support which could be linked in MONRE's web pages in relevant sections. Important databases such as Environmental Management and Monitoring Database (EMMD), Water Quality Database and MPI's investment information database should have links in the MONRE's pages.

5. *Establish/strengthen data sharing between government agencies*

   Basic data sharing practice guidelines that include pricing, data availability for different user groups and mandatory data delivery period required from the relevant governmental agency should be drawn, and be formally accepted in some level within MONRE. Close cooperation between other Finnish supported programmes such as Strengthening National Geographic Services and SUFORD is recommended for gaining momentum and forming practices between these ministries as a starting point.

Related to Component 5:

1. *Further improving the business plan, cost estimates for operation and maintenance, clarification of ownership of equipment and facilities*

   The current business plan of the NREI laboratory would benefit from an assessment aimed towards cost-efficient market approach based on main client needs and defining a realistic market position. This form of support would be beneficial also for considering other economically viable alternatives for the ISO standardization approach now preferred and for checking whether the intended equipment procurement including maintenance and staff needs is operationally feasible. Market surveys together with cost estimates for operations with different options are suggested.

2. *Ensuring a staffing plan, i.e. ensuring sufficient permanent staff may be retained*

   Maintaining the laboratory services and operations intended depend on the ability to keep key staff engaged. It is therefore recommended that some positions will be made attractive in terms of salary and / or fixed within NREI's organization for example with 5 years contracts.

3. *Reconsider the economic feasibility of tests of complicated parameters*

   Some of the heavy metal analysis are costly and may seldom be needed. It is therefore recommended that the laboratory initially should focus on more basic parameters.

4. *Consider support to the establishment of environmental testing facilities within private sector consulting companies irrespective of the competition issue*

   The Luang Prabang laboratory is situated currently in an unsuitable building that cannot be altered as it is protected heritage. In the current form, the laboratory is defunct and will remain so before it has been relocated. When considering the new location, the expected services for the laboratory should be defined, together with operational guidelines, basic business plan and staffing plan.

   The existing small space, basic staff capacities and commitment in Champassak would enable supporting Pakse laboratory further and turning into a small laboratory unit to start with. Pakse laboratory would require operational guidelines, staffing plan, budget estimates and a business plan recommended to focus on i) specialization to monitor selected ESIAs' and IEEs' compliance in Champassak and neighbouring provinces and ii) water quality monitoring reducing the sampling analysis costs originating from analysis done in Vientiane.

5. *Consider the legal implication of geo-referencing samples enabling systematic environmental monitoring*

8 LESSONS LEARNT

The lessons learnt concern experience in programme design and implementation that can be utilised when designing programmes in the future. The lessons learnt may be used in similar environment-oriented programmes or within other sectors.

Five main lessons to be learnt from this Programme have been highlighted. These are:

1. The model for programme implementation and division of responsibilities has been successful for the sense of ownership and is worth replication. This refers to the way activities to receive "Programme Support" or to be included in the "Programme Work Plan" are selected among activities that should have been implemented by the Government of Lao PDR anyway for

targeted support and the way the national programme management/component coordinators hold influential government positions being able to apply these activities as part of their responsibilities.

There is therefore no issue of "handing over" in the exit strategy.

- The programme activities have not been imposed by an external plan but selected among existing or needed activities of the recipient organisations.
- Activities to be supported this way have been defined in a flexible manner.
- Implementation has been by national government staff, who also were appointed as management staff/coordinators of the programme/components.
- The recipient, i.e. the Government of Lao PDR has been in charge of funds dispersal and all processes have been aligned with Lao procedures.

2. The level of programme flexibility when re-focusing the LFA in 2012 has been a major factor in the programme's success.
    - When MONRE was established a new situation emerged requiring a re-direction of all WREA programmes and activities. The EMSP reacted by a thorough redirection of plans and modus operandi. The consequential update of the Logical Framework Matrix was readily approved by the Donor and the Government.
    - Government activities to be supported may be difficult to distinguish from other activities. The Programme has had reasonable freedom to modify boundaries of what to support and what not to support.
3. Appropriate human resources are one of the keys to successful programme implementation. This refers not only to number of staff but equally to staff dedication, training level, sustaining the skills and knowledge transfer etc. Programmes like the Environmental Management Support Programme should include issues of staff management in the form of career development plans that will further the staff's careers even after the programme has come to an end. It has been an issue that staff turn-over is too high to take full advantage of investment in capacity development. Administrative staff may be transferred without too much impact on the Programme but highly technical skills like monitoring technicians, laboratory technicians, EIA reviewers, environmental auditors cannot. A realistic staff development plan/career plan would help ensuring skills stability.
4. A programme can only have success if it is backed by a legislative basis for the issues at hand. The Environmental Management Support Programme has had success on all issues, where this has been the case but issues such as the SEA and ISP have suffered from lack of legal mandate.

    The programme is primarily designed around institutional development concerning planning and legal issues. Without something tangible, such development may easily be too hard to fathom and to earn a reputation. A stronger link to enforcement/implementation of environmental requirements would have strengthened the legacy of this programme.
5. The strength of the programme intervention would have been better if the final beneficiaries, i.e. the general population and the rural communities, had been included through awareness of rights and duties and if programme results had been better communicated in appropriate languages and forms. The Provincial Departments of Natural Resources and Environment gave the impression of being dedicated and reasonably knowledgeable but that they mainly saw programme initiatives and interventions as tools for them to ease their immediate workload as

a service to the central government without really considering the service they were to and the obligation they have (as duty the bearers) for the general public.

Unless interventions enjoy popular support, they will remain artificial and require continued and unsustainable government attention.

To gain public support, there must be benefits e.g. in the form of partnership (participation, reception of information) and benefits (improved livelihoods).

While there have been some attempts to involve communities directly and while there is a time constraint, this lack may pose a risk to sustainability.

Annex 1. Terms of Reference

TERMS OF REFERENCE FOR FINAL EVALUATION, AND AN OPTION FOR APPRAISAL OF PROGRAMME DOCUMENT

1. Background to the evaluation

1.1. Programme context (policy, country, regional, global, thematic context)

The Lao PDR is a land-locked country with a population of some 7 million people. It has achieved impressive economic growth over the last years much, largely on the back of export-oriented policies based on the exploitation of natural resources such as mining, timber, rubber and hydropower. According to the National Assembly, in 2013 the projected GDP growth was 8.3 percent and GDP per capita reached US$1,460. GNP more than doubled from 2000 to 2008. This growth has resulted in poverty reduction: the official proportion of poor people fell from 46 percent in 1992 to 27.6 percent in 2008 (however, 33.9 % are still estimated to live with less than USD 1.25 per day). Lao PDR has also made steady progress in raising overall human development and is on track to achieve half of its Millennium Development Goals (MDGs) of halving extreme poverty by 2015.

However, inequalities are on the rise and there are widening gaps between rich and poor, women and men, ethnic groups, and residents of different regions of the country particularly among ethnic groups living in remote, mountainous and forested areas. Lao PDR has 49 recognised ethnic groups in total.

In spite of its growth and progress, Lao PDR still faces major vulnerabilities and challenges: more than 70% of the population still lives from subsistence farming and inequalities are growing. Much of the growth is not redistributed or reinvested in the country and currently FDI have limited broad gains in the domestic economy. Furthermore, Lao practices of its natural resource exploitation face a real sustainability challenge, while the economy is exposed to volatile commodity prices.

Laos aspires to graduate from its Least Developed Country (LDC) status by 2020 and to become a 'Rule of Law' state with national legislation and enforcement progressively aligned with international legal obligations, including universal human rights standards. The Government attaches high importance to its membership within ASEAN. Lao PDR boasts good development results, but with no signs of willingness for political reform.

The key policy framework is the Seventh Five-Year National Socio-Economic Development Plan (2011-2015). It identifies seven 'directions' to respond to the above challenges: National economy; Rural development and poverty eradication; Educational reforms and human resource development; Better public administration, rule of law, fighting corruption; National defence; Increasing labour skills and; Industrialization and modernization. The mission will also take into account all information available on the 8th NSEDP (2015-20).

Lao PDR grows on the back of its natural resources and needs to sustain them for further prosperity. Lao PDR's forests cover some 40.3% of the total land area, down from 70% in the 1940's. The natural capital and ecosystems in Laos can be threatened by developments applying unsustainable practices including agricultural expansion, as well as land concessions for economic purposes like hydropower development, mining and plantation. Illicit practices are an additional challenge, illegal logging being a

prime example. Forest loss and degradation also lead to high levels of greenhouse gas (GHG) emissions.

A key development challenge is to strive for improved governance based on rights, as well as manage the growth and investments in a way that these do not place an unsustainable burden on the country's precious natural resources and threaten inequitable human development.

EMSP was originally justified by identified sustainability risks related to detrimental environmental impacts and people's livelihood brought about by rapidly increasing business activities and investments, particularly in resource-based industries in the country. The licensing system does not set clearly defined environmental conditions that can really be monitored and enforced. Although sustainable development is a policy goal in Lao PDR, mechanism for incorporating environmental aspects into planning courses are not functional. Capacity of relevant authorities to ensure ambient environmental quality is limited. Importantly, Lao PDR is an upstream country in the Mekong river basin possessing, for instance, the largest hydropower potential of the basin. The consequences of inadequate environmental planning do not respect borders, which in Laos' case must be paid specific attention to.

Accordingly, the development objective of the programme is set to prevent unacceptable damage to the environment, environmental health and the livelihoods of people affected by large scale development projects and strategic plans and to build institutional capacity in adaptation to climate change in Lao PDR.

1.2. Description of the programme to be evaluated

EMSP, commenced in October 2010, is a continuation of SIDA's two-phased Strengthening Environmental Management (SEM) programme. The total budget of the programme (Oct 2010-Sep 2014) is EUR 9 960 000, of which 460 000 € is contributed by the Government of Laos (GOL) (162 000 € cash, the rest as in kind contribution), and EUR 9 500 000 by the Government of Finland (GOF). Comparative to Finland's other programmes in the region; a special characteristic of EMSP is that in addition to TA (5.2 M EUR), Finland provides on-budget financial assistance for programme management and running cost through the Ministry of Finance (4.3 M EUR). This financial arrangement is adopted from that of the SEM.

The programme started with WREA as the main implementing agency, later merged into the new Ministry of Natural Resources and Environment (MONRE) after only the first year of the programme. This led to serious implementation delays and necessary changes due to the unclarities on mandates and weak capacity of the newly formed ministry. The TA team was given more responsibilities on management as MONRE was still working out its structures, responsibilities of different departments and administrative capacity.

1.3. Results of previous evaluations

A Mid Term Review (MTR, 2012) concluded that the EMSP was highly relevant to the GoL policies and strategy for improved environmental management for long-term growth such as the current NSEDP 2011-2015. EMSP was also deemed to reflect the targets set in the 9th Party Congress Resolution and the party's commitment in achieving economic growth in a sustainable manner.

While the EMSP was planned in accordance with the Finnish Development Strategy of 2007 and the environmental policy of the Finnish Government, the Programme design currently reflects the targets of Finland's revised Development Policy Guideline, adopted in 2012. However, a stronger focus on human rights based approach should be reflected in accordance with the renewed policy guideline. The Programme has a strong focus on ISP, SEA and monitoring, which will help the GoL meet its challenges of ensuring *strong environmental management in Lao PDR to support national goals of sustainable development and poverty eradication*. Certain aspects of the EMSP, such as Component 3, have been revised based on the National Environment Action Plan (NEAP); therefore it is relevant to the government and party's policy. Component 3 also supports the GoL's decentralization policy in building the capacity of the provinces for environmental protection, monitoring and evaluation.

The MTR made observations and recommendations on a wide variety of issues ranging from substance to financial administrative systems. The follow up of the recommendations has been continuous and is well documented (the MTR report is included in the annexes). There have been additional revisions and adjustments to the project in 2013 and 2014, including a one – year no-cost extension.

