



# Post-Evaluation of Strengthening of Environmental Administration at the Local Level in Nepal (SEAM), years 2001. 2014

**Final Report** 

Impact Consulting Oy Ltd in association with Saffron Consulting International Ltd.

30 June 2016

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# ABBREVIATIONS

AWP	Annual Work Plan
СВО	Community Based Organizations
CISEMP	Collaborative Initiative for Sustainable Environment Management Project
Consultant	Impact Consulting Ltd in association with Saffron Consulting International Ltd
CSO	Civil Society Organisation
DAGs	Disadvantaged Groups
DDC	District Development Committee
DFID	Department for International Development of the United Kingdom
EcoSan	ecological sanitation
DoEnv	Department of Environment
EDR	Eastern Development Region
ELFG	Environment Friendly Local Governance
EMIN	Environmental Monitoring and Indicators Network
ENSC	Environmental Service Center
EPA	Environment Protection Act 1997
EPR	Environment Protection Rules 1997
ESC	Environmental Sub Committee
ESPS	Environment Sector Programme Support (a Danida project)
ET	Evaluation Team
FCHV	Female Community Health Volunteer
GESI	Gender Equality and Social Inclusion
GoN	Government of Nepal
HOC	Home Office Coordinator
HR	Human Rights
HRBA	Human Rights Based Approach
HRDP	Human Resources Development Plan
IEM	Integrated Environmental Management
ITT	Instruction to Tenderers
MFA	Ministry for Foreign Affairs of Finland
M&E	Monitoring and Evaluation
MLD	Ministry of Local Development (presently replaced by MoFALD)
MMA	Morang Merchants Association
MoE	Ministry of Environment
MoFALD	Ministry of Federal Affairs and Local Development
MoLE	Ministry of Labour & Employment
MoPE	Ministry of Population and Environment
MoSTE	Ministry of Science, Technology and Environment (presently environment is detached and is MoST)
MUAN	Municipality Association of Nepal

NAPANational Adaptation Programme of ActionNENSCNepal Environmental Service CenterNRMNatural Resource ManagementODFOpen Defecation FreeOHOccupational HealthPCCPollution Control CertificatePDProject/Programme DocumentPEIPoverty Environment InitiativeQAQuality AssuranceRBMResult Based ManagementSCISaffron Consulting International Ltd.SEAM-NStrengthening of Environmental Administration and Management at the Local Level in NepalSEPPSchool Environmental Promotion ProgrammeTATechnical AssistanceTLTeam LeaderToRTerms of ReferenceTYIPThree Year Interim PlanUFEUtilization-Focused EvaluationUNDPUnited Nations Development ProgrammeUNEGUnited Nations Environment ProgrammeUNEPVillage Development Programme		
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UNEGUnited Nations Evaluation GroupUNEPUnited Nations Environment ProgrammeUNICEFUnited Nations Children's Fund	UFE	Utilization-Focused Evaluation
UNEP     United Nations Environment Programme       UNICEF     United Nations Children's Fund	UNDP	United Nations Development Programme
UNICEF United Nations Children's Fund	UNEG	United Nations Evaluation Group
	UNEP	United Nations Environment Programme
VDC Village Development Committee	UNICEF	United Nations Children's Fund
	VDC	Village Development Committee

## PREAMBLE

Early April 2016 the Ministry for Foreign Affairs of Finland (MFA) awarded Impact Consulting Ltd in association with Saffron Consulting International Ltd. (SCI) (the Consultant) a contract for the postevaluation of Strengthening of Environmental Administration and Management at the Local Level in Nepal (SEAM-N), years 2001. 2014. The evaluation team (ET) comprises the following experts: Dr Göran Nilsson Axberg - Team Leader; Mr Hannu Pelkonen - International Expert; Ms Kanchan Lama - National Expert; Mr Dilli Joshi - National Expert; Ms Eija Mustonen - Home Office Coordinator; and Ms Anh Thu Tran Minh - Quality Assurance.

A briefing meeting was held on 11 April, 2016 at MFA headquarters in Helsinki with participation via video link also from the Embassy of Finland in Kathmandu, followed by an Inception Report submitted 22 April, 2016. The field work in Nepal started 2 May and ended 20 May.

A Draft Report was submitted 1 June to relevant authorities and stakeholders for corrections and comments, which now have been integrated into this Final Report.

The ET would like to thank all people consulted and interviewed in the course of work, no one named and no one forgotten (see list of people met in Annex 2), who most willingly provided all requested information and gave valuable comments to our work.

The interpretations, views and opinions presented in this Post-evaluation Report are those of the ET and are not to be considered official statements of the Governments of Finland or Nepal. The Teams views are those of an independent external observer.

Stockholm 30 June 2016 Göran Nilsson Axberg Team Leader

# **EXECUTIVE SUMMARY**

The Project I Strengthening of Environmental Administration and Management at the Local Level in Nepal+(SEAM-N) was implemented first in the Morang-Sunsari industrial corridor and later extended to 6 districts in the Eastern Development Region of Nepal over three Phases from 2001 to end of 2014. The project included three main areas of activities: (1) Local environmental administration; (2) Industrial and chemical pollution prevention; and (3) Environmental monitoring, which in the final Phase was completed by (4) Central Level Support to Local Environmental Management.

The SEAM-N Project cost was about EUR 12.6 million for the full intervention, or about 1 million per year.

The Post-evaluation Team (ET) found and concluded that the project had filled a most relevant funding gap and contributed to significantly increased capacity and performance of the local level environmental administration and management functions, contributing to increased environmental health in six districts of the Eastern Development Region. Physical targets of the project have been met and for the most exceeding set targets. This includes facilities for solid waste management, wastewater treatment and energy efficient facilities at industries, establishment of ecologically benign toilets, protection of water sources, introduction and installation of improved cooking stoves and biogas digesters, among others. The installations are most appreciated by the beneficiaries, who also contributed to the investments, often in kind.

Further, and even more important in the long run, the project has introduced significant administration and management tools, and planning formats and procedures. The Project, in close collaboration with national and local authorities, contributed in drafting Environment Policy, National Data Sharing Policy, National Industrial Inspection Guideline, National Core Set of Environmental Indicators, categorization of most health hazard industries in Nepal, and Environmental Audit Guidelines for the Hospital Sector. SEAM-N contributed to formulating pollution abatement guidelines as well as national strategy on environmental administration and monitoring, and updating the State of the Environment report. Some documents, such as categorization of industries and environmental audit guidelines, are now endorsed by the concerned ministry and widely used.

Project methods for local level environmental administration and management are now replicated in other districts through the DFID-supported Environment Friendly Local Governance (EFLG) programme.

The overall assessment of performance is that, in spite of most difficult working conditions at least in the first years of operation, the SEAM-N project had high performance meeting its objectives on the local level, and was well managed. It is the opinion of the ET, however, that more could have been achieved at the national level where poor coordination mechanisms between relevant ministries and high staff turnover rates among senior officials affected project ownership and willingness to adopt solutions proposed by the Project.

The most important lessons learned are, first and not surprising, that the national ownwership needs to be very strong in a project of this kind which aims at both local level environmental management and physical improvements on one hand and central level policy outcomes on the other. Second, that application of a Theory of Change approach would probably have resulted in even better results, if linked with a communication strategy to interact with identified people expected to show behavioural change. And third, that gender and social inclusion (GESI) is both an objective and a means for good and sustainable results.

For immediate action the *ET recommends* that the two governments, within half a year from today, organise a workshop with the aim of enhancing sustainability of Project results, presenting and discussing what was achieved, what can be replicated, what can be used on the national policy level, where to find the evidence, and to recommend and outline action.

The *ET also recommends* that an assessment is made on lessons and effectiveness of integrating GESI aspects using the SEAM-N case, with a pupose to guide future projects, including the ongoing EFLG programme.

For future development cooperation programmes/projects the GoN and GoF are recommended to:

- Allocate resources for development and application of modern leadership culture for sustainable development (possibly to be included in the next Finland/Nepal country strategy)
   Adopt a Theory of Change approach in all projects aiming at behavioural change.
- Include measures for policy development and scaling up already in project design.
- Define a rights-based approach from the very beginning to facilitate demand driven processes and accountability.
- Mainstream GESI issues both as a means and an end approach
- Include activities for both internal and external communication
- Make base-lines, with repeated studies of the indicators to follow the development and adjust working methods.
- Make needs assessments, followed by capacity development and human resource development plans.
- Include exit strategy in programme documents and request projects to include exit plans in their annual work plans.

A full list of recommendations is found in Chapter 5 of this report.

A summary matrix with what this ET regards being the most important Findings, Conclusions and Recommendations is presented in the table below:

FINDINGS	CONCLUSIONS	RECOMMENDATIONS	
Recommendations to both governments			
Results, experience and recommendations	Making SEAM-N results known and adopted	Re-vitalise the website, documenting SEAM-N results and making all standards, guidelines, reports and procedures available on the public domain. Organise a ‰oking-back-and-forward+workshop	
even by relevant senior officers of GoN.	e SEAM-N are not widely known, not y relevant senior officers of GoN. as recommended methods and national policies would greatly improve the environmental management situation of Nepal		
Relevant receiving ministries for Project recommendations had little interest in SEAM-N and were not ready for adoption of results for national policy development	From the very start design of future projects should include measures for policy contribution and an analysis of the need and models for scaling up.	Include measures for policy development and scaling up already in project design.	
Efficiency in the GoN administration is low for many reasons, including fast job rotation of senior officers and underutilized/low motivated young well educated professional staff.	There is a need for leaders in the GoN and projects who can make vision, mission and core values concrete to all co-workers; have communication and listening skills; can mobilise and make staff enthusiastic; understand about sustainability, have facilitation and coaching skills; are good at intercultural work, and can master change management.	Allocate resources for development of leadership skills and application of a modern leadership culture.	
Recommendations to Government of Nepal			
Local level environmental administration and management are now functioning at district, municipality and VDC levels in the six SEAM-N districts.	Solutions in the Project area qualify for replication nationwide.	Replicate the SEAM-N models for local level environmental administration throughout the country.	

FINDINGS	CONCLUSIONS	RECOMMENDATIONS		
There is an unclear situation with regard to accountability at national bodies for replicating SEAM-N lessons; things are happening in isolation.	Mutual accountability among all stakeholders, mainly, the MoPE, MoFALD, DFID, Embassy of Finland, MUAN and CSOs could have resulted in better ownership of SEAM-N lessons. The lack of clarity within the responsible ministers and authorities involved in SEAM-N results in a confusion about the future of the results and processes that SEAM- N has achieved.	Develop and maintain an interagency communication strategy along with an operational plan of action for effective interagency coordination in any future project and programme.		
The local level awareness building mechanisms, e.g., Green club, SEPP, Green City concepts are cost effective, locally adapted and contribute to sustainability.	The proven cost effective mechanisms can be very helpful for initiating long-term sustainability processes and used e.g. in EFLG promotion activities.	Provide technical and financial support to Green club, SEPP, Green City concepts through CSO window in coordination with relevant ministries.		
The ENSC laboratory in Morang district within the MMA, which provides essential services for qualifying the PCC criteria, is presently facing problem of technical and financial support.	The usefulness of the laboratory to provide technical service is valuable in order to continue the results of pollution control management	Provide financial and technical advisory support to the only one laboratory in Morang district to become self-reliant for long-term sustainability and demand creation		
SEAM N was a local level project that produced lots of lessons learned for national replication, but bears the risk of loosing institutional memory	There is a need for further documenting and disseminating the SEAM-N lessons widely among service agencies and the general public. The CSOsqand the media¢ role could be enhanced for mass dissemination and mobilization of public opinions for receiving constructive feedbacks about projects and programmes for improvements.	Continue the work of the Environmental Monitoring and Indicators Network including finalization of a National Environmental Data Sharing Policy, and make effective use of the National Core Set of Environmental Indicators by publishing environmental and monitoring data on the public domain.		
Recommenations to Government of Finland				
See above finding on efficiency in the GoN administration	See above conclusion on the need for good leaders	Include development of modern and participative leadership in the new Finland/Nepal country strategy.		
The EFLG programme contributes to improved environmental health which would fit well into the new Finland/Nepal country strategy that among others focuses on the health sector.	The EFLG programme needs funding and possibly other support from 2017 onwards.	Consider funding the EFLG programme from year 2017 onwards, i.e. when DFID funding has ended.		

FINDINGS	CONCLUSIONS	RECOMMENDATIONS
The SEAM-N could have handled the exit better.	There is a need for a good and planned exit from all development cooperation projects.	Make inclusion of exit strategies and exit plans compulsory in project documents.

# 1. BACKGROUND

### **1.1** Introduction of the intervention being evaluated

This post-evaluation covers the project **Strengthening of Environmental Administration and Management at the Local Level in Nepal (SEAM-N)**, implemented from 2001 to 2014.

The SEAM-N programme advanced through four phases<sup>1</sup>:

- SEAM-N Phase I, 2001-2008, with the aim to develop a model for local level environmental management that could be disseminated throughout the country. The project areas were Dharan-Biratnagar industrial corridor, covering the urban parts of Sunsari and Murang districts. The Finnish project budget was 4.9 m<sup>o</sup>. Originally planned for ending in 2006, the project was extended in two steps until 2008.
- SEAM-N phase II, 2008-11, with the overall objective to improve the state of the environment and to enhance environmentally sustainable rural, urban and industrial development and utilization of natural resources in the project area. The project area was extended to four other districts in the south-east corner of Nepal (Dhankuta, Ilam, Jhapa and Panchtar) with a project budget from MFA of 3.7 m<sup>o</sup>.
- Bridging Phase, August 2011. December 2011, a no cost-extension with similar objective as in phase II.
- SEAM-N Completion Phase 2011-2014, with the overall objective that the environmental health of the beneficiaries has been improved by reducing contamination of the environment in the project area. The Finnish contribution to project budget was 3.0 m<sup>2</sup>.

More details on context and project objectives and design are presented in section 2.2 below. Details on budget and actual expenditures are presented in section 3.3 and Annex 6.

The Ministry of Local Development (MLD, now MoFALD) has been the Executive Authority over the full thirteen-year period. The Finnish Consulting Group (FCG) together with the Finnish Environment Institute (SYKE) have been the service providers to the Project.

A prominent feature of the SEAM-N project is the attempt to deal with concrete local environmental problems and to combine a problem oriented approach with the task of developing local administrative management arrangements.

From the beginning the ambition has been to develop models and other solutions that could be adopted at the national policy level and applied in all other parts of Nepal. Phase I could % erve as an experiment in decentralising environmental administration+ and had one specific activity to this end<sup>2</sup>. With experience from Phase I the second Phase had a significantly increased geographical coverage. At the end of Phase II there were also discussions between the two governments to extend the project to two other industrial corridors of Nepal, more specifically to the Birgunj and the Butwal-Bhairawa industrial corridors. During the Completion Phase a fourth Component was added and an office in Kathmandu was established for interaction on the national policy level.

Project experience was also to be utilised in another project supported by Finland, the Regional Solid Waste Management Project, which started in 2010 but unfortunately had to be closed down for various reasons.

<sup>&</sup>lt;sup>1</sup> Bullit-pointed list of phases copied from the ToR

<sup>&</sup>lt;sup>2</sup> +Development and implementation of mechanisms for documentation and dissemination of the successful experiences gained in the project, to the participating organisations and to other municipalities and VDCs in the country.+(quote from Phase I Project Document)

It should be noted that the target groups of the SEAM-N have been numerous. While some activities focused on household, others focused on industries, Village Development Committees (VDCs), municipalities or District Development Committees (DDCs), and ministries on the national level.

# **1.2** Purpose and objectives of the evaluation

Whe objective of the evaluation is two-fold. (i) The Government of Nepal may learn lessons on how to strengthen the environmental administration and management. (ii) The government of Finland may learn how to run development projects related to environmental management.+It is further commented that: Whus the focus is on the lessons learned. The focus is oriented towards the future involvement in similar processes. The evaluation team is encouraged to show inspiration in locating replicable best practices or avoidable practices.+(ToR, Annex 1)

Based on lessons learned the post-evaluation should be forward looking in terms of being able to inform the two countries about the best strategy, replicability and avoiding problems in environmental management and planning, as well as in formulating future development cooperation projects in the environmental sector. Therefore, the separated lessons learned for MFA Finland and for Government of Nepal (GoN) are vitally important. Both of them need to find readable and straightforward analysis and recommendations that benefit their contemporary needs.

The key question is the long-term impact of the Project with regard to environmental planning and management in the target districts on the environment itself, and more importantly, on the projects final beneficiaries. This is fundamental in assessing the achievements and lessons learned of the whole project period from 2001 to 2014. The overall post-evaluation issues include the evidence-based benefits (quantitative and qualitative) to the beneficiaries; functioning of the exit strategy and handing over; and the role of the Technical Assistance (TA). The specific issues of relevance; efficiency and value for money; effectiveness; impact and sustainability; as well as project design, management and implementation should form an integral part of the post-evaluation in responding to the detailed questions listed in the ToR, as well as the additional ones proposed in the tender of the Consultant.

# 1.3 Main methods used

The ET followed the OECD-DAC Evaluation Guidelines, integrating also MFA Finland policies on crosscutting issues and objectives as per the Finnish development cooperation policies of 1998, 2004, 2007 and 2012. In all of these policies environment is a major theme or a major crosscutting theme. However, policy issues such as crosscutting themes have been analysed against the development cooperation policy of the period concerned and not against the latest policy.

The approach was built on the following main principles:

- Making wide use of existing information, including projects-specific documentation as well as best practices in related environment projects in Nepal.
- Adopting a participatory, consultative approach to the evaluation, including iterative communication with involved staff at MFA Finland, GoN and the project staff, relevant stakeholders, final beneficiaries and NGOs and other organisations.
- Planning and conducting the post-evaluation in ways that enhance the utilisation of both the findings and the evaluation process itself. This approach is often called Utilization-Focused Evaluation (UFE).
- Being rigorous about triangulation, particularly as regards verifying results achieved.
- Utilizing the knowledge of the team on undertaking of evaluations to ensure that appropriate data collection and handling practices are followed, and that division of work is agreed upon in order to draw from team membersquealth of subject experience for the analysis.
- Including cross-cutting issues (e.g., gender and human rights, climate change) as part of the Result Based Management (RBM) and the Theory of Change (ToC) approaches.

The ET developed an evaluation matrix during the Preparatory Phase (Annex 2 of the Inception Report). The matrix shows what specific information will be sought and what questions should be

posed to different organisations and individuals. The matrix is based on the ToR, original project documents, previous evaluations and interactions with project staff in Finland and Nepal.

The ET may have some bias towards environment, gender and social inclusion, simply because of the composition of expertise and experience of the team. This means that other sustainability aspects, such as economy of target industries, might be downgraded. The ET was aware of this and tried to counter this possible bias in its internal discussions and in the writing of reports.

Further details on the approach and methods are presented in Annex 4. Hypotheses formulated in the desk study process are presented and discussed in Annex 5.

# 2. PROGRAMME DESIGN AND SCOPE OF WORK

### 2.1 Projects around the Project

In all likelihood, the current environmental awareness and status in the SEAM-N target districts are influenced by a range of projects and processes, making it difficult or impossible to clearly attribute results to a specific project.

The Nepalese-Finnish cooperation in the environmental sector is based on a Finnish identification mission in 1995, resulting in two environmentally orientated projects implemented in the period 1998 to 2002: © Invironmental Labelling for Export Industries in Nepal+1998-2002 and + Environmental Support Programme through NGOs+1998-2002. There were also other relevant donor-assisted projects in operation in Nepal or in the Eastern Development Region (EDR).

A similarly named project was operational slightly before SEAM-N. The DANIDA supported Environmental Sector Programme Support (ESPS) contributed to industries in practicing cleaner production, energy efficiency, and environmental management system thereby saving valuable resources, enhancing productivity, improving working conditions and reducing the emission of pollutants. ESPS, however, was abruptly stopped in 2005 due to political change in the country. SEAM-N is believed to have taken up some of the industry level activities of ESPS.

Within the MoFALD there were also other projects such as the Local Governance and Community Development Programme (LGCDP) which operated in coordination with the environmental management section of MoFALD, the key focal point for SEAM-N project in the ministry.

The Livelihoods Forestry Programme, funded by the Department for International Development (DFID) of the UK, was also active in the eastern part of the country.

The Community Environmental Awareness and Management Project funded by the Canadian International Development Agency (CIDA) supported communities in creating environmental awareness in Nepal.

Namsaling Community Development Centre, an NGO based in Ilam, implemented the Collaborative Initiative for Sustainable Environment Management Project (CISEMP) from 2009 to 2012 with financial support from the DF-Norway. Support was provided to VDCs in Ilam, Pachthar, Taplejung, Jhapa, Morang and Dolakha districts for inclusion of environmental related activities as cross cutting issues in periodic plans of the VDCs. The project was successful in achieving the goal of  $\pm$ nvironmental Balance for Sustainable Developmentqthrough various activities particularly in good governance, sustainable agriculture practice and sustainable use of forest resource.

Around year 2010 the GoF supported a Regional Waste Management Project in Biratnagar. However, the project was later terminated due to local resistance against construction of landfill.

A WASH project in Panchthar was supported by UNICEF. It was phased out with the declaration of ODF free district early 2014.

# 2.2 SEAM-N history and basic design

The SEAM-N project was originally launched in 2001 for a period of four years in the districts of Morang and Sunsari in the EDR of Nepal. The overall objective of SEAM-N I was +to contribute to the protection of the environment and to the environmentally sustainable rural, urban and industrial development and utilisation of natural resources in Nepal through strengthening and improving local level environmental administration and management capacities and practices.+

The five components of SEAM-N I were:

- Component 1 . Environmental Administration, Planning and Management of the Local Authorities
- Component 2. Local Administration Environmental Investment Fund (LAEIF)
- Component 3 . Cleaner Production and Occupational Health and Safety
- Component 4. Environmental Investment Support Fund for Local Industries (EISFLI)
- Component 5. Environmental Monitoring and Laboratory Services

Decentralisation of environmental administration and management is built on the Local Self-Governance Act of 1999. This is the law through which Decentralisation as a policy framework is being implemented in the country.

Phase 1 of SEAM-N was implemented during the second half of a decade long period of conflict starting 1996, which lead to breakdown of security structure, increased uncertainty in mobility, and socio-political instability in the country. Eleven years of Maoist insurgency and the governmentor response through the state security forces changed the social, economic and political landscape of Nepal. Almost every district in Nepal was affected to some degree. In a significant number of districts, the normal structure of local government and administration, together with the provision of basic government services through line agencies, were disrupted, if not substantially curtailed. The Project faced a situation of limited human resources, an insecure situation and a non-existence of environmental units expected to be strengthened, causing delays in Project activities. The Project was extended from 2006 to 2007, called a Completion Phase. Later, the Project was further extended until the end of July, 2008. As a whole, the Project from its beginning until the end of July, 2008 is called SEAM-N I.

In 2007 the Governments of Nepal and Finland agreed to continue the Project for three additional years. The overall objective of the Project was the same as in the Phase I, while the project purpose was *‰* protect, enhance and sustain the quality of the environment and provide healthier and ecologically more diverse living environments for the population of the Project area through decentralising the environmental administration in the context of the on-going overall decentralisation process in Nepal+ Phase II was originally planned for a geographical expansion to nine districts with continued activities in Morang, Sunsari districts and adding Jhapa, Saptari, Siraha, Udaypur, Ilam, Pachthar and Dhankuta districts. Later, Saptari, Siraha, Udaypur districts were excluded owing to insecure situation. SEAM-N II was finally formulated in the Inception Report, approved by the PSC meeting in February 2009. Apart from its main office in Dharan the Project established a local office at Ilam.

The three components of SEAM-N II were:

• Component 1. Environmental Administration and Management:

Facilitated the establishment of environmental units in the districts and municipalities and environmental subcommittees in DDCs, municipalities and VDCs. Implementation of mostly small scale interventions such as household and public toilets, small biogas units, tree plantation, source separation and composting of solid waste, school environmental programs and various environmental awareness and mobilization activities. Cooperation with municipalities included co-financing of hardware, especially for solid waste management and a variety of technical assistance and awareness activities.

• Component 2. Industrial Environmental Management:

Provided direct support to the industries in the fields of pollution control, environmental selfmonitoring and management systems, cleaner production and occupational health and safety (OHS).

• Component 3. Environmental Monitoring:

Facilitated the decentralization of authority for managing industrial pollution control certificates and environmental complaints cases from the Ministry of Environment to the DDCs, supporting the recruitment of environmental officers in the DDCs to manage these tasks. Salary costs of these officers were initially covered from SEAM-N and then gradually shifted to the DDCs.

During this phase special emphasis was given to strengthening and institutionalization of gender equality and social inclusion aspects in all project activities, technical dimensions and institutional structures.

The Mid-Term Review of Phase II stated that<sup>3</sup> +In general, the impacts of SEAM-N II are at risk of being limited. The resources of SEAM-N II are thinly spread over a large area and over a high number of activities. Furthermore, resources are substantially allocated to the expanded Project area, which makes achievement of visible, tangible impacts even more difficult, due to small size of industries and their lower level of pollution in these areas. However, there have been quite good impacts in terms of awareness raising, building capacity of local institutions, pollution control, health impacts, occupational health and safety, and environmental monitoring, with no substantial negative impacts.+

The main recommendations of the MTR were that the project should not end in 2011. A Phase III should be planned focusing on enforcement of environmental legislation and regulations and have a strategy in place aiming at maximizing impacts and replicability with no new activities to be started, and there should be no extention to new areas.

SEAM-N II ended in July 2011 and was followed by a Bridging Phase as a no-cost extension from August to the end of December 2011. This was to allow adequate time for preparations for the third Phase, called Completion Phase.

The SEAM-N Completion Phase (Jan 2012 to Dec 2014) was designed for more emphasis given to institutional capacity building, streamlining SEAM-N inputs with the national planning and management system and handing over of SEAM-N achievements. In the Completion Phase the overall objective was restricted to pollution issues . thus mostly excluding issues related to the sustainable use of natural resources. Mitigation or adaption to climate change was also excluded from the scope. The Project was to contribute to minimising such pollution that poses a risk to health as its highest priority. In rural areas activities were directed mainly to prevent faecal pollution and to improve sanitation, promote and support water source protection and improve cooking stoves, and approach the pesticide issue from the point of view of environmental administration and environmental monitoring. In urban areas measures to reduce industrial pollution were added. Environmental health of the population should be the main focus for monitoring.

The overall objective was: +The environmental health of the beneficiaries has been improved by reducing pollution of the environment in the project area+ with the project purpose being +Good governance in environmental planning, pollution prevention, mitigation and monitoring is embedded in the local administration of the project area and supported by national policies and guidelines.+

In the Completion Phase, the components were:

- Component 1 Local environmental administration
- Component 2. Industrial and chemical pollution prevention
- Component 3. Environmental monitoring & communication
- Component 4 Central Level Support to Local Environmental Management

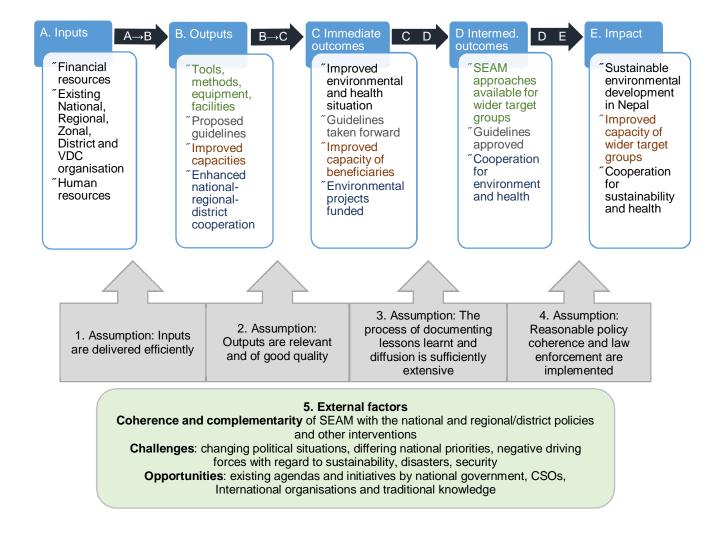
<sup>&</sup>lt;sup>3</sup> Final Report June 2010

As seen, a Component 4 was added to the Project with the specific objective +MLD, MoE, MoI and other relevant authorities are coordinating their guidance to the local level in issues relevant to environmental planning, monitoring and industrial pollution abatement+. Component 4 was implemented by a National Senior Institutional Expert recruited by the Project and posted in Kathmandu. A small independent office was established in Kathmandu for the expert, his/her assistant and short term experts. The duty station of the Chief Technical Advisor (Team Leader) was 50% Dharan and 50% Kathmandu.

The SEAM-N Project ended in December 2014.

# 2.3 Theory of Change and Exit Strategy

Already during the desk study of this post-evaluation the ET did not find any explicitly expressed Theory of Change (ToC) for the SEAM-N, not even for its Completion Phase (which would have been expected). However, as a result of the review of documents the ET set up the following tentative ToC<sup>4</sup> (Fig. 1), which was checked in the early stages of the evaluation work, and used as an input and reference to our assessments, a framework for the contribution analysis, the ET s understanding of Nepals vision for environmental behavioural change and the priorities for environmental and skills development services required.



<sup>&</sup>lt;sup>4</sup> The graphical design and much of the content of this ToC is acknowledged coming from/developed by Indufor Oy, for which the TL of this post-evaluation worked in another assignment using a similar ToC

#### Exit strategy and plan

In essence, an exit strategy is a sustainability plan.

In the opinion of the ET, an explicit exit strategy should have been in the Programme Documents (PDs) from the beginning, even for the first phase, and more detailed exit plans should have been a part of the Annual Work Plans, at least for the last two years. The plans should include activities to sustain results, costs, timelines and responsibilities before and after end of project.

The ET is of the opinion that the SEAM-N never had a clearly articulated exit strategy. However, the project did address its exit, using such terms as % anding over+ and % hasing out+. According to some of our sources, exit, including sustainability issues, was discussed throughout the final year.

The Mid-Term Review of Phase II set the first steps for what could have been developed into an exit strategy by recommending a Bridging Phase and a Completion Phase to ensure successful phasing-out.

The Completion Phase was explicitly designed for completion of tasks and handing over of all functions to relevant Nepalese institutions, with a focus on institutional strengthening and handing over of the achievements of SEAM-N. The four design principles of the Completion Phase were<sup>5</sup>:

- i) Focus and clarify the scope of the Project,
- ii) Hand over and ensure the sustainability of outputs of phases 1 and 2 of the Project,
- iii) Develop tightly coordinated Project components, and
- iv) Embed the Project into the Nepalese administration.

The PD of the Completion Phase sets clear targets and timeframe for the handing over of Phase I and II outputs such as structures, governance practices, concepts, and environmental administration and management.

The Inception Report outlined handing over of the Project by structuring the logical framework following the four design principles. A strategic project approach was that all activities should:

- 1. be implemented with or by the local authorities and organizations.
- 2. be implemented with less direct subsidies per constructed facility.
- 3. include mass mobilization of local communities
- 4. be supported with only one or few thematic interventions in each VDC or Municipality

From the Bridging Phase Report and minutes from SC meetings the ET identifies a fifth strategy:

5. Scaling down staff numbers.

It is also obvious from other sources of information, e.g. interviews with ex-staff and travel notes from the Home Office Coordinator that staff of the project thought a lot about what and how to hand over different project outputs. Available documentation is weak, however, on how much of this was done in reality and the results thereof. Strangely though, it seems from some documented sources, including presentation material to the Steering Committee (SC), that % anding over+was restricted to shift of ownership of equipment and materials, and % xit plan+referred to termination of staff and other contracts only.

<sup>&</sup>lt;sup>5</sup> Completion Phase Appraisal Report, Aug 2011

# 3. FINDINGS AND CONCLUSIONS

# 3.1 Overall assessment

#### **Overall Findings**

The ET found that SEAM-N was successful in meeting the overall objective of the project and that SEAM-N can be considered a dedicated environmental project in Nepal. Some overall findings are listed below, all of which being further elaborated in the following sections of this report:

- SEAM-N was a well performing project, but even more could have been done on the national level.
- It was placed under the most relevant ministry, MoFALD with collaboration also with MoI, MoPE, MoLE and others.
- " Many good activities were carried out, mostly even beyond targets.
- <sup>"</sup> Local level environmental administration is now established, strengthened and working with environmental plans and budgets included in the annual work plans.
- <sup>"</sup> The Project has contributed to and speeded up an ongoing process of decentralisation with regard to environmental administration and management
- <sup>"//</sup> It was a well managed project, following detailed and almost exemplary Administrative Guidelines.
- " The Project spread its resources thinly over six districts.
- There has been too little thinking and analyses of replication / policy/ scaling up of models developed and introduced.
- <sup>"</sup> There was no proper exit strategy and plan focusing on sustainability of results.
- " The Project included communication work, but lacked a real communication strategy.
- Stronger ownership of the government at local level was expected, but linking to the national level ownership was not clearly anticipated in Project design.
- <sup>"</sup> The Project suffered from weak functional linkages between GoN ministries.
- In light of the fast job rotation in the GoN, it is questionable if the study trips for senior officials were worth it.

#### Conclusions:

The SEAM-N was a well performing project with very good results in the six districts.