2. Rationale, purpose and objectives of the evaluation and option for an appraisal

Phase I of Environmental Management Support Project (EMSP) is coming to an end in September 2015. There is common interest in continuing the Finnish support the Laos environmental management, but an adjusted focus. This is related to a consolidation of Finland's regional Mekong program, which envisages bilateral, country-level interventions in support of the regional interventions (e.g. Mekong River Commission) and the set regional objectives. Environmental governance has been identified as a potential focus area, pertaining to Laos' role as a an upstream economy whose rapid natural-resource based growth is highly likely to have increasing transboundary impacts in the future.

The evaluation of Phase I is expected to provide better understanding on what has been achieved with the project and what can be learnt from it. The optional appraisal would use these lessons to provide recommendations for an eventual second phase. Any future phase will be smaller in size and more focused in scope, in line with the premises described above.

The evaluation will be based on a desk study of background materials and reports, followed by field visits, interviews of different stakeholders and beneficiaries (and other methods the evaluation team will propose).

The team will produce the evaluation report. The recommendations of the evaluation report will be presented in a summarized form at the end of the field mission and discussed amongst the competent authorities and project partners as appropriate.

Evaluation recommendations will feed into participatory planning process where the project document (PD) for the phase II will be prepared by another team.

The evaluation includes an option for the desk appraisal of the project document after the planning has been finalised. Appraisal shall focus on analysing the quality and content of the programme document against the MFA standards and evaluation recommendations from the first phase. If realised the appraisal shall produce recommendations to improve the PD in general and the logical framework specifically.

3. Scope of the evaluation

The evaluation covers the whole EMSP project duration until the time of the evaluation (with some months expected to be remaining of the project at that stage). The main stakeholders (described in the EMSP Project Document) should be involved in the participatory evaluation process. Views of other relevant development partners (donors and IFIs), institutions (such as the Mekong River Commission Secretariat, the Lao National Mekong River Commission and Ministry of Industry and Commerce), private sector, civil society and NGOs should be taken into account.

The field evaluation should take place in Vientiane, in two selected (based on their representativeness) actively participating provinces, and for the comparison in one province that has not been actively involved in the project implementation. Interviews or focal group discussions should also take place at district level.

4. Issues to be addressed, and evaluation and appraisal questions

The following evaluation criteria and questions provide the general framework for the evaluation. While the evaluation questions indicate the priority issues, the evaluation team should not limit the evaluation to these questions only.

The evaluation will include a brief context analysis including aspect like good governance, the Rule of Law and human rights based on existing materials and stakeholder discussions during the field mission.

Evaluation questions:

Relevance refers to the extent to which the objectives of the programme are consistent with beneficiaries' requirements and needs, country needs, global priorities and GoL and GoF policies, in particular:

1. Are the objectives of the project consistent with national policies, strategies and priorities in environmental management issues?

Impact describes how the programme has succeeded in contributing to its wider, overall objective, i.e. impact for its final beneficiaries, including promotion of human rights and gender equality, reduction of inequalities and promotion of climate sustainability. The evaluation of impact covers intended and unintended, short- and long-term, positive and negative impacts. The evaluation will be made using the related indicators.

2. Is there a functional theory of change to achieve expected results?To which extent the project has incorporated the human rights based approach and the cross-cutting objectives of Finland's Development Policy Programme 2012 and what is the wider impact of it

3. Determine the extent to which the project and its associated actions are relevant to the existing and likely future needs of its stakeholders and the environment/s in which it is being implemented;

4. What is the net impact of the project to environmental indicators (air quality, water quality, forest coverage, biodiversity) in affected areas and awareness of the stakeholders and beneficiaries on environmental indicators?
5. Has the project any impact on the income and/or health of the people (private sector and civil society) affect by the project and their capacity to get involved in or with environmental administration?

Effectiveness describes if the results have furthered the achievement of the programme purpose (i.e. the immediate objective), or are expected to do so in the future. Evaluation of promotion of human rights and gender equality, reduction of inequalities and promotion of climate sustainability is integrated in the analysis. The evaluation will be made using the related indicators.

6. What is the number and quality of MONRE interventions in SEA and planning processes in other ministries and how successful MONRE has been in merging environmental aspects into national strategic plans?
7. EMSP has continued the Integrated Spatial Planning (ISP) work started under the Swedish funded SEM. To what extend has ISP used so far for environmental planning in Laos, and what are the conditions created for successful future use of ISP? What can be learnt from the implementation of ISP in provinces where it has been implemented recently and previously?
8. To what extent has the project strengthened the MONRE and PONREs environmental permitting, social and environmental impacts regulation and monitoring of the major mining, hydropower, industrial and infrastructure projects? What is the percentage of major projects with relevant, enforceable environmental conditions from all major projects? What is the effectiveness of mechanisms available to project affected people for submitting and following up complaints about environmental and social grievances?
9. To what extent have activities supporting MoIC succeeded in promoting self-monitoring (SM) and environmental management systems (EMS) within industry?
10. Has MONRE environmental messages and information services provision to its partners and stakeholders, including monitoring information availability to the public, improved through the project?
11. How well does the provision of environmental laboratory services established by the project at central and provincial levels, respond to the needs in Laos, and what are the sustainability prospects of those services after project exit in the short, medium and long-term?
12. Have the long-term financing prospects (GoL funding and user fees) of the updated tools and methods improved through the project support?

Efficiency is defined by how well the various activities have transformed the available resources into the intended results in terms of quantity, quality and timeliness. Use of resources to promote human rights and gender equality, reduction of inequalities and promotion of climate sustainability is integrated in the analysis. Comparison should be made against what was planned. Furthermore, the management and administrative arrangements are analysed.

13. How efficient and cost effective have the project management and administrative arrangements been in comparison to the results achieved? Quality of the programme management in supporting implementation? Were possible problems in implementation adequately addressed?
14. Were the stakeholders – including government officials, mass organization, CSO, and private individuals – satisfied with the performance and achievements of the project?
15. To what extent has the environmental management capacity been strengthened, and has it had intended cross-sectoral impacts?

Aid effectiveness (Effectiveness of aid management and delivery) refers to how the programme has implemented the commitments to promote ownership, alignment, harmonisation, management for development results and mutual accountability.

16. How effective has the project been in promoting Government ownership of the developed/updated tools, methods, etc.? How well is the project aligned with the Lao development priorities and harmonised with the other support provided for the sector (e.g.

ADB CEP)? How effectively has the project management been geared towards achieving the agreed development results? How transparent and predictable has the use and provision of the funding to the project been?

Sustainability is the degree to which the benefits produced by the programme continue after the external support has come to an end.

17. Are there significant gaps in the support and capacity of the stakeholders that negatively affect the sustainability of the results?

Appraisal (Optional)

In parallel to this final evaluation, another team will be tasked with programme planning with the aim of developing a draft programme document for the second phase of EMSP. The draft programme document will draw on (besides their own the field and desk top work) the final evaluation findings of the EMSP first phase. The draft PD is expected to be available a few months after the final evaluation team has finalized their work. The MFA may take the appraisal option of this assignment described in the present TOR, provided that once the evaluation results and the programme planning work are completed, there is still a mutual interest to advance to formal decisions on the second phase of the EMSP.

The appraisal will cover an analysis of the **relevance, feasibility** and potential **sustainability**, as specified above in the evaluation questions, of the proposed programme.

Relevance refers to the extent to which the objectives of the project address the needs and priorities of the stakeholders, including poverty reduction of the final beneficiaries. Another dimension of relevance is the consistency of the objectives with policy priorities of the partner country and Finland's development policy. Human rights and cross-cutting objectives are covered in this analysis.

In particular the relevance appraisal will look into:

1. Quality of the analysis; including the needs and priorities of the key stakeholders, relevant policies and strategies of Lao PDR, Finnish development cooperation policies and strategies to be addressed in the planned cooperation and potential for Finnish value-added, policies and strategies of Regional (GMS and ASEAN) importance, donor coordination and division of labour, and on-going / planned (donor supported) programs and processes
2. Relevance of the overall objective and project purpose to the issues identified in the analysis
3. Relevance of the scope of the project purpose

Feasibility is appraised by assessing

4. Adequacy of the background analysis,
5. Is there a functional theory of change to achieve expected results?
6. the project logic (relevance and feasibility of results and targets, feasibility of selected strategic approaches, realism of critical assumptions, sufficiency of inputs, etc.)

7. an analysis of the management and administrative arrangements for project implementation, including proposed institutional framework, coordination / cooperation with other stakeholders

8. aid effectiveness issues including ownership, alignment, harmonisation, mutual accountability and management for development results.

9. Quality of risk assessment and proposed mitigation measures and safeguards

10. Analysis of the feasibility and risks of the proposed alternatives

Sustainability refers to the conduciveness of the policy environment, financial and economic sustainability, adequacy of institutional and other capacity, participation and ownership, socio-cultural aspects, gender issues, environmental sustainability and appropriateness of technology and maintenance.

11. Assessment of the commitment and ownership of the Lao PDR to achieving the development results proposed to be addressed by the project

12. Sufficiency of the resources and adequacy of the institutional capacities proposed

13. Adequacy of the stakeholder participation arrangements proposed

More detailed priority questions may be added based on the evaluation results. Concept Note draft should follow the MFA template and instructions as per the MFA Manual for Bilateral Programmes.

5. Methodology

The team will combine multiple methodologies, both quantitative and qualitative, to gather representative, correct and justified information and feedback in order to carry out the assignment successfully. The methodology for both collection and analysis will be presented in the proposal. The proposal will clearly explain how the team will address causality and attribution issues. Validation of results must be done through multiple sources.

The proposal have to include methodology how they evaluate cross-cutting objectives.

All data collected, analysed and reported should be disaggregated by gender, age group and other relevant categories.

6. The evaluation process and time schedule

The duration of the total assignment is estimated to be approximately 8 weeks (about 40 working days). Field mission to Lao PDR lasts all together 3 weeks as the evaluation requires collection of secondary data and interviews of many, different stakeholders and beneficiaries. In order to conduct it properly and sufficiently it demands enough time.

A follow-up work option may be included for the team leader to support the integration of results in work planning based on a management decision on the recommendations for the remainder of the programme, but especially for planning a second phase.

The process is indicatively outlined below and the key deliverables are as following:

Task	**Approximate duration**	**Time**
Evaluation		
Kick-off briefing meeting	0.5 day	January
Desk review and inception report of the Evaluation	10 days	January
Inception meeting	0.5 day	February
Interviews and field mission	3 weeks	February
Drafting and finalization of the impact evaluation report including table of recommendation	2 weeks	March
Grand Total (evaluation and appraisal)	**8 weeks**	
Option: Appraisal of the PD and reporting to MFA	**1 week**	May – June

The assignment will begin with a **kick-off briefing meeting**(s) at the Ministry for Foreign Affairs (MFA) in Helsinki, and the Embassy of Finland in Bangkok (or jointly, via video link) .

Desk Review: In addition to the Project Document, MFA and the Embassy of Finland in Bangkok and the Embassy of Finland in Hanoi will assist the team by providing material relevant to the project. The team will study the available documents from the different phases, including reviews and evaluations. In addition, data should be collected from the authorities during the field mission, as possible and appropriate. The desk study results are included in an inception report as a concise analysis of the policies, guidelines, and other documents studied for the evaluation. The Inception report must include detailed work methodologies, a work plan and detailed division of labour within the evaluation team, list of major meetings and interviews, detailed evaluation questions linked to the evaluation criteria in an evaluation matrix, reporting plans including proposals for tables of contents of the reports.

Field mission, the team shall to a maximum extent seek opportunities for joint meetings/ interviews with other partners. The field work will include visits to selected provinces. The meeting arrangements, field visits to selected provinces and logistics shall be done in close cooperation

between the Team, implementing agency, and the local counterparts. At the end of the field mission, the team will prepare a clear and concise list of findings and recommendations. These will constitute the core of the report, and will be presented at a debriefing.

Report drafting The draft report will be submitted to the relevant authorities for the correction of factual data presented. The report will include a summary table of findings, conclusions and recommendations indicating responsible institutions and timelines. (see annexes Outline for evaluation report). The final evaluation report will be completed first. Detailed appraisal questions will be prepared based on the evaluation.

7. Reporting

The evaluation team is requested to submit the following deliverables:

- Inception report
- Presentation on the field findings in Vientiane and in Helsinki
- Draft evaluation report
- Final evaluation report
- Power Point Presentation on the evaluation findings and recommendations

Each deliverable is subjected to specific approval. The evaluation team is able to move to the next phase only after receiving a written statement of acceptance by the MFA. The reporting schedule is included in the contract.

8. Quality assurance

The proposal must specify the quality assurance process, methodology, resources and tools.

9. Expertise required

The team is expected to contain 2 international, 2 national experts and a junior expert where international CTA should be available throughout the mission. The team shall demonstrate solid experience and knowledge at least in the following fields:

Expertise required	CTA	Intl expert	National expert	National expert	Junior expert
- Participatory evaluation and appraisal					
- Environmental administration					
- Environmental management					

- Good governance					
- Mainstreaming of human rights, gender equality, social inclusion and climate sustainability					
- MFA's development policy and specifically its cross-cutting objectives					
- Report writing					
- Working experience in Lao PDR and Mekong region					

Experience from the last 10 years will be regarded as the most relevant.

10. Budget

The total available budget for this evaluation is 90 000 euros, excluding VAT, which cannot be exceeded.

11. Mandate

The evaluation team is entitled and expected to discuss matters relevant to this evaluation and concept note appraisal with pertinent persons and organizations. However, it is not authorized to make any commitments on the behalf of the Government of Finland.

Annexes 1: Link to the MFA evaluation manual:
http://formin.finland.fi/public/default.aspx?contentid=288455&contentlan=2&culture=en-US

Annex 2. Findings and Recommendations

Component 1: Integrating environmental issues into strategic planning

Results	Programme Achievement Indicators	Collected data Qualitative and quantitative	Findings (what went well/ not well? Why?)	Recommendations
Result 1.1 GOL capacity in SEA methodology is developed and utilized by WREA, MPI and line ministries;	• Number of GOL staff trained in SEA procedures (divided by gender) • Number of GOL staff involved in the SEA process (divided by gender) • Number of requests for support from MONRE on SEA by other ministries and provinces	• More than 200 staff have undergone SEA training events. 20% female, 80% male • Staff have been actively involved in the process of defining SEA but only 3 staff are proficient in actually carrying out an SEA. • Only two attempts for the actual application of SEA have been made in EMSP of which one reached only screening and the other was a demonstration activity. •	• The SEA decree and guidelines have been drafted where cross sector cooperation between ministries was successful. • Existing SEAs or European SEA models have not been studied or utilized. • The guidelines have been through a substantial number of revisions suggesting technical weaknesses in formulating a functional SEA framework suited in Laotian context . • Training has seemingly been ineffective as only 3 MONRE staff are considered proficient in SEA procedures. • Currently SEAs remain as future planning tool awaiting for full legal endorsement and needing more capacity allowing implementation.	**Short Term** • SEA support does not require further assistance given no significant progress in SEA can be expected in the remaining EMSP implementation. • Preparation of handing over and future SEA support activities with other TA support are recommended. In this EMSP should focus on simplifying the SEA mobilization by promoting pragmatic analysis tools such as Cumulative Impact Assessment (CIA) that belongs into SEA methodology and is able to attract World Bank future assistance. • Discussions with World Bank, a simple technical demonstration of Cumulative Impact Assessment as part of SEA as a case study and possible inputs into the planned Luang Namtha activity are recommended means for the handover and promotion of the simplified SEA mobilization. **Long Term** • Consider significant simplification of scope and procedures for Strategic Environmental Assessment.

				• Strengthen assessment of cumulative impacts from multiple projects in connection with EIA procedures and local planning
Result 1.2 The Environmental Action Plans for the National Environmental Strategy to 2020 are prepared and implemented in a participatory manner;	• Action plans consulted with stakeholders (including number of organisations, districts etc. where consulted) • Action plans approved and disseminated • Number of project proposals prepared in accordance with action plans	• With EMSP's support, the first National Resources and Environmental Strategy (NRES) 2025 including MONRE Vision Toward 2030 and a National Environmental Action Plan (NEAP) 2020 have officially been drafted and approved by MONRE in consultation with several other ministries. This has clarified its organizational aims for 2015 and set an action plan until 2020. When strategy was subjected to the screening process of the SEA it was concluded there is no need for full assessment as no negative impacts were expected.	• While the preparation of the first National Resources and Environmental Strategy (NRES) 2025 including MONRE Vision Towards 2030 demonstrated good cross-sector cooperation, only the screening process was undertaken in the exercise. • The shortcomings of Component 1 lie in the lack of practical application of the Strategic Environmental Assessment processes, both in relation to policies/strategies and to spatial planning. Lack of competent national advisors, the extensive use of volunteers in government service and the constant rotation of permanent staff are cited as major factors contributing to this problem.	**Short Term** • Identify a small number of outstanding PEAPs for finalization and apply participatory methods to set provincial goals and projects as a demonstration. The participation should involve and target also communities and vulnerable groups. **Long Term** • Promote widely the participatory approaches currently practiced by Provincial Departments of Natural Resources and Environment • The realization of the basic rights to information by the affected people and communities are recommended to be reviewed through an independent study. Independent Monitoring Agent (IMA) concept could be tested in practice briefly by hiring a company to assess the participation in an ongoing complaint process. • Information dissemination procedures and the participation processes of MONRE and its provincial departments are recommended to be developed further with regard to keeping records of the complaints and the letters received from affected people and other groups.

Result 1.3 SEA is applied in preparation of the socio-economic plan, urban and sector planning at the national level, according to agreed procedures;	• Agreed procedures exist, including relevant provisions for ensuring public participation and social sustainability of urban and sector planning • Stakeholder analysis and consultation activities in every SEA include vulnerable and ethnic groups • Number of SEAs satisfying agreed procedures	• Only a screening of the Natural Resources and Environment Strategy process has been conducted so far. Therefore it is not possible to evaluate the extent to which the vulnerable and ethnic groups were involved into the whole SEA process.	• Given that Lao PDR has existing SEA models that have not been utilized for 4 years and the SEA related staff capacities remain weak after lengthy implementation of EMSP focusing on SEA, it seems that SEA has not been considered an essential planning tool by MONRE.	**Short Term** • Given ISP remains still unrecognized and is used mainly as a data collection tool, the recommended promotion of SEA should instead focus on recognized spatial planning processes that can produce planning alternatives for specific sector plans. **Long Term** • SEA has not been considered an essential planning tool by MONRE, and therefore requires no immediate support during the remainder of EMSP • Simplified SEA pilots are recommended after EMSP given SEA has potential and political backing for future usage • Initially focus on strategic assessment of spatial plans rather than policy issues

Component 2: Department of Environmental and Social Impact Assessment: Building capacity in licensing and inspection

Results	Programme Achievement Indicators	Collected data Qualitative and quantitative	Findings (what went well/ not well? Why?)	Recommendations
Result 2.1: Good practices in preparing environmental certificates are in place in MONRE	• Number and % of ECCs prepared in accordance with model ECCs • Number and % of hydropower and mining concessions that follow the SESO	• IAS are systematically performed and ECCs are systematically issued for large hydro power projects and mining projects.	• EMSP's results are highly relevant for the need to strengthen ESIA and IEE compliance monitoring that remain as the core of environmental management of Lao PDR. • MONRE and PONREs have received substantial training in issuance of ECCs but lack seriously the technical knowledge to deal with complex, technical and social issues	**Short Term** • To ensure sustainability and consolidation, results focusing on success stories should be disseminated through e.g. seminars, brochures, media articles, and if possible site visits. The primary target for the increased awareness shall be the DESIA at all levels, major investment projects, external donors and their projects, environmental consultants. • Following successes should be highlighted in the seminars: 1) On-site monitoring of ESIAs undertaken by DESIA staff, 2) Examples of the hydropower SESOs that are applied in practice, 3) The national water quality monitoring scheme, 4) The industrial self-monitoring practices with their inspections and guidelines 5) The cross-sector cooperation achieved in setting MONREs strategy and vision 6) The Environmental Management and Monitoring Database (EMMD) **Long Term** • Assess the current capacities of provincial

				Departments of Natural Resources and Environment (PONREs) required for Initial Environmental Examination (IEE) in terms of adequacy of staffing and skills.
Result 2.2: Sustainable inspection and compliance enforcement system for environmental conditions and standards is in place in MONRE	• Number of inspection plans approved and implemented by DESIA, PCD and selected EMUs • Number of inspection reports relative to inspection missions (annually) • Number and % of inspection plans including a relevant level of community consultation • Number and % of inspection reports that include documented representation of relevant vulnerable groups	• Only few selected mega projects are subjected to regular monitoring and seemingly mostly on their own conditions as they finance and time the inspections.	• No clear division exist between compliance monitoring and monitoring of residual impact (ambient monitoring). • Limitations in inspection authority to carry out inspections due to high dependence on the companies to be inspected • Thus far no penalties assigned for possible permit breaches • Insufficient staffing and finances to carry out legally required compliance monitoring • Successful trainings with MOIC and POICs for self-monitoring inspections and a development of self-monitoring manual •	**Short Term** • Dissemination of relevant successes (as above) • Given the lack of self-sustaining financing model for ESIA and IEE compliance monitoring and industrial inspections that greatly dependent on the company paying for the inspection visits, EMSP should provide MONRE and MOIC functional financing model for these core activities. • Already existing models, such as the Environmental Protection Fund, should be studied as the basis of the recommended model. In the model, employing Independent Monitoring Agencies and the DESIA staff working currently with on-site monitoring should be given specific consideration as the agents specializing in these tasks. • Ensure maintaining the 10 DESIA staff undertaking on-site compliance monitoring within MONRE and target them for future career path as part of an inspectorate **Long Term** • Further strengthen DESIA's and MOIC's inspection capacities

				• Improve data sharing among Government authorities: Assure that free data access and exchange are in place between MPI's investment database and MONRE's EIA database and ensure that the databases are developed together in the future. • Improve effectiveness of monitoring of compliance and residual impacts • Test lighter but more efficient monitoring / inspection schemes that can be carried out through selected highly skilled experts and/or contracted independent monitoring agencies. Options such as involvement of external monitoring specialists, or specialists needed for reviewing assessments and reports should be considered. • Improve effectiveness of application of the Standard Environmental and Social Obligations (SESO): Simplify the process, requirements, set scales for requirements (based on operation volumes, company profile etc.) and focus on getting SESOs signed based on accepted compensations referenced from existing compensation cases to facilitate the process.