A higher degree of ownership from the GoN had been necessary for locally gained experience to have an influence on national policies.

# 3.2 Feedback from beneficiaries

#### Findings:

SEAM-N reached out to a very diverse range of beneficiaries consisting of medium sized industries of various kind, women environmental groups, individual households, teachers, school children and public officials with its message of a clean and pollution free environment.

Industry owners confessed to the ET that before the SEAM-N Project they did not think of the environment or environmental health, and not even about occupational health. This has now changed, according to the Morang Merchant Association, to a situation with much greater awareness

of environmental aspects. In a co-funding arrangement with the Project some of the industries in the corridor invested in environmentally friendly technologies. Applications for Pollution Control Certificates continue to be made, with follow-on inspections, tests and issuance from the District. From visits to some industries in the Corridor the ET found, however, that the polluter pay+principle is not yet deeply rooted among the industrialists. Some even claimed that the government+should ake care of the polluted effluents: That the why we pay taxes+

At VDC level, SEAM-N provided service to various different marginalized castes and ethnicities, including socially excluded households, e.g. Dalits. SEAM-N introduced Improved Cooking Stoves (ICS) and biogas plants that proved to be very popular among women. A woman owner of a milk candy Cottage Industry of Ilam municipality remarked; ‰his ICS technology helped me reduce my time and labour in collecting fuel wood to one-third, and I have adopted smoke free conditions by using the chimney that helps prevent negative health effects.+

Through interventions in organic agriculture, SEAM-N transferred new knowledge of organic cultivation practices and vermi-culture, including production of off-seasonal vegetable, thereby helping poor households to increase income and improve livelihood.

SEAM-N reached school children with environmental messages leading to formation of Child Green Clubs, spreading out the message for environmental health to the wider community through their parents. Under pressure of VDC¢ regulation for heavy fine in case of open defecation, the drivers of public transports demand on the DDCs for public toilets. The protection of spring water sources (e.g. at Sakhejung VDC, Ilam) has been popular having made possible a sustainable supply of protected quality of drinking water to local households. SEAM-N influenced the expansion of local tourism by reaching out to the local youths (men and women) who promote local tourism through beautification and safeguarding local potential tourist spots. This has increased income of the local people along with promoting environmental awareness. Several school teachers in Dhankuta (e.g. Bhedetar ward 3) have adopted teaching materials from SEAM-N and introduced child green club models in their own schools. Some housewives in Dhankuta even provided training on solid waste management.

The model village in Sakhejung in Ilam has initiated a local level monitoring mechanism through the VDC, where the local female community health volunteers (FCHV) monitors the utilization of toilet, biogas, waste handling, etc., at household level.

#### Conclusions:

The Project was, and still is, much appreciated among beneficiaries. SEAM-N served many different and diverse groups and individuals with social and technical messages, equipment, capital and technologies and created awareness of pollution control, improved quality water, demands for pollution control mechanisms. SEAM-N made diversified efforts to influence both duty bearers and right holders with the values of building clean environment promotional attitude and behavior.

#### 3.3 Assessment by evaluation criteria

#### 1. Relevance

#### Findings

The ET found that both the overall objective and the Project purpose were highly relevant in terms of both Nepals long-term development strategies, including the Local Self-Governance Act of 1999 which is the policy for decentralisation of environmental administration and management, among other functions. In addition, the National Environmental Policy and Action Plan (1992) and the Three Year Interim Plan (TYIP) for the period July 16, 2008. July 15, 2011 have the long term vision of environmental management to create a clean and healthy environment through effective environmental management; and to achieve sustainable development through wise use of natural resources.

With an overall objective to assist the local authorities and industries in the area, to improve their capacity for environmental planning and management, the SEAM-N Project in Nepal was

significantly relevant to GoNos approach in decentralized participatory governance, specifically regarding environmental promotional objectives.

The ET also found the SEAM-N was highly relevant to the Finnish development cooperation policies in its different versions over the Project period, where implementation of the MDGs and poverty reduction has been the overall objective, and where gender has been a cross-cutting theme and environment has been an objective or a cross cutting theme over the full Project period. During the second half of the Project more attention was paid towards interventions related to climate change, not the least after the Copenhagen Climate Change Summit in 2009. All these aspects were addressed in the Project.

In Nepal, the GoF contributes to poverty reduction, advancement of the peace process, establishment of democracy in society, improvement of human rights and promotion of environmentally sustainable development and supports cross-cutting themes such as good governance and human rights, gender equality and mitigation of climate change<sup>6</sup>. GoF supports promotional activities for the CSOsq voice and community-led approaches to insist on public accountability and participatory measures, and to guarantee and monitor equal access by all. However, the SEAM-N Project did not leave behind documented information about how the project approach was relevant in building organizational capacities at the local level, and the ET was not able to make a judgement on this matter.

#### Conclusion

The ET concludes that the Project was highly relevant in terms of the problems and needs of Nepal. The Project was well in line with the relevant policies of both governments.

Overall, it can be concluded that the project concept and its approach were relevant to GoNos policy of decentralization, inclusion and increasing accountability towards her peopleos rights to environmental health and sustainable well-being.

#### 2. Outcomes and Impact

Under this heading, the ET gives examples of changes produced by the Project, directly or indirectly, intended or unintended. This involves the main impacts, outcomes and effects resulting from the Project.

#### Findings

Local environmental management continues through the EFLG project: The most important outcome of the SEAM-N project is the continuation of creation and strengthening of local environmental administration and management through the Environment-Friendly Local Governance (EFLG) project. Adopting the set of environmental indicators and local administration concept developed by the Project, the MoFALD developed the EFLG Framework in 2013 and presented the same to DFID for funding. The framework is now implemented 14 districts, with the aim to ultimately reach 75 districts of the country. Whe Government of Nepal has endorsed the Environment-friendly Local Governance Framework with an aim to make the entire nation environment-friendly and achieve its indicators from the level of household, tole, settlement, village, municipality and district.<sup>4</sup> Funding from DFID is secured until mid 2017.

Several, but not all, guidelines and standards adopted on the national policy level: This is a positive development and outcome, which may lead to impacts in the future. (See specification and discussion in section 3.5 below)

All visited target DDCs, municipalities and VDCs have now integrated environmental aspects to their planning systems, with allocated budgets in their plans. Clearly, this is an effect of the SEAM-N. At

<sup>&</sup>lt;sup>6</sup> Source: <u>http://www.finland.org.np/public/default.aspx?nodeid=35080&contentlan=2&culture=en-US</u>

<sup>&</sup>lt;sup>7</sup> Source: <u>http://www.mofald.gov.np/sites/default/files/Resources/EFLG-2013.pdf</u>

least the Project has speeded up the environmental decentralization process. The Project has also left behind strategic plans and action plans for environmental improvements on the municipality level.

Public awareness on the importance of managing the environment is increasing: From the meetings and discussions held during the work, the ET found that public awareness of the importance of environmental issues is increasing.

There is now a public pressure for industry to get Pollution Control Certificates (PCC): The ET also found that the SEAM-N work on PCC has been recognised by the public, and that people effected by emissions from the industries now put pressure on the authorities to do something about industrial pollution.

Occupational Health and Safety (OHS) on its way of being firmly rooted. The Ministry of Labor and Employment (MoLE), is key in ensuring the right of industrial labor is met e.g. in terms of occupational health, injury, working hours, etc. The SEAM-N OHS interventions were supported through cooperation and guidance with MoLE. Although the ENSC could act as a facilitator in promoting Occupational Health and Safety the lack of political will to change the current practices of environmental pollution control has not allowed the ENSC to fully take this role. However, ENSC impact on the industry to meet OHS requirements is still significant through increasing demand for PCCs.

*PPC numbers are increasing.* From the start of the Completion Phase to date DDCs have issued 272 new PCCs, and enforcing compliance, focusing on the major polluting industry. Industry's pollution levels are now monitored regularly to validate temporary PCCs. DDCs driving force to execute environmental and pollution issues does not only come from law enforcement, but also from civil societys environmental pressure, befitting substantially also OHS.

Replicability and spill-over effects from Ilam Green City and Dhankuta solid waste management concepts: Ilam Green City activities have been replicated around the project area and several municipalities in other parts of the country. Over 50 municipalities have gained experience and learned from Dhankuta<sup>8</sup>. Long-term effects and impacts are also expected from the implementation of the EFLG project. Both concepts have been given high publicity in Nepal.

*Open Defecation Free (ODF) campaigns is rolling on:* SEAM-N has contributed to the ongoing ODF campaigns for improved sanitation and health. Several municipalities and VDCs have now declared themselves being ODF zones. SEAM-N contributed to environmental health and increased ODF areas by supporting construction of 6,860 household toilets at model and thematic VDCs.

Solid Waste Management (SWM) improved in municipalities and VDCs: Results are varying among the municipalities in the six districts, but generally speaking the situation is improving. Most municipalities have now even banned plastic bags. It is expected that improved SWM has significant health impact by reducing risk of leptospirosis outbreaks in flood prone areas.

Industries are on a promising environmental track: SEAM-N increased awareness, knowledge and capacity about environmental pollution of the participating industries and improved physical and natural environment, business competitiveness and public health within the participating industries by reducing a pollution level.

Limited impact on legal powers or prosecution power: The ET could not form a firm opinion of the Project had any impacts with regard to legal or prosecution power in Nepal, but believes that there is no such influence as yet. The ET did not come across any prosecution case related to violence of environmental law or uncompliance of PCC regulations. However, at local level DDCs and VDCs (in Ilam and Dhankuta) played very powerful roles by implementing local measures of punishment by requesting %ines+(in cash) from common people, public transport drivers, etc. for not practicing

<sup>&</sup>lt;sup>8</sup> The SWM concept Replicate Do Not Copy+ has also been presented at international conferences in Indonesia, Japan and Korea. See also <u>https://www.youtube.com/watch?v=AgYS-5z7ULA</u>

ODF related ethics as well as for breaking the municipality regulations on throwing garbage in public place. The ET got the impression that this was a local decision rather than a suggestion from the Project.

Integration of environmental aspects to GoN planning systems: All relevant ministries and other relevant authorities at the central level have their own environmental section or function. Accordingly, they also include environmental aspects to their planning systems, to some degree, but the influence from SEAM-N is minimal, if any. On the local level, however, SEAM-N had a significant influence: all project districts have incorporated environmental planning and costing in their annual work plans. All DDCs and all municipalities have established ESCs, equipped with staff and budget, capacity building plans as well as monitoring and maintaining the landfill sites.

#### Conclusion

- The greatest impact has been the scaling up of the EFLG framework through the DFID supported EFLG programme.
- Local governmentsqenvironmental developments are in place in the six districts, operating under SEAM-N principles, some are more active than others, but the legacy of SEAM-N is there.
- There are missed policy impact opportunities. Central government's lack of project ownership and a rapid rotation of professional staff in MoFALD, MoST, MoI and MoPE/DoEnv constitute a risk that many policy development initiatives of SEAM-N will be forgotten without actions of the line ministries.

#### 3. Effectiveness

Under this heading, the ET expresses opinion on how much of the expected results from the Project have been attained, and if the specific objectives and outcomes have or are expected to be reached. The effectiveness is assessed both with regard to the local level, which compares achievements with Phase I and II objectives, and to the national level, which should be attributed to the SEAM-N Completion Phase. Phase I and II objectives can be summarized as % actices of environmentally sustainable development have been integrated into decentralized administration in Nepal.+Phase I and II purposes were % officient environmental administration, monitoring and enforcement by relevant local administration are in place in the Eastern Development Region+

Despite physical and administrative obstacles Phase I and II have achieved set targets well to create a model for decentralized environmental administration and building the capacity of districts, municipalities, villages and communities in environmental management. This included establishment of Environmental Sub-Committees (ESC) and Environment Units (EU) at DDCs, Municipalities and VDCs of the project area, and establishing measures for regular monitoring of the overall state of the environment.

The overall objective of the Completion Phase was formulated as +The environmental health of the beneficiaries has been improved by reducing pollution of the environment in the project area+. The project purpose was: +Good governance in environmental planning, pollution prevention, mitigation and monitoring is embedded in the local administration of the project area and supported by national policies and guidelines.+

Completion Phase multiple activities contributed substantially to these objectives. However, in the opinion of the ET, transfer of good practices and knowledge and policy influence to the national government level for supporting local administration was less effective than expected.

#### Findings

The Project achieved more than set targets: A great number of activities were implemented during the 13 year implementation period of SEAM-N, actually well over set targets as shown by the indicators. (See Annex 6, Outputs and Outcomes)

Ongoing processes . speeded up progress: The Project speeded up the already decided policy of decentralising environmental management. It provided sustainable implementation models for the environmental administration and management for VDCs, DDCs and municipalities, speeded up the creation of environmental administration and management on the local level, which through the EFLG project have effects not only in the EDR but eventually over the whole country.

The organisation is now there, with tools to act: SEAM-N tested models and technology variations for environment interventions providing guidelines and training manuals, equipped the staff for the demanding operation in increasing environmental pressure from civil society.

DDCs have used their executing powers to issue Pollution Control Certificates: DDCs environmental law enforcement has increased over the SEAM-N period. As reported earlier in this report, DDCs have since the start of the Completion Phase issued 272 new PCCs, enforcing compliance, and focusing on the major polluting industries. Industrial pollution levels are now monitored regularly to validate temporary PCCs. Several complaints have been also handled successfully. DDCs driving force to execute environmental and pollution issues does not only come from law enforcement, but also from civil society environmental pressure, which has resulted in a shift of awareness to behaviour changes of industries qpollution control.

The health situation has improved but it is not quantifiable: SEAM-N has supported the construction of a great number of sanitation and health improvement interventions at community level. People interviewed confirmed about reduction in health related problems, as an impact of improved air, water quality and smoke control. However, there is no data to quantify this statement.

Work on gender and social inclusion brought better results: Based on interviews with representatives of the target groups the strong engagement from the Project with regard to gender and social inclusion have increased the results and made them more sustainable. An in depth analysis of the learnings could be explored through a formative research on GESI impacts of the SEAM-N project.

Good working methods with regard to local monitoring and reporting: The Project applied an effective method of local level monitoring on sanitation practices by mobilizing the FCHVs and involving the beneficiaries in monitoring and reporting, which according to interviewed FCHVs had have a positive effect. The FCHVs are mandated to pay monthly home visits and thus, they can reach housheolds regularly. They are frontline workers for follow up of activities at local level, contributing to sustainability. In addition, municipalities have adopted new monitoring and reporting systems, which facilitate planning, budgeting and accountability. Monitoring activities of the Project were appreciated by the environmental officers . they regarded it positive that someone was interested in their work and checking that the investments led to results.

Poor thinking about effective models and policy/scale up analyses: the ET reflected that the Project should have made better analysis of the replicability of the models and technologies used, both before and after the implementation.

Baseline studies made but not followed up: Base line study for environmental health was conducted, but follow up results are not available, making it impossible to quantify final project outcome.

Less effective on national level: SEAM-N was designed primarily for local government environmental administration and management improvement. SEAM-N prepared relevant documents and submitted to the line ministries for adoption in the national policy. However, the new officers of MoI and DoEnv seem not interested in referring to the SEAM-N lessons when designing policies for the future.

The objectives could have been more realistic: The purpose was formulated so that the Project, alone, should accomplish (% protect, enhance and sustain the quality of the environmentõ +). Such goals were unrealistic in the sense that they did not recognise that there were other processes contributing to the same effect. It would have been better to write % ontribute to+than to express them in absolute terms.

#### Conclusions

Ownership is very important: The limited adoption of SEAM-N results on the national level may be ascribed to an ownership gap between the SEAM-N and the line ministries. Ownership building is very difficult in any project, especifically in Nepal with its fast staff rotation in the ministries. A high level of ownership and commitment correlates closely with success of the project and contributes to better outcomes. It is the opinion of the ET that ownership has to be very clear in the design, strengthened throughout a project and built into the exit strategy and plan. To this ET it seems logical that in order to increase effectiveness there should have been direct national level involvement from the very start and not only as a component of the last phase as in the case of SEAM-N.

#### 4 Efficiency

In this part the ET is concerned with costs, quantity, quality, timeliness and outputs in relation to the inputs. This requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.

#### **Findings**

Delays due to insecure situation: Because of the intensity of insurgency in the Phase I period, the Project suffered from loss of field working time. However, the project team managed to carry out important analytical and preparatory work at office. It is fully understandable that there were delays in Project work and administrative costs increased. The question is if the project should have been placed on hold under these circumstances.

	Phase I		Phase II/Bridging	Phase III	Total in Euro
Financing Source	2001-2005	2006-2007	2008 -2011/8-12	2012-2014	
Budget from GOF	*3,071,127	**1,823,000	**3,699,907 *	***3,000,000	11,594,034
Expenditures					
GOF	*3,071,127	**1,646,093	***3,582,490	2,998,446	11,298,156
GON	82,748	23,000	15,000	150,000	270,748
Local Gov. & NGOs	206,500	133,800	61,400	400,876	802,576
Industries	147,760	37,270	32,450	30,000	247,480
Total Expenditures	3,508,135	1,840,163	3,691,340	3,579,322	12,618,960

#### THE SEAM PROJECT'S BUDGET/EXPENDITURES DURING THE PROJECT PHASES

\*The additional funds (315,871 ") was allocated to continue the existing contract between Plancenter Ltd and Ministry for Foreign Affairs, Finland, Draft Summary of the Completion Report 2001-2008, May 2008 page1

\*\* Phase I unused budget 199,907" was transferred to Phase II; SEAM-Nepal Phase II, Project Completion Report, page 4; and 1,823,00. 199,907 = 1,646,093

\*\*\* SEAM-Nepal Phase II, Project Completion Report, page 31

\*\*\*\* Completion Report Phase III, page 8 and 82

All unit costs are well justified. The costs for environmental infrastructure such as toilets, stoves, and biogas plants are well within the market price (see Annex 6). The Environment Development Fund (EDF) and Environment Industrial Fund (EIF) were efficiently managed to expedite an improvement of the environmental administration and management, to secure sustainability of administrative structures and models, and to encourage industries to invest in environmental technology. The project had well developed comprehensive administrative guidelines and procedures. The ToRs for short-term consultants (STs) were well formulated. Available resources were transformed into intended results, with programme cost justified by the results.

GoN funding decreased on an annual basis from the Phase I to Phase II. However, during the 3year completion phase the GoN contributed to the SEAM-N projects more than during the first 10year period. Local governments units contributed to SEAM-N operations following a similar pattern. Private sector contribution declined from 2002 to 2014 from 40,000" to 10,000" per year.

The ET interprets these figures as follows: The increased national and local government budget and expenditures during Completion Phase (Phase III) may be attributed to increased awareness and higher priority given to environmental issues. This, in turn, may be a results from the intensive capacity building and training, including public awareness campaigns, that the Project carried out in Phase I and II.

At the beginning of the Phase I, a basic admin investment was made including cars, office equipment, furniture, technical and survey equipment, which partially lasted over the 13 year long SEAM-N project. Some of the cars were used to the end of the project.

SEAM-N encouraged women to participate in training and on-the-job training. In fact there were slightly more women than men participating (see section 3.4 below). According to interviews with participating women the training enhanced their working opportunities, and the ET observed several cottage industries established and run by participating women.

The ET was unable to find information on beneficiariesqgender balance with regard to Project support to post-graduate studies.

#### Conclusion

The ET concludes that the SEAM-N was a professionally managed project that followed a well developed Administrative Guideline. The Project developed models and concepts on cost efficient local-level environmental health improvement in Nepal. Despite the vast project area, and relatively high project operational and logistical costs, SEAM-N has done more than originally targeted.

However, project impact could have been even better with a smaller geographical area. As a hypothesis, it can be argued, that the original project area or just a slightly increased one as compared to Phase I, could have brought better impacts on environmental health as compared to working in six districts. Secondly, spreading thinly limited budget and human resources over six districts, although resulting in a high number of environmental infrastructures, administration and management activities, has a limited impact on the overall environmental health. Probably, as much or more could have been achieved through work in a smaller geographical area.

#### 5. Aid effectiveness

Aid effectiveness refers to how the Project has implemented the commitments to promote ownership, alignment, harmonisation, management for development results and mutual accountability.

The ET found that the project had good management for development results and high level of mutual accountability. At the other end the ET identified shortcomings in ownership and alignment and harmonisation with other development activities.

Overall a slow progress of the central government ministries in adopting policy initiatives developed by SEAM-N has resulted in a lingering fear on the improvement of the State of Environment in Nepal. Poor cooperation and unclear division of responsibilities among the ministries and fast staff rotation have created a stagnant situation in policy development. As an example, guidelines to rationalize national industrial pollution control and emission abatement have been already waiting for MoPE actions for more than two years. This situation needs to be acknowledged as one of the contextual factors that hindered the possibilities for national level impact and sustainability.

#### Findings

Selection and monitoring procedure facilitated aid effectiveness in SEAM-N implementation. SEAM-N had proper administration, implementation and financial management units to secure funds flow and management.

The Project requested and got co-financing of activities, applied a Public-Private-Partnership through the Environment Industrial Fund (EIF) and funding for the ENSC and got community participation in kind, all of which contributed to a high degree of aid effectiveness and sustainability.

*Grants to industries:* Introduction of environmental technology to selected industries was promoted through co-financing of the investments, where the Project contributed the higher share, often between 50 and 80%, as a grant for Climate Change actions covering high up-front costs and risks, championing first-movers, stimulating markets, and bridging financing and information gaps. This can be seen as SEAM-N being able to test and refine financing models that can break down the barriers to private sector participation in climate action in Nepal. The ET was informed that the alternative, to provide soft loans, was rejected since the Embassy did not want to handle the loans after termination of the Project.

Posting of CTA in Kathmandu during the Completion Phase: during Phase I and II the CTAs were based at the project head office in Dharan, but in the Completion Phase the CTA had duty station 50/50 in Dharan and Kathmandu. The ET regards this arrangement being necessary with the project having the ambition to share experience, procedures and models for national policy influence.

*Little coordination with ADB, WB and UNDP and other projects:* to a limited extent the ET communicated with people who had been working in relevant projects in the same region or with similar issues in Nepal. The interviewees all declared that they had limited or no connection or interaction with the SEAM-N Project.

Successful promotion of the local ownership and local commitment towards the project goals: People interviewed in the six districts verified that the Project systematically conducted public awareness campaigns from grassroot level up to VDC, municipal and DDC levels. The Project interacted effectively with different types of woments working groups and schools and managed well gender and ethnic equality and balance to maximise impacts on environmental health and disaster preparedness in the participating six districts. Local ownership was also secured through capacity building of VDCs', DDCs' and municipalities' environmental health management functions based on expressed needs.

*Effective development funds:* The District Development Fund and the Municipal Development Fund have played an important role in District Development Support and overall projectsqsustainability. According to Project Completion Report, matching funds from DDCs (10-20%), municipalities (20-30%) and VDCs (10%) generated 400,846 " over the three-year completion phase. Statistics show that more than 320 projects were implemented. All in all, local government has financed 36.05% and SEAM-N 63.95% of the district development support. According to Project reports, funds flow were occasionally slow due to time consuming banking procedures of the local bank. Generally, District Development Fund and the Municipal Development Fund management was satisfactory with a high degree of accountability. Funds were timely and properly requested, received, and recorded. Internal controls related to remittances and registrations were adequate according to the KPMG auditors.

#### Conclusion

Aid effectiveness was high, but could have been even higher with some careful planning steps based upon periodic reviews.

#### 6. Sustainability

An assessment is made whether the positive outcomes of the Phase and benefits of its activities are likely to continue.

#### Findings

Several kinds of results are likely to sustain still 5-10 years after the project completion and without any external support: There is a good reason to believe that the Environmental Service Center

(ENSC) is operating at least for the next 5 years. ENSC is a non-profit distributing company, established upon the basis of public-private partnership (PPP). It aims to provide the services necessary to prevent environmental pollution and carries out scientific research to support its other services. It generates enough revenues from charging for laboratory analyses to run its own operation. Moreover, the *Enviro-Nepal web-portal*, developed by SEAM-N, is a valuable source of environmental information and data for the environmental community of Nepal, including scientists, students, administrators, journalists as well as international donor agencies and investors. The Web Site was officially opened in February 2014. However, it has very few users due to inadequate promotional efforts.

GoN and DFID have adopted the EFLG concept, which secures that EFLG with a strong linkage to llam Green City, and Dhankuta SWM components are strengthening and improving the environmental management in Nepal up to 2017 in 14 districts. The DDCs and Municipalities visited were found to have integrated environmental promotional activities and support in their regular

#### Case: % acreased budget for environmental action+

Dhankuta municipality has allocated NRS 2.5 million for environmental activities which is fifty times more than the office had budgeted in the initial year of SEAM-N operation, i.e., NRS 50,000 only (source: Upendra Khanal, Environmental Officer, Municipality of Dhankuta)

annual plans and budget allocation. The Project built capacity of the local administrators with technical knowledge and skills to continue project activities, databases and use of environmental indicators. The Sample Collection Centre (SCC) coordinated by District Drinking Water and Sanitation Coordination Committee (DDWSCC) of DDC is still fulfilling its mandated duties. Activities are now more related to validating or applying new PCCs. Monitoring was successfully piloted through a water monitoring program in the project districts. However, the continuation and success of this monitoring program depend on local authorities, stakeholders, and the public and whether they utilise the tools and procedures created by the project.

The environmental sector is now institutionalized locally: environmental sections, committees and officers are now there (but less active than before), and the environment is now included in plans and budgets of the local governments. However, VDCs, DDs and municipalities with limited financial resources are causing a risk that well-trained and knowledgeable staff looking for opportunities to work somewhere else not only in Nepal but also abroad.

School activities go on, and spreading: SEAM-N supported school activities by practical pedagogical modules for environmental education. EFLG education modules will be disseminated throughout 14 districts, which secure continuity for SEAM objectives.

Structures function and are used (almost all toilets, stoves, biogas and water source protection): Water and sanitation, stoves and bio-gas infrastructure built by SEAM-N have been maintained well. Demand for new stows, toilets, bio-gas plant as well as water supply exists. This has created income generation opportunities within ICSs and biogas plants construction, which will facilitate long-term sustainability in the project area.

*Industry is on an environmentally friendly track:* Public pressure and arising awareness within industries have increased demand for temporary PCC certificates. All in all, 272 PCCs have been issued with an increase of 15 certificates in 2016. In addition, several tea farms have also adopted chemical free tea-farming and some of them have improved their energy efficiency.

The ENSC Public-Private Partnership between Morang Merchant Association (MMA) three DDCs and a Municipality has not yet reached financial and human resource stability but it is on its way. ENSC generates funding for its operation from analyses of soil and water samples on orders from local governments and in connection to industrial environmental pollution. Also even sells its services to clients in neighbouring part of India. However, ENSC operation and financial sustainability has weakened considerably after SEAM-N closure and the 2015 earthquake, the resignation of the Main Chemist and Officer In-Charge. DDCs and municipalities have reduced their orders and VDCs have

stopped sending samples to the laboratory. According to MMA the year 2015 resulted in losses to ENSC. The Bussines Plan for 2016 is positive, however, and the financial result for 2016 is expected to be positive. The ET advised ENSC to focus on market oriented business approach to sustain its business.

Job rotations reduce sustainability, people move: Central government rapid rotation of the new and existing professional staffing has set at risk of sustainability of environmental management. However, the local government target DDCs and municipalities have already integrated environmental aspects in their periodic and annual planning and budgeting, which has been solving environmental problems and conflicts successfully. In addition, all DDCs have at least slightly increased annual budget to carry out activities and there are still a great number of SEAM-N trained people to continue activities.

Poor or missing proper exit strategy and plan: It is obvious, that without a proper exit strategy and plan, the main focus of the Completion Phase has been diverted towards fulfilling contract requirements such as submitting completion reports and other deliverables to the clients and assets to the recipient partner in time. Thus, the project ownership and sustainability issues have been left behind. This was also revealed in the discussions with the line ministries in Nepal.

#### Conclusions

The ET concludes that many activities sustain: There is high level of relevant technical knowledge and skills available at the local level to secure that the positive outcomes of the Project and benefits of the project activities continue.

Much more is needed for a sustainable environment: Pollution-control measures and sustainable environmental management are questionable until the law enforcement, environmental legislation and regulation are in place with appropriate fiscal instruments. Much remains to be done in this respect.

#### 7. Coherence

Coherence refers to issues beyond development cooperation focusing on contradictions or mutual reinforcement with other policies to achieve development objectives.

A specific question to the ET was %Did contradictions on any level of the public sector or the government's policies prevent the achievement of the programme's development objectives?+The ET was asked to comment from the perspective of ODF action plan, according to which household toilets are not subsidized and the fact that SEAM-N supported construction of 6,860 household toilets.

Actually, the ODF Master Plan (2011) aims to unifying stakeholdersq through formation and mobilization of WASH Coordination Committees in the Central, Regional, District, Municipality and VDC levels, fulfill resource gaps in the sector through cost sharing, resource pulling/pooling arrangements and co-funding arrangements at local levels and ultimately achieve universal coverage by 2017.<sup>9</sup> Hence, the ET sees no contradiction between the national policy and SEAM-N support to construction of household toilets.

The ET found that environmental sections of DDCs and sub-committees are using current models and practices for issuing PCCs developed in the SEAM-N Project. However, guidelines from the national policy level to rationalize national industrial pollution control and emission abatement are still waiting for MoPE actions. Delay of industrial emission abatement has been limiting DDCs law enforcement and their issuing of permanent PPCs. This has prevented full achievement of the Project**\$** development ambitions in this respect.

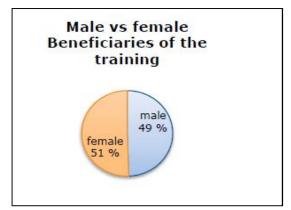
<sup>&</sup>lt;sup>9</sup> SACOSAN-V 2013, Ministry of Urban Development Website: <u>www@moud.gov.np</u>

With regard to Coherence, and looking back at findings presented in other sections of this report, the ET concludes that:

- The SEAM-N Project was well aligned with development priorities of Nepal.
- There could have been a higher degree of interaction and harmonisation with other ministries of the GoN.
- Insurgencies during the first half of the project period prevented full achievement of the programme's development objectives at that time.
- A higher degree of coordination of environmental concerns between different GoN ministries would have increased Project sustainability and impacts.

### 3.4 Cross-cutting issues

In order to mainstream GESI activities and based on the lessons learnt from Phase I the project formulated a Gender Sensitivity and Social Inclusion (GESI) Strategy and Action Plan in Phase II. The project promoted equal participation of girls and boys in school environmental programs. Women were directly targeted and were engaged in the environmental committees of municipalities, VDCs and schools. Technologies such as Improved Cooking Stoves (ICS) and biogas plants have a significant effect on indoor air quality levels, consequently decreasing the risk of respiratory infections, which are a major health concern especially for women and children in Nepal. In its 2nd Phase, the project strengthened GESI interventions as an integral part of project implementation. Thus SEAM-N treated GESI as a cross cutting strategy to enhance project results for sustainability. Most of the beneficiary level activities were focused on women and disadvantaged caste groups. Altogether 15 147 persons benefited from different training schemes in different sectors and 22 132 households benefited directly from toilets, household, organic farming and other environment related livelihood support programs. Gender distribution of such training beneficiaries is presented in the graph below:



The distribution of trainees by ethnicity is presented in the table below:

Training beneficiaries				
Total		15147		
Single mothers	2%	303		
Mandheshi	6%	909		
Dalit	10%	1515		
Others	31%	4696		
Janjati	51%	7725		

To compare from national statistics (primarily the 2011 census) out of the total population of 26,494,504 persons the indigenous nationalities (Adivasi Janajati) of Nepal comprise 35.8%, Mandheshi 17.3% and Dalit 11.4%.<sup>10</sup>

Dis Advantaged Groups (DAGs) include all dalits, janajatis, poor and disabled people who are deprived of benefits, and lower caste and lower education people, among others. Obviously, the Project managed to engage a majority of DAG people in its trainign and other activities.

The project GESI Strategy and Action Plan was a good step forward, which however was not adopted as a continuous process and intensive capacity building over a longer period of time<sup>11</sup>.

Key lessons on woments participation and leadership in environmental management: SEAM-Nos made efforts to target project activities at women, individually as well as in groups at usersqlevel, in all activities taking place at household and community level. SEAM-N mobilised women social mobilisers and female community health volunteers to reach households with public sanitation and ODF messages. The project also promoted some housewives as resource persons for solid waste management training to local people.

Nevertheless, despite identifying the central role of women in waste management and environmental administration, the project achieved very little in establishing women and DAG members in decision-making positions in SEAM-N planning processes. Since the project does not have a GESI impact assessment to claim the project position, it is unclear if the project interventions produced any significant impacts on the existing power gap between gender and social structures, or if the project produced any remarkable model of women leadership in environmental management. The gender and exclusion gap in community political role can be well articulated from the description given in the case below:

Case: Representation by women and DAG at ESCs:

In DDC ESC's there were 48 male (84%) and 9 female (16%), including 2% Dalit, 19% janajati, 56% upper caste and 23% representing others.

In municipalities, there were 40 male (71%) and 24 female (71%) members in ESCs. By caste, 2% were Dalit, 39% janajati, 55% upper caste and 4% others.