Result 2.3: Polluting industry is practicing self-monitoring and using environmental management systems to control hazardous emissions	• Number of industrial facilities where MOIC Environmental Division is facilitating SM and EMS • Number of self-monitoring reporting schemes (scheme=an officially organized plan or system) • Number of applied EMS in industries	• About 20 factories are taking part in the self-monitoring schemes. However, not all actually implement the schemes.	• There is no distinction between hazardous and non-hazardous waste. • The Programme has at a very late stage become involved in management of hazardous waste.	**Short Term** • As above (dissemination of relevant successes and development of self-sustaining financing model) **Long Term** • Define tasks and procedures required especially to account for environmental accidents or activities that are breaching the permit. • Strengthen penalising capacities by setting fining and other compensation mechanisms for enforcement procedures. • Undertake inspection drills and assign & collect fines when breaches are found. • Support to hazardous waste management should be sought from other donor projects to materialise the first hazardous waste management site to Vientiane..
Result 2.4: Financial sustainability of compliance monitoring has improved	• Number and % of investment projects going through the certification process that have allocated budget for E&S monitoring by government agencies • Monetary value of GOL contribution to monitoring and inspection budget	• All large projects are obliged to contribute to the monitoring schemes both in terms of funding and in terms of skills training. • The projects actively provide skills training to government staff. • The Financial Management Manual that has been revised in accordance with the mechanism and has	• Under the principles of general user payments and "the polluter pays' a provision for payment towards monitoring "services" by the government is incorporated as a requirement in the Standard Environmental and Social Obligations annexed to the concession agreements for large and medium projects.	**Short Term** • Given the lack of self-sustaining financing model for ESIA and IEE compliance monitoring and industrial inspections that greatly dependent on the company paying for the inspection visits, EMSP should provide MONRE and MOIC functional financing model for these core activities. **Long Term** • Define the staffing, skills and funding needed for the PONRE's to efficiently meet the IEE handling and monitoring

	• Monetary value of developers' contribution to monitoring and inspection budget	been approved by the Minister of MONRE. DESIA has employed an accountant to assist with their accounting work.	During 2013-2014 this contribution amounted to about 8 billion LAK (1 million USD), most of which was spent on monitoring activities together with about 2 billion LAK provided by the Government of Lao PDR. The principles are sound but it may be necessary to introduce a high level of transparency in the use of these funds to satisfy the need for public participation.	requirements. Undertake similar assessment for ESIAs in MONRE. • Use the assessments to provide the Government of Lao PDR with pragmatic estimated requirements in terms of staffing and budgets needed to undertake these tasks annually. • Provide MONRE clear guidance on how to utilize existing financial mechanisms (such as set in to collect funds from developers into the Environmental Protection Fund) and the needed annual budgets from the Government of Lao PDR, to cover the operational requirements of ESIA & IEE compliance monitoring and inspections .

Component 3: Provincial Departments of Natural Resources and Environment: Strengthening environmental management at the provincial level Including new ISP activities

Results	Programme Achievement Indicators	Collected data Qualitative and quantitative	Findings (what went well/ not well? Why?)	Recommendations
Result 3.1 DONREs prepare and implement provincial environmental action plans in selected environmental issues and selected Result provinces have developed integrated spatial plans as a basis for environmental management	• Number of approved PEAPs • Number of PEAP activities being funded and implemented • Number of government officials from provincial departments/administrations and district administrations and offices trained in basic ISP • Number of completed Integrated Spatial Plans that have been prepared through open and participatory processes • Number of PEAP or ISP related meetings held at provincial, district and village levels	• All 17 provincial Departments of Natural Resources and Environment have received financial and technical support. District plans have been established in most places while 6 provinces actively pursue their PEAPs.	• Much effort has been dedicated to establishment/finalisation of provincial environmental action plans and integrated spatial planning (ISP). These activities were already ongoing many places before the inception of the Environmental Management Support Programme. The activities have thus been continued, updated and refined. A large number of government staff have been trained. • ISP is considered beneficial for information collection and mapping aimed at improved decision making when considering environment and strategic natural resource management, although the	**Short Term** • Assist MONRE's DESIA department in defining budgeting and staffing plan using the planned support to be provided by the Environmental Protection Fund application process. Define main activities of ESIA compliance monitoring that can be supported by the Environmental Protection Fund. • For the Integrated Spatial Planning, Technical Assistance has achieved a data collection procedure considered beneficial for strategic decision support which can be demonstrated further for those ISP processes that may lack behind. Disseminate existing ISP results including maps into other provinces that they can use in finalizing ISP related activities. • Demonstrate the environmental management objectives that should be driving the ISP process for the future development of ISP. Develop selected case studies how environmental planning

	(participant data divided by gender and organisation/occupation)		legal status and practical usage of ISP remains unclarified affected by overlapping planning mandates. • ISP can be used a tool for incorporating climate change adaptation into provincial and district plans, however at the moment the capacity/ understanding of the facts related are still insufficient hence the ISPs do not currently address adaptation measures adequately.	objectives associated with ISP are recognized in environmental management oriented planning for example by planning requirements imposed by waste management sites, nature conservation objectives or specific climate change concerns. • The Programme should also, as part of the exit strategy, publish for other projects and agencies a list of geo-referenced data available from the programme data bases. **Long Term** • ISP is recommended to be further developed so its objectives are legally binding at the provincial level: provincial by-laws or adopted provincial planning guidelines can be considered for getting the endorsement and level of engagement needed • ISP should focus on environmental planning objectives and interventions for e.g. waste management, climate change and ecological /biodiversity issues. • ISP should strengthen its inclusion of socio-economic issues.
Result 3.2 Selected DONRE staff have adequate compliance monitoring and	• Number and quality of inspection reports • Number of non-compliance issues identified and actions	• Staff have been trained but few are confident enough to carry our testing and sampling independently.	• While key individuals working in provinces have been successfully trained in inspections and sampling, the overall the provincial	**Short Term** • In undertaking the ESIA consultations for compensations through local community hearings, the Programme should demonstrate participatory approaches

sampling skills	taken • Number of people trained and qualified in WQ sampling • Number of provincial WQ monitoring plans developed and implemented		environmental management capacities for these functions remain still constrained and limited stemming from inadequate budgeting and staff rotation. • The Environmental Management Units lack capacity to carry out compliance monitoring (incl. weak English skills which hinders the understanding of the set agreements etc.). • Major investors honour their obligations to provide capacity building in the field of monitoring for government agencies. • DESIA lacks staff capacity for monitoring social compliance	that include sound community involvement before Programme termination. Participatory approaches shall here be understood as active involvement of common people and ensuring their knowledge, experience, expectations and concerns are included in the data and information collection and that these concerns are duly incorporated in the decision making. • The Programme could arrange a few community dialogues where not only community leaders are invited, where it can be demonstrated how local understanding and local concerns contribute positively to the definition of future strategies. It may require substantial efforts to bring forward an enabling attitude to listening to ordinary people and to accept their – sometimes very local – horizon. **Long Term** • The 10 DESIA staff working with monitoring in the development companies at the moment are suggested to receive more trainings aimed at occupying Environmental Officer/ Inspector / Compliance Monitoring position as part of MONRE. • DESIA should recruit staff or build capacity of the current staff on social monitoring.

				• Capacity building for DESIA staff especially on the EIA and IEE processes should be continued e.g. under UNDP PEI programme. • In order to ensure sustainability of the current success level, ensure continued expansion of staff numbers and capacities.
Result 3.3 Updated baseline maps and data, planning maps and local/national regulations are available and in use by the DONREs in connection with daily environmental administration such as IEE review and certification	• Number of DONREs which have and are using updated maps and data on key environmental features • Relevance and applicability of environmental conditions in IEEs to compliance monitoring	• There are still issues on authority and formats of maps.	• For many organisations or individuals, the Integrated Spatial Planning (ISP) has almost become synonymous with the Environmental Management Support Programme. While the Integrated Spatial Planning (ISP) seems a popular tool in the districts and provinces aimed at decision support it collides to some degree with the Land Use Planning (LUP) system in use by the Department of Land Planning and Development and overlaps with the spatial planning done in connection with the Socio-economic Development Planning cycles in MPI as supported by GIZ.	**Short Term** • Instead of baselines maps, EMSP has developed ISP as a popular and systematized data collection tool. Further development of the ISP towards environmental planning objectives highlighted through case studies (as above) is recommended. **Long Term** • Include mapping of E(S)IA sites and monitoring activities in the ISP mapping and records • Assure that free data access and exchange are in place between MPI's investment database and MONRE's EIA database and ensure that the databases are developed together in the future. • Initiate data exchange and define IT design plan aimed at developing the databases together and jointly in the coming years by setting IT architecture composed of joint user groups, data storage and exchange practices and

				assigned user portal accessible within MPI and MONRE. • The Environmental Management and Monitoring Database that is accessible through the internet can be developed further as a user portal.
Result 3.4: Basic working conditions and skills in all provinces	• Number of DONRE offices equipped with vehicle and basic office equipment • % of staff with basic IT and English language skills	• Provincial staff have limited work space and equipment to carry out their duties in a free manner. Basic space and equipment is there but it is mainly due to the staff's dedication that the provinces are so productive. • Spoken, conversational English is acceptable but there is a definite limitation on technical English, especially written.	• Training provided for monitoring and sampling has established basic capacity levels in provincial Departments of Natural Resources and Environment for selected tasks such as water quality and EIA compliance monitoring. These provincial departments have national and local regulations available mostly as hard copies.	**Short Term** • As above **Long Term** • Considering the dedication found among provincial staff, additional focus and funding should be diverted to provincial staff development. This will ensure staff stability and capacity to deal with issues close to the root.

Component 4: DEQP and Natural Resources and Environment Data Information Centre: Capacity building for high quality information services

Results	Programme Achievement Indicators	Collected data Qualitative and quantitative	Findings (what went well/ not well? Why?)	Recommendations
Result 4.1: MONRE is regularly feeding productized environmental information and data into national planning processes	• Number and type of environmental reports and data sets submitted to or downloaded by MPI, line ministries and international organizations	• Information sharing is still in its infancy.	• EMSP and MONRE web pages contain several materials with regard to regulations and EMSP activities. Important databases such as Environmental Management and Monitoring Database (EMMD) and Water Quality Database add into the selection of information available within MONRE and for MONRE's partners.	**Short Term** • Updating and transfer of all contents from the EMSP website to MONRE website. • Making sure, all printed programme results are distributed to relevant parties. • Implementing dedicated seminars for donors and projects so they are aware of all programme endeavours and what is needed to consolidate them. • Implementing dedicated seminars for major investment projects and environmental consultants so they are aware of all programme results. • Issue news releases and follow up with media seminar • Establish cooperation between PEI to carry on with the Environmental Management and Monitoring Database (EMMD) development in cooperation with MPI's investment database. • Define and enforce data sharing procedures within MONRE in close cooperation between Finnish supported programmes SNGS and SUFORD by writing simple data sharing guidelines including pricing,

				different data formats and different information user groups. **Long Term** • Ensure transfer and integration of the EMSP website into the MONRE website.
Result 4.2: MONRE is efficiently disseminating information about environmental law, its services, donor interventions, achievements and Findings of environmental monitoring and research	• Number of monthly hits on the different websites • Number of downloads of environmental datasets	• More than 300,000 visitors to the MONRE/EMSP site	• The target group for the webpage is not clear. The language and mode of presentation seems to be directed towards professionals rather than the general public or rural communities. • EMSP web pages would benefit from more frequent updates of contents regarding activities and materials as most updates are dated before 2013. The current coverage of data the databases within MONRE and the access to databases by provincial Departments of Natural Resources and Environment is very limited requiring further and continued strengthening.	**Short Term** • As above **Long Term** • Maintain relevance by more frequent updates of documents, data and topics • A procedure for maintaining and updating selected web sites should be provided for MONRE. • Access to key legal documents such as Public Involvement Guidelines and the ESIA and IEE regulations should be promoted for the public. • It is recommended that the Environmental Management and Monitoring Database(EMMD) is maintained and expanded to cover also the ESIAs under the Ministry of Planning and Investment. Specific resources should be assigned for such work that should initiated still during the remaining EMSP period as a high priority.
Result 4.3: MONRE is actively supporting partnerships and engagement of	• Number of communication plans prepared and implemented by	• Actual participation based on free, prior and informed decision making and	• Mass organisations such as Lao Women Committee, Youth Committee and Lao Front of National Construction (interest organisation of ethnic groups) have been included e.g. in the ISP process,	**Short Term** • As above **Long Term** • Include information relevant to local

different target groups (including ethnic or vulnerable groups) in environmental information dissemination and awareness raising	MONRE that follow agreed procedures (in a year) • Number of awareness campaigns with specific consideration for non-web based strategies and means of disseminating information to vulnerable groups • Number and quality of communication interventions together with the media, mass organizations, NGOs and sector ministries and agencies • Number of campaign related citations in press and on the internet	consent is not part of current practices. • Posters on the main environmental and social management and monitoring tools, such as ESIA and the Standard Environmental and Social Obligations (SESO) as well as process charts of DESIA mandate, monitoring and fee collection have been produced in Lao language. • Non-web based awareness material has been produced incl. radio forecast to raise awareness in environmental protection and educational video on water quality monitoring. •Awareness raising activities targeted to communities taken place by	however no evidence was found that NGOs or other civil society groups would have been actively engaged to the project supported activities.	communities and ensure language and technical expressions are suitable for this target group (especially non-web based information to be produced) • Relevant documents such as Environment and Social Management and Monitoring Plans, SESOs etc. should be translated into Lao by the project developer and compliance of distribution to relevant stakeholders at community level to be monitored by MONRE. • Public hearing structure, roles, responsibilities and mandates to be specified under the SEA decree and guideline.