In VDCs, 50 males represented 68% of ESCs, and 24 females represented 32%, respectively. By caste, 7% were Dalit, 49% janajati and 44% upper caste.

Out of the total 52 Project staff, 65% were male and 35% female, forming of 2% Dalit, 59% janajati, 31% upper cast and 8% others.

(Source: Final report mid term evaluation . June 2010)

A lesson learned from the project is that women are key to achieve desired goals in environmental management at the local level. Women, women-led CBOs and social mobilizers contributed to sustainability by ensuring the adoption of SWM, ICS and biogas, organic farming, etc. at household level. But they were not equipped with skills on how to mobilize and influence public decision on environmental planning processes.

The ET met women who seemed to be unaware of their fundamental rights to be informed about environmental issues, planning, participation and benefits, etc. This might influence negatively on their interest to demand for access and control over environmental issues in the long run.

<sup>&</sup>lt;sup>10</sup> In spite of serious efforts the ET could not get hold of any statistics on population by ethnicity in the six SEAM-N districts.

<sup>&</sup>lt;sup>11</sup> source: Final Report June 30, 2010 and Mid-term Review of SEAM-N Phase II

#### Climate change

The SEAM-N Project has carried out remarkable work related to climate change, in line with the objectives and goals of NAPA and LAPA documents. In this regards SEAM-N has allocated resources to climate-change related issues as follows:

Adopting the priority options for climate change adaptation and mitigation in the NAPA and Climate Change policies, the Project invested EUR 502,400 exclusive of all admin and monitoring cost. This is 17% of the SEAM-Nepal total budget. The project implemented various activities, such as, ICS and biogas and solar technology at VDC, DDC and municipalities of the six districts. As compared to earlier energy sources these interventions have helped reduce GHG emissions in large quantity. 7,807 ICS and 513 cum capacity of biogas have been installed. Annual CO2 savings through ICS and biogas interventions is 20,800 tn/year and annual fuel-wood savings 20,500 m<sup>3</sup>. Application of WASH policy and strategies at the district level result in ODF areas<sup>12</sup>. Each of these interventions include software support, hardware interventions and institutional development. In addition, altogether EUR 272,361 (exclusive of admin and monitoring cost) were spent for acquiring public health adaptation strategies against climate change.

To summarise on cross cutting objectives:

#### Conclusions

The ET concludes that

- The central role of women and indigenous caste groups with regard to environmental sustainability could have been further strengthened by including them in major decision making positions and as the primary stakeholders.
- <sup>~</sup> Usersqrights to clean air and quality water (a human rights aspect) could have been more clearly pronounced in the project in order to promote the general public to claim their basic right to environmental services and accountability of duty bearers service provision.
- The limited analysis of project results from GESI perspectives is a missed opportunity for policy feedback and influence. (Referring to the impact of womence increased involvement in village and district level planning and decision making, including also their organized demand making systems in public service systems and how the programme benefitted from this change.)

### 3.5 Contribution to national level policies and work

Component 4 of the Completion Phase Central level support to local environmental managementwas designed to contribute to the work of four ministries viz. MoFALD, MoEnv, MoI and MoLE to coordinate and provide guidance to the local level in issues relevant to environmental planning, monitoring and industrial pollution abatement.

As repeatedly stated in this report, the SEAM-N must be credited for coming up with the Environment Friendly Local Governance Framework, and the Environmental Service Center with its laboratory, both of national level importance.

One of the activities of Completion Phase Component 4 was to establish two task forces, one was to deal with minimum criteria performance monitoring (MCPM), a criterion to evaluate performance of the local level government agencies. However, the task was widened to the much broader agenda of EFLG. The integrated environmental management (IEM) concept was applied in the Green City Ilam and some model VDCs where the EFLG indicators were also tested. The MoFALD has now

<sup>&</sup>lt;sup>12</sup> ODF strategies have a climate change mitigation effect, see e.g. Khatri, Nam Raj 2012?, Sustainability and Climate Change aspects of Ecosan Toilet: Nepal prospective

instructed local government bodies to implement the IEM and EFLG concepts and indicators all over the country.

The ET is of the opinion that the core contribution of SEAM-N to Nepal is the institutionalisation of environmental administration at local level agencies. Environmental sub-committees formed or strengthened by the project are important as they have made possible wider participation of the local communities in environmental matters. These committees are now able to handle complaints raised against polluting industries. This is even more important in the present situation where there is no elected local government.

SEAM-N contributed to fulfilling some provisions of GoN¢ Environment Protection Act (EPA) 1997 and Environment Protection Rules (EPR) 1997 focusing on prevention or control of pollution by industries.

SEAM-N was successful in preparing/contributing to a set of guidelines, indicators and policy suggestions. The Project, in close collaboration with national and local authorities, was able to contribute in drafting National Data Sharing Policy, updating the State of the Environment, National Industrial Inspection Guideline, National Core Set of Environmental Indicators, categorization of most health hazard industries in Nepal, and Environmental Audit Guidelines for the Hospital Sector. SEAM-N contributed to formulating pollution abatement guidelines as well as national strategy on environmental administration and monitoring. The Project also recommended GoN to take initiative in formulating a National OHS Policy. Some documents, such as categorization of industries and environmental audit guidelines, are now endorsed by the concerned ministry and widely used. However, even though many of the attempts mentioned above have not been adopted or implemented in the project period, they are very important for environmental management of the country and may be adopted formally in the future.

To ensure well informed and targeted environmental policy making the Project established the Environmental Monitoring and Indicators Network, a system with several government agencies, academics, INGOs and other monitoring and data holder organizations. This network defined and prioritized the top 10 environmental problems of Nepal, drafted for these a National Core Set of Environmental Indicators, discussed and drafted a way forward to a National Environmental Data Sharing Policy. However, the environmental and monitoring data is not effectively used as it is not yet made available to the public or shared with other concerned institutions.

The project was successful in launching the Enviro-Nepal web portal. For the security and reliability of Enviro-Nepal Web Portal, the server is placed in the Government Integrated Data Center at the National Information Technology Center. The project also set up an environmental library in the premises of MoFALD. The primary purpose of the library is to enhance the capacities of GoN to help improve environment administration and management capabilities. The library keeps a large number of environmental entries, educational materials including books, scientific publications, audiovisual materials, publications, reports, and proceedings.

A series of International Standards training was organized to develop the audit capacity of government officials through conducting the internationally recognized Lead Auditors training course on energy management systems. ISO 50001, environmental management systems- ISO 14001, and OHAS 180001.

The ET concludes that SEAM-N indeed contributed to the development of environmental administration in Nepal and contributed to behavioural change of people involved.

The ET is of the opinion that the reason for some of the SEAM-N guidelines/policy proposals/standards being adopted for national use and others not is the limited ownership felt by most of the relevant ministries, and the fast rotation of senior officials at the ministries.

# 4. DISCUSSION AND LESSONS LEARNT

## 4.1 Lessons to bring forward

Some main lessons from the SEAM-N project of general nature are presented and discussed below:

Ownership is very important. The lesson in the case of SEAM-N is that there should have been a clearer definition and higher engagement of the project owner(s). The owner of the project was the Ministry of Federal Affairs and Local Development (MoFALD), which this ET regards as being the ideal place for the Project. Collaborating ministries and the District Development Committees (DDCs) may (or should) be regarded part-owners of the project. The project owners are the ones that have to adopt the % products+ and make them work. The Project Owner should be engaged under clear terms including establishing that the key result areas for the project are consistent with the organisations qvalues, and, overseeing the performance of the project.

Time and efforts should be spent on developing project ownership at all levels of government during project preparation. Adequate consultation with government agencies, development partners, and non-government organizations helps ensure that the Project design promotes ownership. More government involvement during recruitment of consultants can also help build ownership and produce good results.

In the case of SEAM-N, the ET found that those who should own the project, at least partly, did not have the feeling of being project owners. This was most clearly expressed from collaborating ministries, but also by district representatives who sometimes felt themselves pushed by the Project, and not enough listened to. The latter stated that the Project came with one solution for all, not always adapted to the local situation, and the district officers were placed in a % take it or leave it+ situation. On the other hand, other interviewees stated that Project staff was listening to their views and adapted the solutions accordingly.

Use a Theory of Change approach: For an environmental project aiming at behavioural change, such as SEAM-N, a ToC approach is most suitable. The ToC is essentially a description and illustration of how and why a desired change is expected to take place in a particular context, focusing on mapping out or **%illing** in+what are the missing factors between the present situation and the desired goals, identifying all the conditions and outcomes that must be in place for the goals to occur, including those behavioural changes expected as a result of the project. The outcomes are looked upon as preconditions for achieving the long-term goal. This thinking leads to activities that are linked to a detailed understanding of how change actually happens.

The ET is convinced that if SEAM-N had used ToC thinking in its design, then much more emphasis would have been placed on ownership, communication and national level engagement in project activities, from the beginning of the project. (The ET-formulated ToC Framework for the SEAM-N project is further discussed in section 5.3 below.)

Think of end results from the beginning: In line with using a ToC approach the end results must be in the mind of all owners and project workers from the very beginning of a project, else too much energy may be placed on achieving all the many &mall+activities a project is to carry out. Achieving the end results and sustaining the same need be in the mind of all people engaged in leading positions of a project, constantly. A clear exit strategy, formulated from the beginning, a communication strategy and an exit plan for sustainability would have been instrumental.

Need for a communication strategy: In the opinion of the ET, the SEAM-N lacked a clear communication strategy and this has limited the final results of the project. In line with adoption of a ToC approach a communication strategy should include a clear identification and formulation of communication means and activities with identified key individuals, groups of people and segments of society, expected for behavioural change as a result of the project. In other words, formulate what behavioural changes are needed and develop a strategy for reaching and communicating with each individual, group and categories.

A very good exit is needed in all development cooperation programmes/projects. In the case of SEAM-N it is obvious that without a proper exit strategy and plan, the Completion Phase main focus was diverted towards fulfilling contract requirements such as submitting completion reports and other deliverables to the clients and transfer of assets to the recipient partners. Thus, the project ownership and sustainability issues were left behind. This lesson was revealed in the discussions with line ministries in Kathmandu.

Integrate human rights aspects: Human right (HR) aspects need to be addressed in a project, in its own right but also for sustainability. Despite producing a rich base of human resources, SEAM-N¢ efforts were less oriented on the human rights aspects connected to basic environmental services. When rights holders internalize their rights to clean environment and claim fair and functioning governance systems, they will have an influence on the attitude and implementation at the duty bearersqlevel towards high efficiency, effectiveness and accountability. In this regard, SEAM-N could have aimed at strengthening networking among all relevant stakeholders for a united process of demands for improved environmental health and services.

*Provide a basis for follow-on programme/project/activities:* Commendably, in its Completion Phase the Project assisted districts and municipalities in developing strategic environmental plans and short-term environmental action plans for the post-project period. The lesson is that almost any development project could to the same, help stakeholders to make plans for continued application of project results, indeed a very practical sustainabilitymeasure!

At the central level, it is fair to state that the SEAM-N lessons are brought forward under the EFLG framework, as implemented by MoFALD. However, one main objective of SEAM-N, to reduce industrial pollution, might not be given enough attention, which in turn means that expected environmental health improvements may be limited.

# 4.2 Project specific issues and lessons

With regard to lessons learned, the ET attempted to answer the following questions:

- What are the environmental administration and management systems which proved to be success / failure? How can the existing practices be improved using lessons learned from the region?
- What lessons can we learn from the project on the factors contributing to increase women's participation in project activities, planning, meetings, trainings, monitoring as decision makers and the factors contributing to improved gender relationship of mutual respect and cooperation between women and men?
- What lessons has the project gained in mobilizing women led CBOs and social mobilizers, such as WASH committees, water usersqcommittees and Female Community Health Volunteers, to achieve project goal of increased VDC awareness and environmental management at local level?

To answer the first question the ET is of the opinion that the following functions may be regarded as a success: Environmental Sub-Committees, the annual work plan with costing, the local level M&E systems, the green clubs in schools, the landfill in Dhankuta, Municipalities and DDCs fully equipped with skilled human resources to carry forward SEAM-N lessons, the PCC system for industries, and the EFLG programme addressing SEAM-N lessons. However, the laboratory in Biratnagar, which is an essential service center for the PCC issuance process, does present certain doubts about its management efficiency and financial sustainability.

A discussion on other lessons and issues follows:

*Make reference to the Base-line data and follow-up:* Making use of the base line information and data is a must to achieve a realistic plan for a project. In the initial work in the Completion Phase SEAM-N carried out a study and prepared baseline data. However, this was not referred to during implementation of project activities. This has led to a diversification of project staff engagement, time

and budget, hampering achievement of some planned activities of project. Periodically the SEAM-N could have reviewed operational status by referring to the existing baseline information and logframe in order to keep the project on track.

Cooperate with other on-going interventions in the region: The ET concluded that SEAM-N could have had much more impacts by building synergy and cooperation with the several other programmes and projects operating in the region or even in the same districts, with similar objectives, e.g. those projects mentioned in section 2.1 above. From primary interactions with concerned people the ET found that there was very little or no coordination and cross learning among these projects. In the understanding of the ET, knowledge and experience from others were not collected or analysed, and planning was not coordinated. Thus, the project missed a rich opportunity of learning and potential collaboration for enhanced outcomes and sustainability. A lesson can be drawn that learning and sharing need to be an integral part of project design and planning for building up coherence, collaboration and coordination.

Because of the insurgency SEAM-N Phase I could have had a hold: The lesson is that there need to be a plan B when a new project is started in a politically critical and unstable situation. The starting years (2001-2002) of the project were the years of peak of the Maoist insurgency in the country. The project began its operation but could not implement all planned activities as expected. It had to bear costs of project staff, rent of office building and all logistics costs to maintain project presence in the region. Instead the project could have postponed its launch or be kept on hold to a more favourable time.

Support leadership development and engage leading champions: Recognizing and building on the capacity and enthusiasm of local leading champions is very important for development projects to make change happen. This was clearly demonstrated in the SEAM-N case.

Particularly in its second phase, the Project assisted a significant number of local level change agents as leading champions on environmental cause. The ET was impressed by the level of dedication, knowledge and accountability attitude shown by the Sakhejung model VDC secretary, the Environment Officer of Dhankuta Municipality, School teachers in Bhedetar, young women and men entrepreneurs in Bhedetar, Namaset Jharna park, and VDC Secretary of Bhedetar (must have been many more who the ET could not see) and learned one common lesson: projects like SEAM-N should work for modern leadership and assist personalities who can lead their own communities towards improved environmental health.

Gender and social inclusion is a means for higher and more sustainable results: Any development intervention, be it a technical or social, can produce higher and more sustainable results by adopting a gender and social inclusion approach. It is an inevitable element for project success. The second phase of the project strengthened its work on a gender and social inclusion approach in all local level activities. SEAM-N mobilized women and DAGs through raising their awareness on environmental health and family health, convincing them to adopt ecological sanitation (EcoSan) toilets, ICS, biogas, ODF related activities, plastic re-usage for handicrafts, and promotion of eco-villages. Practically it is the women in the Nepali society who hold main responsibility for water and fuel wood management at the household level. The project correctly targeted these activities at women. Ultimately these users of project interventions at household level have been maintaining, benefiting and spreading also public sanitation behaviour.

Include school activities: Mobilising teachers and students for behavioural change actions and messages can produce rippling effects. Towards its second phase of operation, SEAM-N encouraged school teachers and students to promote environmental awareness and practice EcoSan in school and household level. The ET visited and discussed the school environmental programme in Bhedetar-3, Dhankuta. From discussions with the Head Master, teachers and even pupils the ET became convinced about the effectiveness of the strategy. The school environmental promotion programme (SEPP) activities of SEAM-N remained highly effective through supporting toilet construction separately for boys and girls, formation of studentsqGreen Eco Clubs, holding awareness raising orientation and campaigns, and even reaching all parents through their children with obligatory messages on ODF and sanitation, including washing hands and using clean drinking

water. The recipient schools successfully demonstrated and non-recipient schools replicated<sup>13</sup>. Any new project design on environmental awareness and adoption aiming at behavioural change on sanitation and hygiene at household level will benefit from this lesson.

Do not make false promises for incentive: Sometimes, making promises on rewards and incentives to the best performers might rise their expectations. This might lead to disappointment if not materialised, and even hamper project implementation. The ET met a few champions who were promised by senior project officials about exposure to other successful models in the region or in another country, which however never happened. This is not a correct behaviour of the project seniors to dedicated staff and local stakeholders. In fact, false promises may kill the spirit of innovators. Apart from showing disappointment and accusing SEAM-N staff of not always honouring promises, the ET did not find that the unmet promises had affected results. Anyhow, this gives us a lesson for being careful, and to be well prepared before making any promises to staff or stakeholders.