		DONREs/PONREs e.g. alongside Nam Tha river as well as in Oudomxay related to general environmental and waste management.		

Component 5: NREI: The Natural Resources and Environment Institute: Environmental laboratory services

Results	Programme Achievement Indicators	Collected data Qualitative and quantitative	Findings (what went well/ not well? Why?)	Recommendations
Result 5.1: Laboratory is equipped with appropriate technology which are used for delivering services in national water quality and compliance monitoring	• Status of laboratory equipment • Services provided to e.g. MONRE, DONREs, projects, Ministry of Health etc.	• The central Laboratory is well equipped and all equipment installed and in use by qualified staff. • Services are rendered to government and private sectors. • Some equipment meant for the provinces has not yet been distributed. • Not all provincial laboratories have adequate staff or logistics available.	• The capacity to provide laboratory services remains essential underlining the high relevance of the environmental laboratory operations where capacity has been strengthened successfully. However, several pragmatic constraints have been met and risks remain for the longevity and sustainability of the laboratories supported. • A fair number of private customers including the Mekong River Commission are regular users of the facility.	**Short Term** • Establishment of a clear timeline for ISO certification and identify potential sources of financial and technical support during this period. • Reconsider the economic feasibility of tests of complicated parameters. Suggest alternative business and marketing plan based on the target market needs and cost-efficiency of the needed analysis. • Further improvements to the business plan, cost estimates for operation and maintenance, clarification of ownership of equipment and facilities. • Ensuring a staffing plan, i.e. ensuring sufficient permanent staff may be retained. • Relocate or disassemble Luang Prabang laboratory as it is defunct. • Develop a simple business and staffing plan for Pakse laboratory based on specific ESIA monitoring needs in the province to initiate a minimum level of commercial sampling required for basic laboratory services and operationality. • Propose post-programme allocation of

				unutilised equipment into the sampling laboratory in place in National University Of Laos particularly from provincial laboratories. **Long Term** • The Laboratory must include in its management plans a method of retaining funds for future upgrading and maintenance of sophisticated equipment. • The Laboratory must also be ready to finance continued training of new and old staff. • The current business plan of the NREI laboratory would benefit from an assessment aimed towards cost-efficient market approach based on main client needs and defining a realistic market position. This would be beneficial also for considering other economically viable alternatives for the ISO standardization approach now preferred and for checking whether the intended equipment procurement including maintenance and staff needs is operationally feasible. Market surveys together with cost estimates for operations with different options are suggested. • Luang Prabang laboratory is defunct and should be relocated. When considering the new location, expected services from the laboratory should be defined, together with operational guidelines, basic business plan and staffing plan.

Result 5.2: Laboratory staff are trained to the level of international certification and using their new skills	• Number of staff trained and qualified to carry out certified chemical analysis • Laboratory personnel performance measured by % reliable analysis results as defined by the QA/QC system	• A high number of staff have been trained • Central laboratory has been subjected to tests and has passed with good marks.	• Whereas the central laboratory functions well and has a high production of tests and analysis, the same can not entirely be said about the provincial laboratories. The basics – equipment and staff – is there but if there is no work, no supervision, no guidance, it will eventually fail. • The Central laboratory is determined to achieve ISO 17025 certification and is actively working in that direction. Tests are satisfactory and the paper work (operational procedures, job descriptions etc.) have all been worked out	**Short Term** • As above **Long Term** • To maintain current staff level, a career plan should be drawn up for staff receiving such dedicated training. This will enable the laboratory to maintain and develop standards of high level. • For ensuring required staffing, it is recommended that some laboratory positions will be made attractive in terms of salary and / or fixed within NREI's organization for example with 5 year contracts.
Result 5.3: Water quality sampling is credible and reliable	• Number of personnel trained and certified for sampling as measured against Standard Operating Procedures • Sampling personnel performance as measured against Standard Operating Procedures	• Procedures in the central Laboratory all follow international standards. • Sampling personnel has not been appointed with the same rigidity on procedural skills as the laboratory staff. The central laboratory, however, does insist of correct handling, labelling and transportation	• The certifying institution in Thailand has issued tests to the laboratory. These have been carried out satisfactorily. • Labelling, storage and general handling of incoming samples is equivalent to procedures observed in other accredited laboratories. • While the central laboratory is housed in temporary facilities, all safety and technical standards are respected.	**Short Term** • Discuss the water quality monitoring continuation with other active donors including Australia and ADB and define tasks to be handed over. **Long Term** • Dedicated technicians should be permanently employed for sampling procedures. • Private environmental consulting companies should be encouraged to employ certified technicians to do sampling.

		as required by international standards.		
Result 5.4: Laboratory is operating on a semi-commercial basis and a preparation for an accreditation of ISO/IEC 17025	• Number of services productized • Services sold per year, value and share of total production • % of satisfied customers • Number of quality document completed according to requirements of ISO/IEC 17025	• The Laboratory handles a large amount of samples from a variety of customers such as the MRC, hydroelectric projects, mines and factories. • The number of commercial samples has been on the rise. This may be explained by the fact that there is no other laboratory of this kind in Laos and there is an increased need for environmental safety.	• The Central laboratory is determined to achieve ISO 17025 certification and is actively working in that direction. Tests are satisfactory and the paper work (operational procedures, job descriptions etc.) have all been worked out.	**Short Term** • As above **Long Term** • The entire idea of a semi commercial operation should be reconsidered. The Mission has not been convinced it is the responsibility of the Government to provide this service or that the laboratory in the long run can keep up the momentum at the same technical standard. • Further improving the business plan, cost estimates for operation and maintenance, clarification of ownership of equipment and facilities • Reconsider the economic feasibility of tests of complicated parameters • Consider support to the establishment of environmental testing facilities within private sector consulting companies irrespective of the competition issue
Result 5.5: Results of first national water quality survey are available and capacity exists to replicate	• Number and quality of data analysed and reported in accordance with the monitoring programme	• Samples have been taken at 116 fixed stations but results are not available	• Not even the communities, who have assisted taking the samples have been informed about the results. The explanation has been that the Government wishes to make comparative quality analysis before publication. This may be in line with Laos policy on disclosure but is not	**Short Term** • Discuss the water quality monitoring continuation with other active donors including Australia and ADB and define tasks to be handed over. **Long Term** • In order to obtain popular trust and support, the Government of Laos should

			found in line with Finnish general policies.	subscribe to a policy of environmental disclosure.

Annex 3. Programme Achievements

Component 1: DEQP - Department of Environmental Quality Promotion: Building capacity for Strategic Environmental Assessment and National Environmental Action Plans

Purpose: Ensuring that environmental aspects are merged into national strategic plans and that MONRE's role in this is recognized by the Ministry of Planning and Investment and other concerned line ministries

Achievements:

- A draft SEA decree and associated guideline produced in 2012 and later refined under Ministry of Natural Resources and Environment Leadership.
- Successful cross sector ministry cooperation in developing the decree
- The draft SEA decree and guidelines have been applied for agricultural, industrial and tourism development potentials in Oudomxai.
- SEA screening of the Natural Resources and Environment Strategy 2015 and successful cross sector cooperation with several ministries for setting MONRE's strategic objectives.

Result 1.1: Government of Lao PDR capacity in Strategic Environmental Assessment is developed and utilized by the Ministry of Natural Resources and Environment, the Ministry of Planning and Investment and line ministries

- A total of 397 participants are reported having received SEA training (225 male, 172 female).
- Large number of participants from MONRE, DONRE and line ministries involved in Golden Triangle SEA and the Oudomxai demonstration project SEAs, and development of SEA guidelines.
- No known use of existing successful SEA models or results in Laos such as Golden Quadrangle Tourism SEA (under ADB's Core Environment Programme) and Mekong Mainstream Hydropower SEA (under Mekong River Commission) was noted.
- No recent requests for MONRE SEA support to other agencies.

Result 1.2: The Environmental Action Plans for the National Environmental Strategy to 2025 are prepared and implemented in a participatory way

- The National Environmental Action Plan has been approved.
- Natural resources and environmental strategy 2016-2025 and vision towards 2030 ready in draft form prepared successfully with cross-sector participation between ministries.
- Provinces have PEAPs in place as strategic plans but their planned implementation has remained partial and incomplete in 2010-2015 in some provinces supported by EMSP (Attapeu, Champassak)
- Staff capacity on strategy development noticeably improved.

Result 1.3: Strategic Environmental Assessment is applied in preparation of the socio-economic plan, urban and sector planning at the national level, according to agreed procedures

- The SEA decree and guideline have been completed, including procedures for public involvement. The decree is currently undergoing further refinement
- The formal application of SEAs requires further legal endorsement and technical implementation capacity which is not achievable within the remaining EMSP implementation timeline.
- The Result is considered completed apart from continued legal revision of the decree.

Component 2: Department of Environmental and Social Impact Assessment: Building capacity in licensing and inspection

Achievements:

- Renewed ESIA and IEE regulations have been endorsed and disseminated broadly.
- The continued support provided by Finnish and Swedish support to strengthening the ESIA regulations have empowered MONRE's and PONREs' DESIA successfully in undertaking environmental management as per their mandates for over 15 years as a continued positive environmental sector impact.
- DESIA is practicing ESIA and IEE compliance monitoring including selected staff assigned to conduct on-site compliance monitoring.
- Industrial self-monitoring guidelines and industrial inspections of MOIC have been strengthened significantly through guidelines and inspection trainings.
- EIA database is in place and accessible freely through the internet although it covers currently less than 30% of known investments with EIAs.
- Virtually all Environmental Compliance Certificates are now issued within the stipulated time limit after submission of Environmental Impact Assessments or Initial Environmental Examinations. This is an improvement from less than 50% before the programme support.
- Water Quality Monitoring has been reformulated under EMSP's support including a national water sampling scheme put in place
- Monitoring and inspection database in place developed and under tests.
- A grievance system is in place within MONRE (DESIA) and the National Assembly.

Result 2.1: Good practices in preparing environmental certificates are in place in MONRE

- An increasing number of ECCs are issued annually using an improved model structure.
- SESOs have been applied in some 20 concession agreements providing functional basis to put more SESOs into practice.
- SESO development has gained significant level of attention but the ongoing drafting process has been lengthy and slow.
- All new large Hydro power and mining concession agreements negotiations are reportedly based on inclusion of SESO.

Result 2.2: Sustainable inspection and compliance enforcement system for environmental conditions and standards is in place in MONRE

- Inspection guidelines have been completed and is in active use since 2012 (77 projects)

- Self-monitoring guidelines have been successfully developed for MOIC in cooperation with prominent large industrial companies and the Ministry Of Health.
- Draft Public Involvement Guidelines have been prepared. The majority of monitored projects report public consultations.
- The annual requirements for ESIA and IEE compliance monitoring are followed but they impose heavy burdens for staffing and financing.
- Ten DESIA staff have been employed to conduct on-site compliance monitoring.
- Currently the companies being inspected fund each of the inspection visits reducing independence and financial sustainability of the monitoring.