Initially paying salaries for local officers: The SEAM-N project was successful in mainstreaming environmental responsibilities and accountability in local governance system by establishing and strengthening Environment Sections in DDCs and municipalities in all project districts. SEAM-N made an arrangement with DDCs/municipalities so that the project initially paid their full salaries and related costs and that the officers gradually were integrated into DDCs/municipalities and eventually fully paid by them. SEAM-N also made efforts to consider GESI aspects in this process by recruiting gender balanced and caste sensitive staff. Contrary to ‰ormal+development cooperation policies the ET finds that this salary-paying practice was a successful strategy for mainstreaming environmental issues. Under the Nepali context at the time, at the beginning of the Project environmental officers the ET found that the transfer of staff from project salary to GoN salary was smooth, with the same staff continue working and, in most cases, with high motivation.

### 4.3 Theory of Change

When looking back at the initial Theory of Change (ToC) formulated by the ET and presented in section 2.3 above, combined with the findings and conclusions of this post-evaluation, it is quite obvious that the SEAM-N project did not reach the end of chain of effects.

Making an overall assessment based on the presentations and discussions in Chapters 3 and 4 above, the ET concluded that the project came to step C (Immediate outputs) of the ToC, being:

- É Improved environmental health situation
- É Guidelines taken forward
- É Improved capacity of beneficiaries
- É Environmental projects funded

but did not enter into a step D (Intermediate outcomes) situation, characterised by the following points:

- $\acute{E}$  SEAM-N approaches available for wider target groups
- É Guidelines approved
- $\acute{E}$  Cooperation for environment and health

which would have been expected.

The ET believes that the adoption of a ToC approach, a connected communication strategy and a proper exit strategy/plan would have helped the project focus its Completion Phase resources for impacts on the national policy level, maybe even reaching step E of the ToC:

<sup>&</sup>lt;sup>13</sup> According the Head Master at Bhedetar-3, but no of replicating schools not known.

- É Sustainable environmental development in Nepal
- É Improved capacity of wider target groups
- É Cooperation for sustainability and health

which would be there several years after end of project, to some extent attributable to SEAM-N.

### 4.4 Exit strategy and plan

There is a mutual interest among the development parties to see to it that the Projectos hard work is used after project closure so that there is a valuable impact on the wider environmental sector of Nepal. An on time prepared exit plan should spell out how the project deliverables and achievements would be maintained, replicated, hosted, accessible, disseminated, etc. to secure project sustainability. However, SEAM-N did not make such a sustainability-focused exit strategy and plan.

As said above, an exit strategy and plan should be a sustainability plan. It should also be a living document, adding new items and making amendments as activities are carried out in the project and its environment. Thinking in exit terms will help setting deadlines for important events, decisions and activities in order to attain project goals before time is out. As part of its exit plan, there should be great efforts to integrate the lessons and results from the capacity building and lessons from the policy formulation processes on different levels.

Accordingly, an exit strategy describes how the project intends to rationalize its resources while ensuring that progress is made towards achievement of goals. For both governments the exit strategy provides a means for withdrawal from the commitments made, whilst ensuring a %eturn on investment+. Formally, for GoF the %exit+ refers to the conclusion of all its externally provided resources (financial and technical) to the Project, while for GoN %exit+refers to its commitments made in bilateral Agreement with the GoF in regard to the Project.

A more detailed exit plan should include actions for ensuring sustainability and a clear framework for officially handing over purchased equipment, as well as a commitment on how it shall be maintained and managed after the project has ended.

There are phasing out plans in both Project Documents for Phase I and Completion Phase. For Phase I the following plans and activities were included:

- Sustainability plan (Sustainability Strategies for Support funds; Capacity building and technology transfer for environmental units)
- Handing over plan (project facilities, documentation etc.)
- Plan for finalising project activities
- Auditing

The ET took note that the Phase I plans do not include anything aiming at replication or national policy influence even if activities to that end were included in the project design.

In the Project Document for the Completion Phase it was noted that an unplanned or sudden termination would undoubtedly put the continuation of activities in danger, and plans were made for phasing out slowly and handing over the responsibilities to the local bodies. However, even after termination of the project, local authorities were complaining about sudden termination of the project. As far as the ET could judge the perceived %udden stop+did not endanger the continuation of activities, which anyhow were spelled out in the environmental plans that the Project had helped them to develop.

In the opinion of the ET, and in spite of the addition of a Component IV to the Completion Phase for national level work, project resources and TA inputs were not allocated sufficially for the important task of bringing local experience and produced guidelines and standards to the national level for policy adoption.

SEAM-N exit strategy and plan should also have included **%**est+and **%**orst+case scenario analyses. Examples from the region and globally could have been used to develop best and worst case scenarios for environmental management within a decentralised system of government in Nepal.

With regard to exit strategy and/or exit plan the ET suggests the following points for consideration:

- Include the exit strategy section in the programme document. Then, in the last two Annual Work Plans, include more detailed exit plans with timeline and responsibilities.
- <sup>"</sup> Include explicit actions for sustainability of results in the strategy/plan.
- Include analyses of the replicability of experience, models and procedures, etc. intended for adoption at the national policy level and in other parts of the country. The replicability analysis should answer questions such as: where and in what situations may the model be used? How much will a nationwide application cost? What capacities are needed, and do we have them or do we need to develop them? What are the benefits?
- Include dissemination activities such as workshops and media communication, discussing policy and scaling up of results from the project.
- <sup>"</sup> Draft and present environmental management policies, applicable for different levels.
- <sup>"</sup> Leave behind approved action plans, with budgets.
- <sup>"</sup> Take-over discussions/negotiations. Agree on responsibilities.
- Systematic placing of all documents in an archive or a library and on web-site(s). Provide hard copies, well structured, to archive. Make and distribute CDs and videos with copies to all relevant ministries and programmes/projects.
- <sup>"</sup> Let the phasing-out plan and timing be well known to all participants and all stakeholders.
- <sup>"</sup> Set aside resources for dissemination of the completion report to all stakeholders and partners for future needs, including a list of contact details.

# **5. RECOMMENDATIONS**

### 5.1 General

A purpose of this post-evaluation is to *inform* the two countries about the best strategy, replicability and avoiding problems in environmental management and planning, as well as in formulating future development cooperation projects in the environmental sector*i*.

With regard to the SEAM-N Project the GoN and GoF are recommended to jointly:

- Re-vitalise the website, documenting SEAM-N results and making all standards, guidelines, reports and procedures available on the public domain.
- Within half a year from today, organise a *%*ooking-back-and-forward+workshop with the aim of enhancing the sustainability of project results. The main content would be to show what was achieved, what can be replicated, what can be used on the national policy level, where to find the documentation and recommend action. Invite DFID as an organising partner.
- Invite participants to the workshop from relevant GoN ministries and agencies, donor and other project representatives, international and national advisers/experts of the Project and staff of the ENSC, representatives from the industry and representatives of the local governments of participating districts.
- Assess SEAM-N interventions with regard to GESI lessons and effectiveness of integrating GESI aspects in order to guide future projects, including the ongoing EFLG programme.

Some other recommendations for development cooperation project work are:

- Adopt a Theory of Change approach in all projects aiming at behavioural change. This includes clear identification of organisations and individuals and a communication strategy for reaching and interactions with them.
- <sup>"</sup> Include measures for policy development and scaling up already in project design.
- <sup>"</sup> Define a right based approach from the very beginning to facilitate demand driven processes and accountability.
- Mainstream GESI issues both as a means and an end approach avoiding the practice of making women only a vehicle for success.
- <sup>"</sup> Include startegy and plans for internal and external communication.
- <sup>"</sup> Make base-lines, with repeated studies of the indicators to follow the development and adjust working methods.
- Make needs assessments, followed by capacity development and human resource development plans.
- Include exit strategy in programme documents and request projects to include exit plans in their annual work plans.

Finally, recognising that leadership is extremely important in development work, including in cases like SEAM-N, the ET recommends:

Allocate resources for development and application of a modern leadership culture where leaders in the GoN and projects who can make vision, mission and core values concrete to all co-workers; have communication and listening skills; understand about sustainability; can mobilise and make staff enthusiastic; have facilitation and coaching skills; are good at intercultural work, and can master change management.

The latter recommendation could even be the basis for a separate project under the new Finnish country strategy.

### 5.2 Recommendations to GoN

The following general recommendations are made to the Government of Nepal:

- The model envisioned by the project for local level environmental administration should be replicated throughout the country.
- Design of future projects should from the very start include measures for policy contribution and an analysis of the need and models for scaling up.
- Work for increased level of ownership from relevant ministry(ies) in projects that pilot models and solutions intended for adoption nationwide.

With regard to SEAM-N follow-on activities the recommendations are:

- Cooperate with the Embassy of Finland and DFID to organise a looking-back-and-forward workshop as described above.
- Carry out baseline follow-up studies in the SEAM-N districts and encourage the DDCs and municipalities to use that information while designing future development and environmental programmes.
- Support the Environmental Service Center to cater local level environmental quality data and dissemination of the same.
- Continue the work of the Environmental Monitoring and Indicators Network including finalization of a National Environmental Data Sharing Policy.
- Make effective use of the National Core Set of Environmental Indicators by publishing environmental and monitoring data on the public domain.

- Review the lessons on GESI impacts and use them for enhancing the EFLG implementation processes.
- Build upon the existing strengths of School Environmental promotion programme and integrate this into the EFLG framework and other environmental projects for wider impacts of environmental awareness and demand claims at household level for environmental services.
- Replicate widely the Green City and Green Club initiatives as vital mechnisms for peoples participation at local level.
- Conduct periodic assessment of socio-economic impacts of environmental programmes and collect lessons for improving national policies on environemental maangement in a user friendly way.
- Continue technical advisory support and issue relevant permits to the Environmental Service Center in Morang district to become self relaint for longer term sustainability and demand creation. Use results generated from ENSC for future decision making.
- Develop and maintain an interagency communication strategy along with an operational plan of action for effective interagency coordination in any future project and programme.
- Include CSOsqrole for mass dissemination and mobilization of public opinions for receving constructive feedbacks for improvement of projects and programmes.

### 5.3 Recommendations to GoF

The following recommendations are given to the MFA of the Government of Finland:

- In the new country strategy include development of modern and participative leadership within GoN and projects.
- Consider funding the EFLG programme from year 2017 onwards, i.e. when DFID funding has ended. The EFLG programme contributes to improved environmental health which would fit well into the new country strategy.
- Consider posting the CTA or a senior policy adviser within a relevant ministry of the recipient country in all projects that at least partly aim at policy influence.
- Make inclusion of exit strategies and exit plans compulsory in project documents. (As already included in the bilateral manual.)
- Make it compulsory to have overlapping periods when the CTA or other key positions are changed in a project for effectively transferred information, experiences and the working culture of the project.

Connected to the work of the SEAM-N but not directly based on finding from this post-evaluation the ET is of the opinion that the GoF should:

- Activate the Public Sector Investment Facility (PIF) for the environmental technology investments among large companies in Nepal.
- Enhance sustainability of SEAM-N results by initiating an ICI collaboration arrangement between the Department of Environment of Nepal and SYKE of Finland for training of environmental inspectors for posting in all districts of Nepal.

# Annex 1 Terms of Reference



ULKOASIAINMINISTERIÖ TE Osasto ASA-40 Suittio Nina/ KAT Seppälä Pekka

TERMS OF REFERENCE EVALUATION UH2015-023586

5.2.2016 V 2.0

Vastaanottajataho Yhteyshenkilö Osoite

notes

#### UHA2011-007999, 66005801, 66010701, 66010702, 66013601

# Nepal, The Post-Evaluation of Strengthening of Environmental Administration at the Local Level in Nepal (SEAM), years 2001 Ë 2014

#### Asian kuvaus

#### 1. Background to the evaluation

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

Both Nepal and Finland have witnessed fundamental changes during the past two decades. In Nepal, the most prominent factor has been a decade of insurgency followed by years of building democratic institutions. The economic changes have also been significant. Both countries have learned new ways of conducting development cooperation. Both countries have advanced their policies in relation to development cooperation.

Development cooperation between Finland and Nepal began in 1983, when Nepal was selected as one of the target countries for bilateral cooperation. The cooperation has focused always on a few selected sectors. Environment was selected as a major sector in the 1990s. Nepal produced its Environmental Policy and Action Plan in 1993. Based on it, an environmental identification mission was conducted in 1995 and environment selected as a key sector in 1996. Initially several project ideas were selected and in the end of 1990s two environmental projects were launched. The cooperation has continued until the present day. In the latest Country Programme for 2013-2016, the environment is not any more a core sector. The bilateral cooperation project was finished in the end of 2014.

In Nepal, environmental issues have gained prominence during the past decades when pollution and other hazards have reached new levels. Environmental issues have been increasingly debated in Nepal. The Environmental Protection Act and Environmental Protection Rules were formulated in 1997 and amended in 1999. The big issue for Nepal is how to provide resources to environmental administration in the situation when there are many pressing development concerns. Environmental administration has taken place in different kinds of ministry level setting during the years. Environmental administration has also been affected by Local Self-Governance Act of 1999.

In 2010's, Nepal is facing a growing amount of environmental problems. For example, air pollution is perceived at the level which is one of the highest in the globe. Ministry of Science, Technology and Environment is planning to expand the staff on environmental inspection heavily. Now it is an

appropriate time to look back and analyse what can be learned from the past experiences of developing environmental administration.

The theme of the evaluation is the support to environmental administration and management at a local level in Nepal. This is a sector where there have been relatively few donor-assisted projects. The environmental administration has developed rather slowly and the local level capacity of the environmental administration has had limited resource base.

#### **1.2.** Description of the programme to be evaluated

Nepalese-Finnish cooperation in environment sector is based on identification mission in 1995. Based on this identification, Environment Support Fund for Non-Governmental Organizations (NGOs) and Community Based Organizations (CBOs) was implemented between 1999 and 2003. Also Environmental Labelling for Export Industries in Nepal project was implemented in 1999-2002. The evaluation team should familiarise with the completion reports of these projects in order to understand history. However, these two projects are not covered in the final evaluation.

The evaluation covers the Strengthening of Environmental Administration and Management at the Local Level in Nepal (SEAM) cooperation from 2001 to 2014. The programme has advanced through the following phases:

- SEAM-Nepal phase I, 2001-2008, with the aim of developing a model for local level environmental management that could be disseminated throughout the country. The project areas were Dharan-Biratnagar industrial corridor, covering the urban parts of Sunsari and Murang districts. The project budget was 2.8 m<sup>2</sup>.
- SEAM-Nepal phase II, 2008-11, with the overall objective to improve the state of the environment and to enhance environmentally sustainable rural, urban and industrial development and utilization of natural resources in the project area. The project area was extended to four other districts in the south-east corner of Nepal (Dhankuta, Ilam, Jhapa and Panchtar). The project budget was 3.5 m<sup>2</sup>.
- Bridging phase, August 2011 . December 2011, no cost-extension with similar objective as in phase II.
- SEAM-Nepal, completion phase 2011-2014, with the overall objective that the environmental health of the beneficiaries has been improved by reducing the contamination of environment in the project area. The project budget was 3 m<sup>2</sup>.

The SEAM I was planned already in 1997-1998. However, the difficult circumstances were not conducive for launching the project. The SEAM I launching took place in 2001 on the time of insurgency. The security situation did not always allow the project team to travel outside their offices. The difficult working conditions and major changes in personnel characterised the SEAM I. A further challenge was the regional environmental units to be strengthened were not established for several years. The project was expected to finalise in 2005 but it was extended to 2005-2007 with some additional financing.

SEAM II was planned in 2008. The appraisal conducted in the same year proposed some major changes into the approach. The inception report of 2009 became as a de facto project document. SEAM II was subjected to Mid-Term Review (MTR) in 2010. The MTR concluded that the environmental issues had not been given priority in Nepal due to political situation. SEAM II had been active in raising environmental awareness but the resources were thinly spread over a large area with a high number of activities.

SEAM Completion phase was planned in 2011. The completion phase had largely similar targets as the second phase. However, it expanded its operations to the national level. The environmental administration was at the core of the project. The environmental officers and the environmental subcommittees of the Dairy Development Co-operations (DDCs) were provided with support. The main focus was on the institutional strengthening of environmental sustainability aspects in the national planning and reporting modalities. SEAM completion phase included four project components with 18 expected results. This provided a formidable challenge for an exit strategy and for handing over the results.

What have been the key features of the SEAM project layout? Perhaps the most prominent feature is the attempt to deal with concrete local environmental problems and to combine the problem oriented approach with the task of developing administrative management arrangements. Examples like environmental laboratory or the inspection of major industries illustrate the point.

It is noteworthy that the target groups of the SEAM have been wide. While some activities focus on household, others focus on industries, Village Development Committees (VDCs) or municipalities. The wide variety of the targeted 'polluters' has widened the scope of the project.

#### 1.3. Results of previous evaluations

The Government of Nepal has not commissioned any major evaluation on the cooperation.

The Government of Finland has evaluated the country programme between Finland and Nepal in 2012. The first MTR of SEAM I was conducted in 2004. Large number of training programmes had been launched as a result. Awareness of environment protection among people had increased. To achieve sustainability the report pointed out more emphasis in strengthening Community Based Organizations, CBOs. Serious consideration of the Phase II was recommended, as it seemed to be impossible to achieve results in a short time frame. Also synergy with other donors and donor funded projects was requested. The second MTR of SEAM II conducted in 2010. The last MTR proposed the launching of the completion phase.

The Completion Phase had several administrational innovations and reforms as main sustainability targets, which were scheduled to be completed by the end of 2014. Thereafter the responsibility of sustainable functioning of these established institutions, networks, portals, managements and programmes are taken care by the local public officials.

#### 2. Rationale, purpose and objectives of the evaluation

The objective of the evaluation is two-fold. (i) The Government of Nepal may learn lessons on how to strengthen the environmental administration and management. (ii) The government of Finland may learn how to run development projects related to environmental management.

Thus the focus is on the lessons learned. The focus is oriented towards the future involvement in similar processes. The evaluation team is encouraged to show inspiration in locating replicable best practices or avoidable practices.

The documentation of the final evaluation should take into consideration the different needs of the two major clients. Both of them need to find readable and straightforward analysis and recommendations that benefit their contemporary needs.

The evaluation is also expected to provide an impartial view on the relevance, effectiveness, efficiency, sustainability and impact of the SEAM. In this manner it is expected to follow the Organisation for Economic Co-operation and Development (OECD) best practices on evaluation.

### 3. Scope of the evaluation

The scope of the evaluation is SEAM-Nepal from 2001 to 2014. More emphasis is placed on the most recent phases.

The geographical scope of the project has expanded from SEAM I to SEAM completion phase.

The scope of the evaluation does not include two early environmental projects from 1990s, nor the Regional Solid Water Management project launched in 2010. However, it is useful for the team to be aware of their rationale.

The scope of the evaluation is environment sector. Thus the linkages to water, climate change or other sectors do not need to be covered.

The scope of the evaluation covers all levels from national government to local level households. The level of international environmental obligations need not to be covered.

The scope of evaluation covers basic information on other relevant donor-supported projects in the field of environment in Nepal. The rationale here is to find comparative evidence.

In Finland, there have been development policies of 1998, 2004, 2007 and 2012 in operation during the studied period. All of these policies have maintained that environmental issues are a major theme or a major crosscutting theme. Thus there has been a continuous support to develop environmental administration in Nepal. However, the policy issues like crosscutting themes need to be analysed against the policies of the concerned period. not against current policy.

#### 4. Issues to be addressed and evaluation questions

The main guiding evaluation questions are as follows:

- 1. What can the Government of Nepal learn on the strengthening of environmental administration and management on the basis of this project?
- 2. What can the Government of Finland learn on how to run development projects related to environmental management? Where has Finland been adding the most value? What have been the best practices and practises that have not worked well?

**Relevance** refers to the extent to which the objectives of the programme are consistent with beneficiaries' requirements, country priorities, global priorities and partners' and Finland's policies.

3. What has been the relevance of SEAM towards the objective of strengthening environmental administration and management in Nepal from the perspective of evolving Nepalese environmental policies?

**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.

4. Has SEAM had an impact on development of environmental policies, legislation and enforcement in Nepal? Has SEAM had an impact on legal powers or prosecution power in Nepal?

- 5. Has SEAM had an impact on the environmental administration and governance (for example monitoring and advisory services, permitting systems etc.) in Nepal?
- 6. To what extent have the target DDCs, municipalities and VDCs integrated environmental aspects to their planning systems? What about central level (ministries) and other relevant authorities?
- 7. Has SEAM succeeded in reducing environmental pollution in the region and contributed to the environmental health of the beneficiaries? How?
- 8. What kind of impact SEAM had in raising environmental awareness in the project area?
- 9. Have there been spin-off effects from the project and are there models/initiatives, which are been replicated elsewhere and still utilised? Which are the best practices, avoidable practices and key lessons learnt?

*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.

- 10. How effectively has the project advanced the cross-cutting objectives during the project duration?
- 11. How has SEAM fulfilled the criteria for value of money? Is the quality and quantity of the produced results and outputs in accordance with the plans? What were the costs per output? The amount in percentage the project has spent on a) administration and b) traveling expenses?

*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.

- 12. What kind of working modalities/administrative systems/approaches have improved or hindered the project to reach the target groups?
- 13. How well have the activities transformed the available resources into intended results? Can the cost of the program be justified by the results?

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.

14. What has SEAM done to promote the local ownership and local commitment towards the project goals? How successful it has been? What kind of problem has occurred?

**Sustainability** refers to the likely continuation of programme achievements when external support comes to an end. This includes an analysis on the likely continuation of achievements in human rights and gender equality, reduction of inequalities and climate sustainability. Evaluation of phasing out plans is part of this sustainability analysis.

- 15. What kinds of results are likely to sustain still 5-10 years after the project completion and without any external support?
- 16. Has the programme been able to commit local population and authorities to gain sustainability? In which ways?
- 17. Are established institutions (e.g. environmental laboratory) by SEAM continuing their work independently and sustainably?

**Coherence** refers to issues beyond development cooperation focusing on contradictions or mutual reinforcement with other policies to achieve the development objectives.

- 18. How well was SEAM aligned with the Nepal development priorities and harmonised with the other support provided for the sector?
- 19. Did contradictions on any level of the public sector or the government's policies prevent the achievement of the programme's development objectives?

#### 5. Methodology, evaluation process, time schedule and reporting

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.

The evaluation is expected to be conducted in phases over a period of eight weeks.

*Kick-off Meeting:* The assignment will begin with a kick-off meeting at the Ministry for Foreign Affairs (MFA) in Helsinki, the Embassy of Finland in Kathmandu via video-conference.

**Desk Review:** The consultant is expected to carry out a desk review based on the documentation provided by the MFA and the Embassy of Finland in Kathmandu.

*Inception Report:* Before field work and on the basis of the desk review, the consultant shall present an inception report. The inception report consists of the initial findings and conclusions of the desk study, an evaluation matrix and a detailed and updated work plan and detailed division of labour within the team.

• max 10 pages plus annexes

*Interviews and Field Work:* The meeting arrangements and logistics shall be done in close cooperation between the team and the Embassy.

**Debriefing:** At the end of the field mission, the team shall prepare and organize a meeting to present the key findings and recommendations to the Embassy and other stakeholders in Kathmandu or jointly MFA via video-conference. A follow-up debriefing shall be organized at the MFA in Helsinki.

**Draft Final Report:** The draft report shall be submitted to the MFA one week after the follow-up debriefing. Draft final report will combine the desk study and the field findings. The Ministry and the Embassy will submit comments within two weeks after receiving the draft final report.

• max 40 pages plus annexes (including two annexes on lessons learned)

*Final Report:* The final report shall be submitted to the MFA two weeks after receiving comments on the draft report. The final report should be in English.

• max 40 pages plus annexes (including two annexes on lessons learned)

Presentation on the evaluation findings: in the closing seminar in English by the Team Leader

Each *deliverable* (listed bold above) is subjected to specific approval. The OECD/DAC and the EU evaluation quality standards are used in checking that the reports deal with necessary dimensions of the topic. 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.* 

#### 6. Quality assurance

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

#### 7. Expertise required

The composition of the evaluation team are not predetermined, but it is expected to have at least one international and one national expert in the team.

The qualifications of the persons are presented in the Instructions to Tenderers (ITT).

The evaluation team shall ensure solid experience and knowledge, which is also specified in ITT.

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

#### 8. Budget

The total available budget for this evaluation is 80.000 euro, excluding VAT, which cannot be exceeded. The amount is a lump sum. The tender competition is based on fixed price and competition on quality. The fee for junior expert is fixed at 150 per day including all salary related costs but no overhead.

#### 9. Mandate

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

# Annex 2 List of places visited and people met

During the field visit to four out of six project districts, the ET visited:

#### llam district:

- LDO at DDC, Environmental officer and concerned staff in DDC,
- Solar panel fixed at DDC
- Municipality, Environmental officer and administration Officer and intern staff
- Ilam jail: biogas operation for bigger cooking and relevant use of the slurry
- Ilam police office: Rain water harvesting technology for water supply
- Landfill site
- ICS at Makhmali Sunakhari lalipop (milk candy) cottage Industry

#### Sakhejung SEAM-N model VDC, Ilam:

- Public Toilet fixed to biogas,
- individual Household level biogas and toilet,
- Spring water protection,
- Organic Tea industry, with energy efficient heating

#### Sunsari district:

- Municipality, environmental officer
- JBS food industry and Reliance Spinning Mills,
- Khanaar VDC organic firming

#### Dhankuta district:

- Municipality Environmental Officer
- Landfill site and on site lady staff

#### Bhedetar VDC, Dhankuta district

- Youth club representative in Namaste Jharna park
- FGD with women users and social mobilisers
- School teacher/s with SEAM-N funding and non funded
- School toilets

#### Morang district:

- Morang Merchant Association (MMA)
- Laboratory and its staff

#### • List of persons met

S No	Name	Designation	Organization	Remarks
1	Dr Pekka Seppala	Counsellor/Deputy Chief of Mission	Embassy of Finland	
2	Dr Chudamani Joshi	Special Advisor	Embassy of Finland	
3	Mr Jukka Ilomäki	Education, Co- Operation	Embassy of Finland	
4	Mr Chakra Pani Sharma	Under Secretary, Chief of Environment	Ministry of Federal Affairs and Local Development	

		Section and Ex NPD, SEAM-Nepal		
	Mr Narayan Raj Timilsina	Joint Secretary , Chief of Population and Environment Division	Ministry of Population and Environment	
6	Mr Tulasi Narayan Maharjan	Section Officer Environmental Standard and Monitoring	Ministry of Population and Environment	
7	Mr Surendra Subedi	Joint Secretary and Chief of Science and Technology Promotion Division	Ministry of Science and Technology	Previously Under Secretary at Department of Environment
8	Mr Ram Chandra Paudel	Under Secretary and Chief of Environmental Standards and Monitoring Section	Ministry of Population and Environment	Previously Under Secretary at Ministry of Labour and Employment
9	Mr Rishi Raj Koirala	Joint Secretary and Chief of Technology Transfer and Environment Division	Ministry of Industry	Previously Under Secretary, Ministry of Environment
10	Mr Prabhat Kumar Singh	Under Secretary and Chief of Environment Section	Ministry of Industry	
11	Mr Amit Acharya	Under Secretary and Chief of Technology Transfer Section	Ministry of Industry	
12	Mr Prajjwal Raut	Freelance		Ex Vice Deputy Team Leader, SEAM-N
13	Mr Bikrant Bikram Chand	Entrepreneur		Ex Deputy Team Leader, SEAM-N
14	Mr Subhash Chand	Freelance		Ex District Environmental Advisor, SEAM- N
15	Mr Sushil Paudel	Shelter Project Manager	Tearfund	Ex SWM Expert, SEAM-N
16	Ms Pushpa Koirala	Programme Officer	Environment Friendly Local Governance	Ex Sr Environment Expert, SEAM-N
17	Mr Yub Raj Bhatta	Consultant	Ministry of Population and Environment	Ex OHS Expert , SEAM-N
18	Ms Bishnu Thakali	President	WEPCO Nepal	

19	Mr Manjit Dhakal	Board Member	Clean Energy Nepal	
20	Mr Anil Upadhayay	Information Officer	NGO Federation Nepal	
21	Ms Padmja Shrestha	Director	ENPHO	
22	Mr Daya Sagar Shrestha	Executive Director	NGO Federation Nepal	
23	Mr Madan Koirala	Local Development Officer	District Development Committee, Ilam	
24	Mr Om Raj Dhungana	Senior Divisional Engineer	District Technical Office, Ilam	
25	Mr Mahendra Chauhan	Accountant	District Development Committee, Ilam	
26	Ms Indra Maya Subedi	Biogas user	Shekhajung VDC, Ilam	
27	Ms Indra Kumari Subedi	Biogas user	Shekhajung VDC, Ilam	
28	Ms Shushila Karki	Biogas user	Shekhajung VDC, Ilam	
29	Mr Netra Bahadur Magar	Biogas user	Shekhajung VDC, Ilam	
30	Mr Bed Mangal Khatiwada	VDC Secretary	Shakhejung VDC Office, Ilam	
31	Mr Rudra Basnet	Office Assistant	Shakhejung VDC Office, Ilam	
32	Ms Yurina Rai	ICS user and candy entrepreneur	Shakhejung VDC, Ilam	
33	Mr Kamal Mainali	Proprietor	Pathibhara Orthodox Tea Industry, Skhakejung VDC, Ilam	
34	Mr Kamal Kumar Sah	Administrative Officer	Ilam Municipality	
35	Mr Kamal Mainali	Assistant, Environment Section	Ilam Municipality	
36	Mr Krishna Sapkota	Section Officer	Ilam Municipality	
37	Mr Bhimsen Shrestha	Urban Governance Expert	Ilam Municipality	
38	Ms Preeti Shrestha	Volunteer on SWM	Ilam Municipality	
39	Mr Pushpa Chaudhary	Environment Officer	DDC, Sunsari	
40	Mr Kapil Dev Mehata	Environment Officer	Inaruwa Municipality Sunsari	

41	Mr Umeshwor Mehata	Engineer	Inaruwa Municipality Sunsari	
42	Ms Sunita Dulal	Office Assistant	Inaruwa Municipality Sunsari	
43	Mr Krishna Ghimire	School Teacher	Sita Devi Higher Secondary School, Bhedetar VDC, Dhankuta	
44	Mr Dilip Limbu	Local Entrepreneur and President	Namaste Waterfall Management Committee, Dhankuta	
45	Ms Buddhimyaa Limbu	Local resident and Shopkeeper in Namaste Waterfall	Sinswua-3, Dhankuta	
46	Ms Urmila Magar	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar -3, Dhankuta	
47	Ms Tankamaya Magar	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar -3, Dhankuta	
48	Ms Chijamatai Limbu	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar -3, Dhankuta	
49	Ms Aruna Rai	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar -3, Dhankuta	
50	Ms Jhulkumari Limbu	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar -3, Dhankuta	
51	Ms Rita Gurung	Local resident and Shopkeeper in Namaste Waterfall	Bhedetar . 3, Dhankuta	
52	Mr Narayan Prasad Khanal	VDC Secretary	Bhedetar VDC Office	
53	Mr Tank Bhujel	Principal	Gramin Janata Higher Secondary School, Bhedetar VDC, Dhankuta	
54	Mr Bishnu Acharya	Member . School Management Committee	Gramin Janata Higher Secondary School, Bhedetar VDC, Dhankuta	
55	Mr Min Rijal	Volunteer	Global Action Nepal	
56	Mr Upendra Khanal	Environment Officer	Dhankuta Municipality, Dhankuta	

57	Mr Praladh Sah	Farmer	Khanar, Itahari Municipality - 11 Sunsari	
58	Ms Suprina Shrestha	Office In-charge	Environmental Service Center	
59	Ms NIsha Balmiki	Analytical Officer	Environmental Service Center	
60	Mr Pankaj Kumar Karna	Deputy In-charge	Environmental Service Center	
61	Mr Ashok Paudel	Lab Assistant	Environmental Service Center	
62	Mr Gopal Prasad Regmi	Executive Officer	Biratnagar Municipality, Morang	
63	Ms Anita Koirala	Environment Officer	Biratnagar Municipality, Morang	
64	Mr Jit Singh Bist	Director	JBS Industries, Sunsari	
65	Mr Ananta Bist	Deputy Director	JBS Industries, Sunsari	
66	Mr Mahesh Pokhrel	Sr Manager	Reliance Spinning Mills, Morang	
67	Mr Bharat Niraula	Administrative Officer	Reliance Spinning Mills, Morang	
68	Mr Pawan Kumar Sarada	President	Morang Merchant Association	
69	Mr Prakash Mundra	General Secretary	Morang Merchant Association	
70	Mr Shyam Bhandari	Executive Secretary	Morang Merchant Association	
71	Mr Govind Neupane	Governance Unit	UK Department for International Development	
72	Ms Shailee Manandhar	Governance Unit	UK Department for International Development	
73	Mr Sahaj Man Shrestha	President	Nepal Federation of Environmental Journalists	
74	Mr Nimesh Regmi	General Secretary	Nepal Federation of Environmental Journalists	
75	Mr Laxman Uprety	Past President	Nepal Federation of Environmental Journalists	