Result 2.3: Polluting industry is practicing self-monitoring and using environmental management systems to control hazardous emissions

- Only large and prominent industrial companies have self-monitoring schemes in place.
- MOIC estimates that in total some 20 factories have self-monitoring schemes in place featuring tobacco, brewing, electronics, agro-processing (cassava, rubber, sugar) and steel production.

Result 2.4: Financial sustainability of compliance monitoring has improved

- Companies are providing the funds for the inspection visits and can refuse inspections based on insufficient funds or even by being simply busy.
- MONRE is yet to develop an internal model for funding inspections although there are technically suited models for this like the Environmental Protection Fund that collects money from developers and decides on the activities it funds.
- While the major companies fully finance monitoring inspection of themselves, companies *per se* only contribute a small amount of funds for MONRE's total monitoring activities.

Component 3: Provincial Departments of Natural Resources and Environment: Strengthening environmental management at the provincial level Including new ISP activities

Achievements:

- Complaints mechanisms implemented and complaints received in focal provinces (Champassak, Luang Prabang, Xyayabury, Xiengkhuang, Huaphan and Bolikhamxay). Virtually all complaints have been recognized as received and processed.
- PONREs have basic capacity composed typically of 1-3 staff in place for EIA, IEE processes and Water Quality Monitoring.
- ISP has been actively supported at provincial and district levels in 6 provinces aimed at governor's decision support with a high level of completion of data collection with ISPs signed by governors at both levels.
- ISP remains a strategic tool having strong political backing used mainly for data collection. However, ISP is still missing formal recognition in relation to legal planning and Socio Economic Development Planning process which belongs to MPI (where MONRE and PONREs have apparently included this as an internal tool without having securing full cooperation with MONRE's Land Use unit).
- Although PONREs are facing mandate and operational boundary issues with regard to on-site inspections of environmental pollution reported by local communities, these

have been successfully dealt with on central level through cooperation between PONRE and MONRE.

- Some issues still pending concerning introduction of standard ECC models as some reportedly may not have been issued in strict compliance with existing legislation.

Result 3.1 DONREs prepare and implement provincial environmental action plans in selected environmental issues and selected Result provinces have developed integrated spatial plans as a basis for environmental management

- Provinces have been undertaking several ISP activities focusing on 6 provinces from 2012 onwards resulting in ISPs being used for data collection and strategic planning aimed at supporting governors' decision making.
- Provinces have Provincial Environmental Action Plans in place as strategic plans but their planned implementation has remained partial and incomplete in 2010-2015 in some provinces supported by EMSP (Attapeu, Champassak)
- 17 provinces have approved environmental action plans.
- Older ISPs for years 2010-2015 have been successfully established with governors' signatures but their influence over the actual development planning has remained very limited in the Southern provinces (Champassak, Attapeu).
- More than 900 staff reportedly trained in basic ISP (total number of trainees, most of whom are repeaters)

Result 3.2 Selected DONRE staff have adequate compliance monitoring and sampling skills

- PONRE staff actively undertakes ESIA and IEE compliance monitoring including public consultations and facilitation of setting the compensation units having typically a minimum of 1-3 key staff with sufficient operational skills.
- Compliance monitoring has increased as indicated by the increased number of monitoring reports in 2014
- At least 2 staff from each province have repeatedly been trained in water quality sampling ensuring sufficient capacity exists for the provincial water quality monitoring
- National water quality sampling scheme has been harmonized under EMSP and set into operation starting in 2013

Result 3.3 Updated baseline maps and data, planning maps and local/national regulations are available and in use by the DONREs in connection with daily environmental administration such as IEE review and certification

- Although no baselines or benchmarks have been defined in EMSP, systematic data collection practices have been established successfully for ISP and Water Quality Monitoring.
- About 60% of ISP related maps and data collection have been completed.
- Environmental Compliance Certificates are being issued based on Initial Environmental Examinations but these have often not followed procedure. Guidelines are therefore under review.

Result 3.4: Basic working conditions and skills in all provinces

- Distribution of vehicles and basic administrative and IT equipment has been completed

- Some provincial staff have basic English skills and IT skills. The activity has been considered completed.

Component 4: DEQP and Natural Resources and Environment Data Information Centre: Capacity building for high quality information services

Achievements:

- EMSP website functional and including most programme related results.
- Environmental Data Management System is operational and operators trained.
- Environmental Management and Monitoring Database (EMMD) established and accessible through the internet.
- Websites for 16 DONREs
- Local Area Networks(LAN) installed

Result 4.1: MONRE is regularly feeding productized environmental information and data into national planning processes

- Material has been downloaded by other line agencies regarding e.g. EIA legislation/decree and guidelines, ISP material, web-mapping, monitoring date, SEMII material and EMSP material

Result 4.2: MONRE is efficiently disseminating information about environmental law, its services, donor interventions, achievements and findings of environmental monitoring and research

- About 250,000 hits so far on the MONRE website

Result 4.3: MONRE is actively supporting partnerships and engagement of different target groups (including ethnic or vulnerable groups) in environmental information dissemination and awareness raising

- Drafting of guidelines on communication planning done
- Public Involvement guideline draft produced
- Some staff trained in communication planning.
- 3 provinces have conducted awareness campaigns targeting "vulnerable" groups (remote villages, hospitality staff in Luang Prabang).
- Celebration of World Environment Day at central and provincial levels.

Component 5: NREI: The Natural Resources and Environment Institute: Environmental laboratory services

Achievements:

- A national environmental laboratory functional as currently equipped and staffed in temporary building.
- About 6000 samples and 35 parameters alone in the period Oct 2012-September 2013.
- Commercial contracts have been established with the Mekong River Secretariat and a few other major clients as well as with about 65 minor regular clients.

- During Oct 2013- Sept 2014, 5,538 water samples for 35 water quality parameters; namely alkalinity, ammonia, BOD5, chloride, COD, conductivity, cyanide, dissolved oxygen, nitrate, nitrite, sulphate, calcium, magnesium, potassium, sodium, antimony, cadmium, chromium, copper, iron, manganese, nickel, lead, zinc, arsenic, selenium, total mercury, oil and grease, pH, phosphate, total hardness, total phosphorus, total solids, total dissolved solids and total suspended solids. All analysis procedures in accordance to ISO/IEC 17025.

Result 5.1: Laboratory is equipped with appropriate technology which are used for delivering services in national water quality and compliance monitoring

- Equipment procured, installed and operational at central laboratory.
- New building under construction
- 18 provincial and district Departments of Natural Resources and Environment supported with Laboratory services
- Laboratory equipment purchased and basic staff capacity built for the DESIA PONRE staff in selected provinces (Champassak, Luang Prabang). However, no laboratory staff permanently in place in the provinces as of yet.

Result 5.2: Laboratory staff are trained to the level of international certification and using their new skills

- All relevant central and provincial staff have received basic training.
- Central staff fully proficient and working.

Result 5.3: Water quality sampling is credible and reliable

- Staff trained, national sampling scheme in place and sampling ongoing.
- Water quality are samples sent routinely to NREI central laboratory for analysis of 20 parameters.

Result 5.4: Laboratory is operating on a semi-commercial basis and a preparation for an accreditation of ISO/IEC 17025

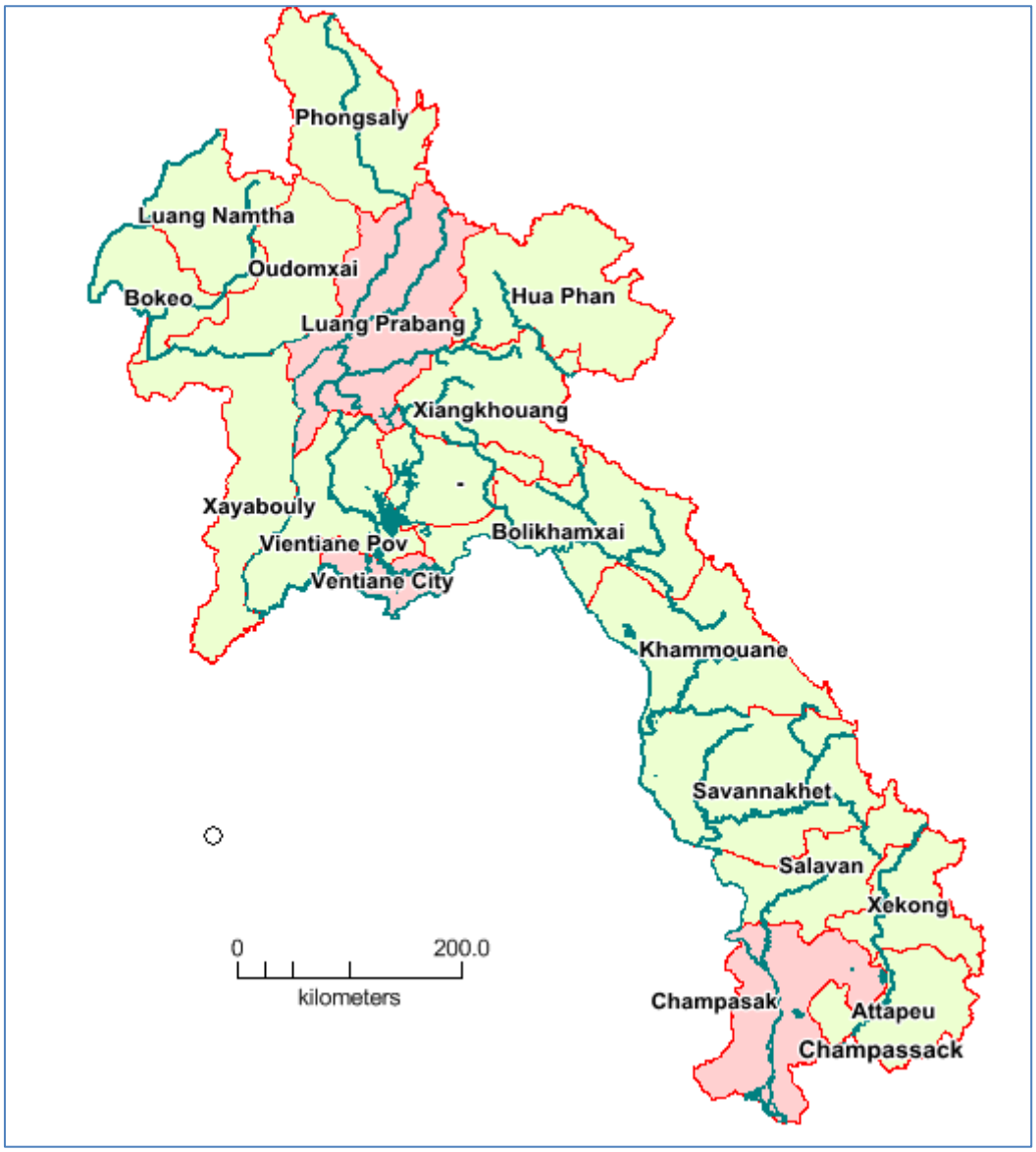
- A business plan is produced
- Service agreements agreed with some major clients.
- About 65 medium and minor clients are regular.
- Trainings provided with proven skills set developed
- Laboratory operational processes planned currently according to ISO 1705 requirements

Result 5.5: Results of first national water quality survey are available and capacity exists to replicate

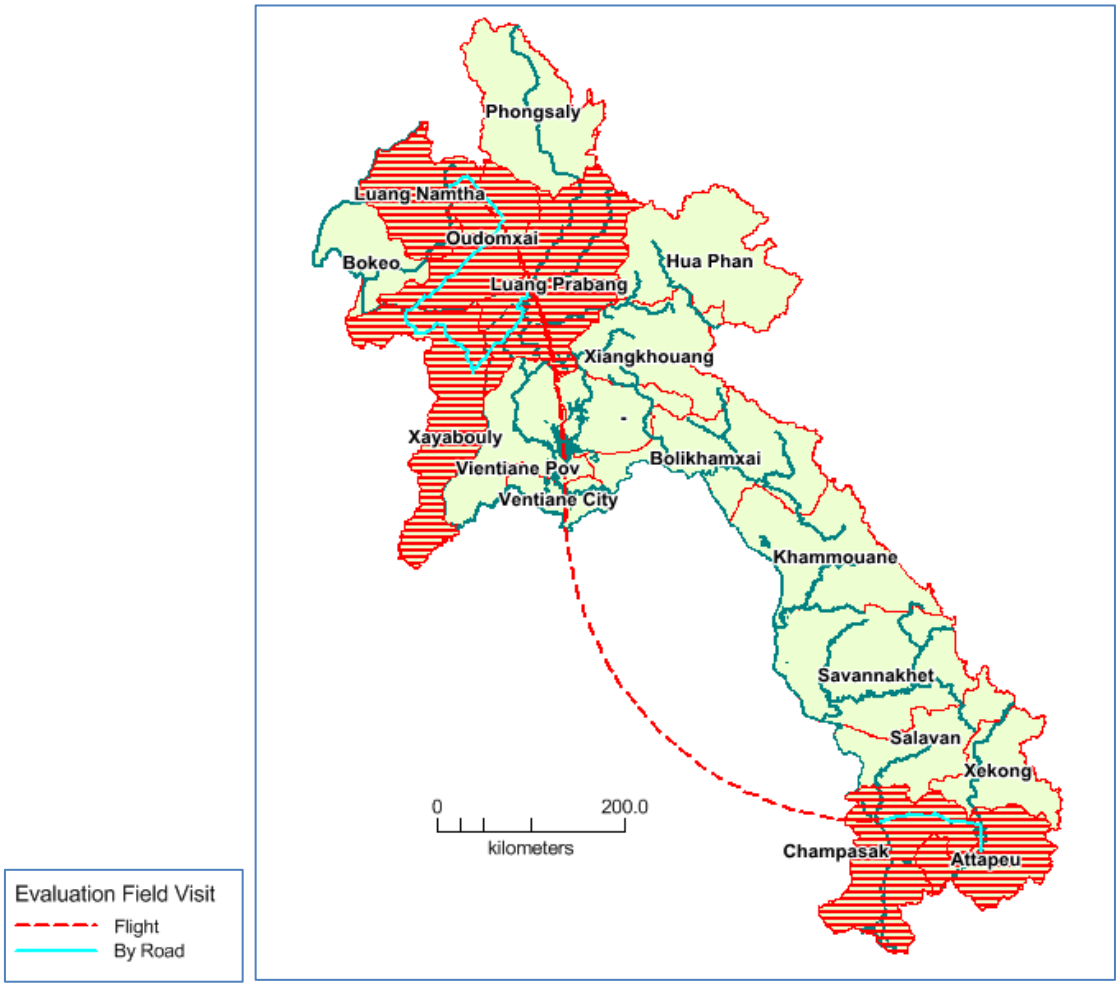
- National sampling (Mekong river) and provincial sampling now a continuous ongoing process.
- National water quality database is in existence in MONRE

Annex 4. Maps

The Programme's original focus areas shown in red: Luang Prabang, Vientiane City, Champassak.



Evaluation Field Visit



Annex 5. Field Schedule of the Evaluation Mission

From	To	Place/Activity
25 Feb 2015	8 Mar 2015	Home base(s), Inception
9 Mar 2019	15 Mar 2015	Interviews, Vientiane
Group 1		
16 Mar 2015	17 Mar 2015	Luang NamTha
17 Mar 2015	18 Mar 2015	Oudomxay
18 Mar 2015	19 Mar 2015	Xayabouri
20 Mar 2015	20 Mar 2015	Luang Prabang
Group 2		
16 Mar 2015	18 Mar 2015	Attapeu
18 Mar 2015	20 Mar 2015	Champassak
23 Mar 2015	25 Mar 2015	Interviews, Vientiane
26 Mar 2015	26 Mar 2015	Debriefing
27 Mar 2015	28 Mar 2015	Team Coord/home travel
29 Mar 2015	2 Apr 2015	Reporting

Annex 6. List of People Consulted

No	Name	Position	Organization / Province
	March 10, 2015, meeting TA and national programme management- VTE Capital		
1.	Mr. Peter Gamelgaard Jensen	Chief Technical Advisor	EMSP
2.	Mr. Mikko Jokinen	Licensing and Inspection Expert	EMSP
3.	Dr. Vithet Srinetr	International Laboratory	EMSP
4.	Mme. Souvanny Phonevilay	Project Director	EMSP
5.	Mr. Lonkham Atsanavong	Project Coordinator	EMSP
	March 11, 2015, meeting with component's coordinators -VTE Capital		
6.	Mr. Ketkeo Salichanh	Component 1 Coordinator; Director of Environmental Management Division,	DEQP
7.	Mr. Singsavanh Singkavongsay	C3 and C4 Coordinator, Director of Environmental Assessment Division	DEQP
8.	Mr. Lamphoukeo Kettavong	Component 2 Coordinator, Deputy Director of Management and Planning Division,	DESIA
9.	Mr. Khampadith Khammounheuang	Director General	DEQP
10.	Ms. Phetsamone Inphaiyalath	Deputy Director of Legislation Monitoring division	DESIA
11.	Ms. Virana Sonnasin	Director of Planning and Cooperation Division, Department of Planning Cooperation	MONRE
	March 12, 2015, Meetings with Government agencies (continue)-VTE Capital		
12.	Mrs. Keodokmai Phouipaserth	Deputy Director of Water Quality Division,	DWR
13.	Mr. Somvang Bouttavong	Energy Centre	DESIA
14.	Mrs. Bouakham Soulivanh,	DDG	PCD
15.	Mr. Vilasack Chundara	Deputy Director General	NREI
16.	Ms. Dalounny Vilaythong	C5 Coordinator, Director of Management and Planning Division,	NREI

No	Name	Position	Organization / Province
	March 13, 2015, Meetings with Government agencies (continue) and other relevant programs in other Ministries- VTE Capital		
17.	Mr. Chantho Milattana	DDG of Institute of Renewable Energy Promotion	Ministry of Energy and Mining
18.	Mr. Khamphone Keodalavong	Director General of Industrial Environment and Chemistry Division	MOIC
19.	Mr. Phoutsavanh Duangphosy	Chemistry	MOIC
20.	Mr. Chanthanet Boualapha	DG of Water Resources Department	MONRE
21.	Mr. Vongduen Vongsihalath	DG of Land Planning and Development Department	MONRE
22.	Mr. Khamphanh	Head of Land M&E unit	MONRE
23.	Mr. Bounpon Sengthong	Project Director, SUFORD	DOF
24.	Mr. Esa Puustjärvi	CTA- SUFORD	DOF
	March 16, 2015 - Field visit (Luangnamtha province) Northern part of Laos		
25.	Mr. Souksan Phonpradith	Head of Provincial Environmental Section, DONRE	Luangnamtha province - LNT
26.	Mr. Thongchan Chuarluangkhammy	Head of Water Resources Section, DONRE	LNT
27.	Mr. Chanthy Keosouphone	Deputy Director of DONRE	LNT
28.	Mr. Tui Kingmala	Head of Forest Resources	LNT
29.	Mr. Somvisay Prasannga	Head of Consumption production Unit, Army camp	LNT
30.	Mr. Khamlath Xienthavong	Environmental Technician	LNT
31.	Mr. Singthong Boutsavong	LNT	LNT
32.	Ms. Phonexay Xaykosy	Financial Officer	DEQP, VTE
33.	25 Villagers from 2 villages lunch together	during lunch time aside the Namtha river	LNT
	March 17, 2015: Field visit (Oudomxay province) Northern part of Laos		
34.	Mr. Bounthan Champasymany	Deputy Director of DONRE	Oudomxay province-ODX
35.	Mr. Khonsy Xayyamone	Head of Environmental Section	ODX
36.	Mr. Somelith Southaphone	Deputy Head of Environmental Section	ODX
	March 18, 2015: (Hongsa district, Xayyaboury Province), Northern part of Laos		
37.	Mr. Thongkhan PhanthouAmath	Head of District National Resources and Environmental Office	Hongsa district, Xayyaboury Province (XYBR)
38.	Mr. Keokhamxay Fongkhambay	Senior Environmental Officer, Hongsa Power Company	XYBR

No	Name	Position	Organization / Province
39.	Mr. Anousone Onsymuang	Head of Hongsa Environmental Unit	XYBR
40.	Mr. Thitkong	Nakeankham village, Hongsa	XYBR
41.	Mr. Thong Simmathong	Vice Village head	XYBR
42.	Mr. Manvong Senthaap	Village elder	XYBR
43.	Mr. Noitem Sanevilay	Village head of Nakeankham	XYBR
44.	Mr. Kongseng	Village's Mushroom producer	XYBR
45.	Ms. Soulany Phousouvanh	HPC staff	XYBR
46.	Mr. Likhit Phongpranganh	HPC staff	XYBR
47.	Mr. Peeraphol Monthakaew	HPC staff	XYBR
48.	Mr. Sonhthai Watthonamongkhol	HPC staff	XYBR
49.	Mr. Khamta Suwanna	HPC staff	XYBR
50.	Mr. Somyong Phapimpha	HPC staff	XYBR
51.	Ms. Daovone Inthongpasome	Village Volunteer	XYBR
	March 19, 2015: (Nane District, Luangprabang Province) Effected village from Xayaboury Hydropower Dam		
52.	Mr. Soulaphone Philakhoun	Head of Environmental Section	Luangprabang province (LPB)
53.	Mr. Vilaphong Khannhasone	Head of Environmental Management Unit	LPB
54.	Ms. Duangchai Keomany	Environmental Technician	LPB
55.	Mr. Vilaysack Phouliphanh	Deputy Head of Environmental Unit	LPB
56.	Mr. Bounpone Phonesavanh	Environmental Management Unit technician	LPB
57.	Mr. Sonethep Phouchana	Sayyaboury Dam, Site manager	LPB
58.	Mr. Vixiene Chaleurnsouk	Assistant to Project Director	LPB
59.	Ms. Vilayphone Sombathduang	Environmental Technician	DEQP

No	Name	Position	Organization / Province
60.	Ms. Manylattana Tonekhamtha	Deputy head of DONRE	LPB
61.	Mr. Xayyalath Linthonesy	Head of Environmental Quality Promotion Unit	LPB
62.	Mr. Chanthavong Phonnachit	Deputy Director of DONRE	LPB
63.	Mr. Phoxay Khammanyvong	Driver, EMSP	EMSP
64.	Mr. Sengthong Boutsavath	Driver, EMSP	EMSP
	March 23, 2015: Meetings with Government agencies and Donors		
65.	Ms. Katharina Földi	Deputy Head of Development Cooperation, Embassy of the Federal Republic of Germany	German Embassy, Vientiane
66.	Ms. Sikhay Sosiribounma	Deputy Director of Department of Geography, Ministry of Home Affairs	Ministry of Home Affairs, Vientiane
67.	Ms. Khamvanh Lorkhamyong	Project Coordinator, Finmap International	Vientiane
68.	Ms. Chitlatda Keomoungchanh	Programme Analyst Environment Unit	UNDP, VTE
69.	Ms. Rubkwan Choldumrongkul	Regional Legal Consultant	Grontmij, TA
70.	Mr. George Henry Stirrett	WB, Consultant, ENRM	WB, Vientiane
	March 24, 2015: Meetings with Government agencies and Donors		
71.	Ms. Rechel Jolly	First Secretary - Development Cooperation	Australian Embassy, VTE
72.	Ms. Liliane Ortega & Dr Phil.	Deputy Country Director	Swiss Confederation, Vientiane
73.	Mr. Soukata Vichit	Executive Director, EPF	Government's Office, Viantiane
74.	Ms. Chitlatda Keomuongchanh	Programme Analyst	UNDP
75.	Mr. Micah Ingalls	Senior Agriculture and Forestry Expert	PEI, UNDP
	March 25, 2015: Meetings with Programme management		
	Mme. Souvanny Phonevilay	Project Director	EMSP
	Mr. Lonkham Atsanavong	Project Coordinator	EMSP

No	Name	Position	Organization / Province
	March 26, 2015: Briefing of preliminary finding (Final Evaluation of EMSP)		
76.	Mr. Thavone Vongphosy	DDG of ESIA	MONRE
77.	Mr. Lonkham Atsanavong	DDG of DEQP	MONRE
78.	Mr. Khampadith	DG DEQP	MONRE
79.	Mr. Virana Sonnasing	Head of Planning and Investment Division	MONRE
80.	Mr. Annika Kaipola	Counsellor	MFA-Finland
81.	Mr. Somsack Chandara	NPO	Embassy
82.	Mr. Peter G. Jensen	CTA, EMSP	Vientiane
83.	Ms. Souvanny Phonevilay	DDG, DEQP	MONRE
84.	Mr. Anim Invinon	Counsellor	MFA-Finland
85.	Mr. George Henry Stirrett	Environment Specialist	WB
86.	Mr. Kettkeo Salichanh	Division Head, DEQP	MONRE
87.	Mr. Thavivanh Phannakhone	Project Coordinator, DfW	Vientiane
88.	Mr. Micharl Trokobrodf	Project Director,	GIZ
89.	Ms. Katharinia Foldi	Deputy Head of Development Cooperation, Embassy of the Federal Republic of Germany	German Embassy, Vientiane
90.	Mr. Singsavanh Singyavongsay	Head of Division, DEQP	MONRE
91.	Ms. Keodockmay Phouiphasert	Head of Division, DWR	MONRE
92.	Mr. Vithet Suneth	International Laboratory Advisor	Grontmij, TA
93.	Ms. Rubkwan Choldumrongkul	Regional Legal Consultant	Grontmij, TA
94.	Ms. Khamsy Chansamay	Environment management and Monitoring Expert	Grontmij, TA
95.	Mr. Phoutthaneth Rattanavong	Assistant to Planning Consultant	Grontmij, TA
96.	Ms. Dalouny Vilaythong	Comp. 5 coordinator, NREI	MONRE
97.	Mr. Marko Saarinen	Counsellor	Embassy of Finland
98.	Mr. Yaiyang	Translator	Grontmij, TA

No	Name	Position	Organization / Province
99.	Mr. Keu Meomoanvong	Environment Management Expert	Grontmij, TA
100.	Ms. Ketta Phanumavong	Secretary	Grontmij, TA
101.	Mr. Antti Inkinen	Counsellor, Head of Regional Development Co-operation	Embassy of Finland in Bangkok
102.	Ms. Annika Kaipola	Councellor	Embassy of Finland in Hanoi
	People met in Finland prior to field visit		
	Finnish Environment Institute (SYKE)		
103.	Mr. Lauri Kattelus	Programme Coordinator	SYKE
104.	Ms. Riitta Koivikko	Chemist	SYKE
	Ministry for Foreign Affairs of Finland		
105.	Ms. Katariina Vartiainen	Environment Advisor	MFA
106.	Mr. Antti Inkinen	Counsellor, Head of Regional Development Co-operation	Embassy of Finland in Bangkok

Annex 7. List of Evaluation Reference Documents

Hardcopy

DEQP/MONRE (2013). Environment Protection Law (Revised Version)

DONRE Luangprabang Province (2013). Luangprarbang Province Second Five year Environmental Action Plan

Lao PDR (2004). National Biodiversity Strategy to 202 and Action Plan to 2010.

MONRE (2013). Ministerial Agreement on the Endorsement and Promulgation of List of Investment Projects and Activities Requiring for Conducting the Initial Environmental Examination or Environmental and Social Impact Assessment

MONRE (2013). Ministerial Instruction on the Process of Environmental and Social Impact Assessment of the Investment Projects and Activities

MONRE (2013). Ministerial Instruction on the Process of Initial Environmental Examination of the Investment Projects and Activities

MONRE(). Guideline Strategic Environmental Assessment of Government Policies, Strategies, Plans and Programs

MPI (2013). Guidelines. District Socio Economic Development Planning

Electronic versions

Government of Laos	Forest Law, 2007
	Environmental Protection Law 2013
	ESIA Instruction (Executed)
	ESIA Ministerial Instruction (E) Agreed
	Final Translated EPL March2013 first official print
	IEE Instruction (Executed)
	IEE Ministerial Instruction (E) Agreed
	List of Project Ministerial Agreement (E) Agreed
	List of Projects (Executed)
	Water Resources Law (Draft 2014)
	The seventh Five-Year National Socio-Economic Development Plan (2011-2015)
Studies	Lao Environment Outlook, 2012 (MONRE)
	Land Tenure Security and Food Security: Exploring the Links (PPT/LIWG)
	Understanding Land Deals in Laos (PPT/University of Bern)
	Mining Sector in Laos, Phouphet Kyophilvong
	Evaluation of Environmental Impact Assessments System in Lao PDR.
	Journal of Environmental Protection, 2012, 3, 1655-1670
	Report on Legal Framework of Forestry Sector, Todd Sigaty
	FAO Forest Outlook, 2009
EMSP Documents	EMSP updated Programme Document
	Programme Mid-Term Review
	EMSP II Concept Note ver. 6 0 17-11-2014

Progress reports	Annual progress reports 2010-2011, 2011-2012, 2012-2013, and 2013-2014.
Work plans	Annual Work Plan 2011-2012_EMSP (corrupted)
	Final Work Plan [2012-2013] Clean 30-11-2012
	Work Plan 2013-2014 ver. 3-1-2014 signed version
	Work Plan 2014-2015 Final 17-11-2014 Clean
Technical Reports	EMU Training Report
	Environment Compliance Certificates (In English and Lao):
	With no resettlement
	Model Conditions to the ECC approving ESIA
	Model Conditions to the ECC approving ESMMP
	Model ECC approving ESIA
	Model ECC approving the ESMMP
	With resettlements
	Model Conditions to the ECC approving ESIA
	Model Conditions to the ECC approving ESMMP
	Model ECC approving ESIA (latest – with resettlement)
	Model ECC approving the ESMMP (latest with resettlement)
ISP	Guideline Integrated Spatial Planning 23-04-2010
	ISP and SEA ADB Workshop Peter G Jensen (Presentation)
	ISP and SEA General Orientation(Presentation)
Laboratory	Business Plan for the NEL and the RLs, rev Sept 2014
Other	Natural Resources and Environment Strategy
	4th MONRE Action Plan 2016-2020_Final English 5.1.2015
	Gender Strategy 2012-2014
	Final Report of NRES Vangvieng WS [workshop report]
	EMU Training Report
	Standard Environmental and Social Obligations for Hydropower Projects
	Standard Environmental and Social Obligations, Overview .ppt
	SESO in Concession Agreements, workshop .ppt
	Decree on Strategic Environmental Assessment (draft)
	DESIA Monitoring database .ppt (Lao)
	SEA Decree (draft)
	DESIA Mandate poster (Lao)
	DESIA whole flow process poster (Lao)
	Draft DESIA flow poster (Lao)
	Fee collection poster (Lao)
	SESO flow poster (Lao)
	MoNRE vision towards 2030, NRES, 10 years, 2016-2025
	Water Quality Sampling Stations for 5 Provinces (.xlsx)
	Public Involvement Guideline
	State of Environment Report 2012
	Monitoring flow poster (Lao)

	Provincial Environment Action Plan 2012-2013 Khamouan Province
	Provincial Environment Action Plan 2011-2015 Luang Prabang Province
	ESIA process flow
	Step-by-Step Environmental Guidelines for Biomass Removal from Hydropower Reservoirs in Lao PDR, Dec 2012.
MFA guidelines, checklists and policies	Manual for Bilateral Program, 2012
	Development Policy Programme. Towards a Sustainable and Just Humanity Policy. MFA Government Decision in Principle 2007.
	Evaluation Manual, 2013
	Finland's Development Policy Programme, 2012
	HRBA Principles
	HRBA Checklist for design, implementation and review
	General Cross-cutting issues checklist
	Gender Impact Assessment checklist
	Cross-cutting objectives in the Development Policy Programme, 16 Aug 2012
	Implementing the human rights-based approach in Finland's development policy
	Finnish development policy guidelines for environment, 2009
Other references	UN."Universal Declaration of Human Rights.60th Anniversary Special Edit.,1948-2008"
	UNEG (2011). "Integrating Human Rights and Gender Equality in Evaluation- Towards UNEG Guidance".
	Overview of German funded projects in Lao (list)
	Structure of Natural Resources and Environment Sector Working Group (.ppt)
	E.Mann, N. Luangkhot (2008); Women's Land and Property Rights under Customary or Traditional Tenure Systems in Five Ethnic Groups in Lao PDR, Land Policy Study No. 13 under LLTP II

Annex 8. Programme Budget and Expenditure

DESCRIPTION Note: All figures are in Euro	REVISED BUDGET 2010-2015	ANNUAL BUDGET 2014-2015	EXPENSES 1 Oct 2010 - 30 Sep 2011	EXPENSES 1 Oct 2011 - 30 Sep 2012	EXPENSES 1 Oct 2012 - 30 Sep 2013	EXPENSES 1 Oct 2013 - 30th Sep 2014	ANNUAL EXPENSES 1st Oct- 28th Feb 2015	TOTAL EXPENSES	% Spending 2014-2015	Total % Spending 2010-2015	BALANCE 2010-2015 BUDGET
FINANCIAL ASSISTANCE BUDGET											
Component I: Integrating Environmental Issues into Strategic Planning	273,683	60,663	38,945	23,120	75,049	75,906	30,214	243,234	50%	89%	30,449
Component II: Environmental Certification, Monitoring and Enforcement	423,981	105,899	24,882	123,033	107,448	62,719	75,759	393,841	72%	93%	30,140
Component III: Strengthening Environmental Management on Provincial Level	1,532,296	477,123	73,464	325,772	383,116	272,822	252,128	1,307,303	53%	85%	224,993
Component IV: Communication and Information Services	210,649	45,829	15,493	106,924	33,956	8,447	19,667	184,487	43%	88%	26,162
Component V: Environmental Laboratory Services	1,062,763	315,928	49,442	125,634	301,499	270,260	144,892	891,727	46%	84%	171,036
Component VI: Programme Management	734,348	185,422	58,711	200,844	122,089	167,282	56,421	605,348	30%	82%	129,001
	4,237,720	**1,190,862**	**260,937**	**905,327**	**1,023,158**	**857,436**	**579,081**	**3,625,939**	**49%**	**86%**	**611,781**
TECHNICAL ASSISTANCE BUDGET											
International TA	4,222,566	598,791	814,952	930,526	982,856	895,441	290,168	3,913,942	48%	93%	308,624
International Financial Management TA	68,650	18,682	-	-	28,947	21,021	9,104	59,072	49%	86%	9,578

National TA Fees	871,282	260,651	-	-	263,864	346,766	153,331	763,961	59%	88%	107,320
National TA Expenses	95,447	35,225	-	-	29,131	31,091	7,222	67,445	21%	71%	28,002
TA Contingencies	3,064	3,064	-	-	-	-	-	-	0%		3,064
Total TA Budget	**5,261,009**	**916,413**	**814,952**	**930,526**	**1,304,798**	**1,294,320**	**459,825**	**4,804,421**	**50%**	**91%**	**456,589**
Programmed contingencies	1,271	1,271						-	0%	0%	1,271
GRAND TOTAL	**9,500,000**	**2,108,546**	**1,075,889**	**1,835,853**	**2,327,956**	**2,151,756**	**1,038,905**	**8,430,359**	**49%**	**89%**	**1,069,640**