76	Mr Udaya Gupta	Under Secretary and Chief of Kathmandu Labour Office	Ministry of Labour and Employment	
77	Mr Shankar Singh Dhami	Factory Inspector	Ministry of Labour and Employment	
78	Mrs Auli Keinänen	Director, Development Consulting	FCG International Ltd	FCG Home Office Coodinator SEAM-N 2001 - 2014
79	Mr Kari Kinnunen			CTA in two periods in Phase I
80	Mr Lauri Kattelus			CTA for 1.5 years in Phase II, SYKE Home Office Coordinator 2001 - 2014
81	Mr Tapani Reinikainen		SYKE	CTA for Completion Phase

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#### Phase I

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Ms Helena Raijas

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Gothatar, Kathmandu; Tel: 01-4992068, E-mail:nep.dev@gmail.com

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- Health and Safety & Workplace Inspection Manual
- National Core set of Environmental Indicators (NCEI)
- Guidelines to rationalize national industrial pollution control and emission abatement
- Suideline for Monitoring and Measurement of EFLG Indicators+
- Categorization of most health hazard industries in Nepal
- Training Program on water quality to the Sample Collection Centers (SCC)
- Assessment of the Nepal Actions in Management of Persistent Organic Pollutants+
- Environmental Audit Guidelines for Hospital Sectors
- Training of Trainers (TOT) on Industrial Environmental Inspection

# Annex 4 Approach, methods, work plan and evaluation matrix

#### Approach and methods

The ET followed the OECD-DAC Evaluation Guidelines, integrating also MFA Finland policies on crosscutting issues and objectives as per the Finnish development policies of 1998, 2004, 2007 and 2012. The approach was built on the following main principles:

- Making wide use of existing information, including projects-specific documentation as well as best practices in related environment projects in Nepal.
- Adopting a participatory, consultative approach to the evaluation, including iterative communication with involved MFA Finland and the projector staff in ministries, relevant stakeholders, final beneficiaries and NGOs and other organisations.
- Planning and conducting the post-evaluation in ways that enhance the utilisation of both the findings and the evaluation process itself to informed decisions and improved performance of environmental administration and management under GoN and MFA respectively. This approach is often called Utilization-Focused Evaluation (UFE).
- Being rigorous about triangulation, particularly as regards verifying results achieved.
- Utilizing the knowledge of the team on undertaking of evaluations to ensure that appropriate data collection and handling practices are followed, and that division of work is agreed upon in order to draw from team membersquealth of subject experience for the analysis.
- Including cross-cutting issues (e.g., gender and human rights, climate change) as part of the Result Based Management (RBM) approach and the Theory of Change (ToC) approach.

The ET established at an early stage a tentative SEAM ToC (see Fig 1 below) as it is explicitly or implicitly perceived in the strategy and project document designs (PD). The ToC was checked and discussed in focus group discussions with MFA, GoN representatives and project staff and advisors. The ToC was used to simplify and explain how the projects were expected to bring about the desired results, and subsequent chain of outputs, outcomes and impacts.

Assessment of the efficiency and effectiveness of the projects and Nepali environmental organisations as a change and support agent was carried out to provide valuable inputs to the evaluation and recommendations. The ET analysed how well the project organization was positioned to achieve its intended objectives. Using the identified ToC the ET set out to gain in-depth understanding of Nepalos vision for behavioural change and the priorities for environmental and skills development services required in order to meet that change in the Nepali context. When assessing the environmental organisation, the ET distinguished between human resources, organisational and systems development, the regulatory environment, and the value framework using a tool for institutional assessment that is widely used and accepted in the public and private sector: the 7S Framework (originally developed by McKinsey Consultants). It is a diagnostic tool aimed at helping key stakeholders understand the performance of an organisation, and assess the various components that might affect that performance in the future.

#### Data collection

The field mission, and particularly a beneficiary assessment, allowed the ET to collect the necessary information. M&E data from the SEAM-N project directly and the NENSC hosted environmental databases were of crucial importance as a data source for the post-evaluation, especially since this is impartial through participation of the wider environmental community of Nepal. Environment Friendly Local Governance (EFLG) framework indicators were especially good examples of a practical approach to environmental management. Comparable evidence from the databases was validated from field observations and data collected, as well as other sources. Particular attention was given to analysing the key environmental problems identified through the Analytical Hierarchy Process (AHP) as these critical issues were prioritized for activities during project implementation.

At central level the project was discussed in terms of national legislation and policy, best practices, replicability and sustainability. Some of the most relevant stakeholders, such as the Ministry of

Science, Technology and Environment (MOSTE), the Environment Management Section of the Ministry of Federal Affairs and Local Development (MOFALD) and the Ministry of Labour & Employment (MOLE) (for Occupational Safety and Health) were interviewed twice for triangulation and confirmation of findings after the field visit.

Field visits to selected villages/municipalities/districts concentrated on key informant interviews at VDC, municipality and district levels. Specific project components were reviewed with municipality and district authorities responsible for outcomes and their sustainability. Village Development Committees (VDCs), Dairy Development Co-operations (DDCs) and Community Based Organizations (CBOs) were interviewed separately and focus group discussions organised at village level with representatives of final beneficiaries. The groups were selected for gender and ethnic minority representation ensuring the data could be disaggregated by gender, age and other relevant categories.

During the field visit the Green City (Ilam) and the Green Model VDC¢ were reviewed carefully for examples of best practices. Institutional capacity building and on-the-job training to the environmental officers was evaluated based on original training needs assessments, training reports and M&E data, as well as structured interviews with trainees at all levels.

Feed-back on initial findings, conclusions and recommendations came from the de-briefing in Kathmandu before departure, and in Helsinki before drafting the evaluation report.

#### Data analysis

Triangulation of collected data from various sources was the main method for data analysis. This was carried out in group discussions within the Team.

In weighting of evidence the strength of findings was ascribed by the ET according to the nature of the evidence and the triangulation of the finding. Stronger evidence means stronger conclusions. Data, such as number of participating organisations, trainees and staff numbers were assumed to be simple facts. Independent reviews and evaluations carried out in a professional way, subscribing to international quality standards, were regarded having high credibility. Information from administrative processes, financial expenditure, surveys of target groups, monitoring and evaluation data and formal programme documentation (manuals, policy documents, guidelines etc.) was regarded of high interest, especially so when methodology is explained. Findings from the field visits and interviews with stakeholders complemented the picture and verified earlier findings. Based on all sources of information mentioned above the ET created an overall picture of the impacts and lessons learned.

#### Impact contribution analysis

In assessing and verifying the changes brought about, the ET examined the validity of the causal steps of the programme along the results chain, i.e. the Theory of Change. However, causality and attribution of results can often be problematic. Other organisations, projects or processes might well have initiated or contributed to an observed positive (or negative) change. Therefore, our method was to carry out *a* simplified contribution analysis, which is an evaluation method that allows drawing robust conclusions, within a reasonable level of confidence, on the contribution of the Programme to the observed results, outcomes or impacts.

The evidence to support the conclusion is generated from the process of confirming the ToC. The ET analysed the Programme as a part of and contribution to the overall Nepali sustainable development framework, and asked affected people very clear questions on the reasons and sources of the change. The ET then weight the responses according to the strength of evidence, relying heavily on triangulation, i.e. using evidence collected from several sources based on alternative methods for data collection. When applying this approach, the ET paid special attention to identifying in a participatory manner (i) those factors/processes where the projects can be expected to have a direct influence on the expected results; (ii) factors/processes where the projects or collaborating organisations have fairly direct control of the outcomes and noticed or expected impacts; and (iii) factors/processes where the Programme have indirect influence on outcomes. In

most cases the ET found that SEAM-N had contributed to a certain development, and that a singlesource attribution is difficult, and not necessary, to establish.

For further details on the contribution analysis, see <a href="http://betterevaluation.org/plan/approach/contribution\_analysis">http://betterevaluation.org/plan/approach/contribution\_analysis</a>

The ET developed an evaluation matrix during the Preparatory Phase (Annex 2 to the Inception Report). The matrix shows what specific information will be sought and what questions were planned to be posed to different organisations and individuals. The matrix is based on the ToR, original project documents, previous evaluations and interactions with project staff in Finland and Nepal.

## Annex 5 Hypotheses from the desk studies

As one of the results from the post-evaluation desk studies the ET made a statement on the longterm effects (or non-effect) of each Phase (i.e. impacts, sustainability), formulated as a hypothesis that the ET would need to verify or falsify in the coming field work. The hypotheses and answers/discussions follows:

*Phase I:* Hypothesis: ‰he Project activities were limited to two districts, within three municipalities and seven VDCs. With the resources given, it could have been considered taking up all sections of the government, down to all wards, in municipalities and VDCs in the selected area.+

It is noted that all phases had relatively high admin costs in relation to activities benefitting the society, and Phase I, in particular, had also slow implementation progress. This is understandable since insurgency and riots and other disturbance were common during the Phase I. In this situation it could have been justified to reduce the number of staff and make a hold on investments, so that funds would have been saved for extended operations when the situation was more favourable.

*Phase II:* Hypothesis: Whe outcomes and impacts could have been significantly improved by systematically conducting assessment of Gender Equality and Social Inclusion (GESI) impacts on project managerial approach, technical interventions, user groupsgempowerment and organizational development of both implementing organizations and local institutions.+

The impacts of Phase II from GESI angles seem to be limited to the mobilisation of women and Disadvantaged Groups (DAG) for practical level involvement. Women were targeted for implementation, both as users and motivators of household toilet, biogas, Improved Cooking Stoves (ICS), small scale recycling of plastic to produce daily usable items for income generation and solid waste management purpose, small scale vermi-culture<sup>14</sup>, non-pesticide farming technology, etc. Women at local level successfully performed the role of social mobilisers and even resource persons for mobilising and ensuring that each and every household constructs and uses toilets to have the districts declared as ODF zones.

The Female Community Health Volunteersq(FCHV) can take on an important role in monitoring utilization of household level toilets, biogas, general hygiene, and others. And indeed, the FCHVs of visited VDCs had been and are engaged in activities promoted by the project and continue supporting and monitoring sanitation and other health factors. From discussion with villagers, in particular FCHVs themselves, the ET came to the conclusion that the project also could have carried out empowerment activities for this group with the aim of sustaining and replicating for long term health impacts. The ET believes that the project actually had missed an opportunity to learn from their experience and issues to develop strategies for successful scaling up of environmental reforms.

SEAM-N managed to reach out to many beneficiaries (see section 3.3.). However, despite having focus on women and DAG groups, the Project remained to be just another project to strengthen the traditional stereotyping gender roles and did not focus on transformation of power relationship between men and women and between socially marginalized and higher caste groups. This has an effect on the process of formulating local level demand for environmental services, since the user's voice could not be organized at a higher level to claim rights to sustainable environmental services. The project also missed the strategic opportunity to link grassroots learning on human rights issues around public sanitation measures to national policy dialogues. Thus the added value of GESI integration and mainstreaming to SEAM-N¢ technical interventions remained to be less vibrantly articulated in the documentation of methods and results.

In order to be effective, strategies to decrease poverty and preserve the environment must therefore pay close attention to the impact of disparities between women and men and members of the

<sup>&</sup>lt;sup>14</sup> Composting with worms

different social castes/ethnic groups on access to resources and opportunities. Moreover, there is much evidence that gender equality and empowerment of women has positive effects on a variety of other important aspects of development . notably population growth and health. An in-depth analysis of the learnings could be explored through formative research on GESI impacts of the SEAM-N project.

*Completion Phase:* Hypothesis: Communication and information sharing between SEAM-N and multilateral and bilateral donor agencies and organizations, including NGOs, have been very minimal. This can be concluded as lost opportunities from the point of view of SEAM-N, GoN and GoF. There is considerable interest in green development, green city concepts and decentralised environmental management where the SEAM-N project could have had a proactive approach providing in workable solutions for GoN, donors and NGOs.+

Based on the interviews in Kathmandu and in the field, the ET found that SEAM-N had carried out better communication and information sharing than expected from the desk study. Many agencies were invited in environmental monitoring seminars, and the Project was represented when other bilateral projects arranged workshops, etc. However, it could have been even better had the project developed and followed a well-prepared communication strategy from the very beginning to the end of the project. Communications and information sharing culminated in the Completion Phase, when SEAM-N had an office in Kathmandu. At that time a proactive approach was needed for knowledge and information sharing, and discussions on lessons learned between ministries, multilateral and bilateral donor agencies and organizations, including NGOs. Still, from interviews with government representatives, journalists and NGOs, the ET concludes that more efficient communication and information work would have been necessary.

# Annex 6 Assessment by outputs and outcomes

#### Output achievements

OUTPUTS OF THE COMPLETION PHASE

- 1. Safeguarding positions of environmental officers of DDCs are only officials in Nepal who have experience on issuance of pollution control certificates, complaint handlings, self-monitoring systems of industries (SMS), ISO 14 001.
- 2. Environmental Monitoring Indicators of Nepal has been developed and handed over to MOFALD has been developed and )
- **3.** EMIN selected in an expert assessment 10 most important environmental problems and prioritized them according to scientific method, the AHP.
- **4.** SEAM is also in process to complete a State of the Environment book, base on TOP 10 problems.
- 5. Finalizing the Enviro-Nepal database and handing it over to ENSC: Dissemination of the environmental information to the broader world through portal shall be sustained: All databases, guidelines, manuals, research papers and other SEAM publications will be made available through Enviro-Nepal and handed over to key ministries, respective local bodies, ENSC ant the local chambers of commerce.
- 6. Dissemination of concepts such as Environmentally Friendly Local Governance (EFLG), Integrated Environmental Management, Plastic bag free declaration, litter free zone declaration, solid waste burning free zone declaration and stopping of the Ensuring the continuation of the green city programme with continued ownership and participation from different stakeholder
  - Categorizing the resources spent under the programs and activities listed as per the priorities options for adaptation and mitigation in the NAPA and Climate Change policy 2011 documents, project invested 50,2407 " exclusive of all admin and monitoring cost. This is 17% of the SEAM-Nepal total budget.
  - In synergies with this, the project has implemented various programs like ICS, bio-gas and solar technology at VDC, DDC and Municipality of 6 project districts. These interventions have help in the reduction of GHG emissions in large quantity. ICS units of 7,807 and 513 m<sup>3</sup> capacities of bio-gas have been implemented. Annual CO<sub>2</sub> saving through ICS and Bio-gas Interventions is 20,800 tn.
  - The installed cooking stoves and bio-gas have been constructed through project support. This has direct implication in the forest management and its bio mass conservation. Annual Fuel-wood Savings through ICS and Bio-gas Interventions is 20,500 m<sup>3</sup>.
  - SEAM has implemented formulation of the WASH policy and strategies at the district level related to ODF camping to increase access to safe drinking water. These support comprises of software, hardware interventions and institutional. Altogether 272,361 " exclusive of admin and monitoring cost have been spent in the related headings for acquiring public health adaptation strategies against the climate change.
  - The project has supported in formulation of District WASH plan of three districts and to strengthen the DWASH-CC and VWASH-CC networks in all the project districts. The corresponding beneficiary population under each of the above interventions is as follows. Sustainable managements of water resources are realized in the form of spring source protection, storm water harvesting pond, lake and pond reclamation and conservation, watershed and catchment protection. Water quality monitoring and lab strengthen as presented below in a graph. Clean Drinking Water Programs Impact 12,660 and ICS Beneficiary.

- Clean energy promotion adopted by the project are ICS & IAP (indoor air pollution free campaign), plastic ban campaign, bio-briquette promotion, solar electrification of DDC and municipalities, solar street lights, biogas promotion and decreasing the carbon foot print of the mirco-hydro systems were implemented to promote clean energy and low carbon technologies. The investment made and the related capacity/quantity are presented in the graph below. Clean Energy Promotion Capacity.
- Promoting Climate Smart Urban Settlement 11 municipalities and urban settlements where SEAM has contributed good amount of resources on climate change related programs. But the key focus has been the solid waste management and development of IEM (integrated Environment Management) plan. The Solid waste management support mostly comprises of banning of plastic bag use, declaration of litter free and clean zones, vermin composting and bin composting, improvement of landfill sites and solar technology promotion in some cases.
- SEAM-N, in its Completion Phase, has constructed 6860 HH s toilet till date at model and thematic VDC s in order to enhance the sanitation status and to support VDC to be declared as ODF benefiting 35,672 community people.
- Also, as a part of WASH process, SEAM-N has supported the construct ion of eight public toilet s at mod el and thematic VDCqs. Also, one institution al toilet was constructed in a school of Bhedetar, the model VDC of Dhankuta district. One mobile toilet ha s been constructed at Itharai municipality. The total beneficiaries are 2627 individuals per day.
- During this reporting period, 283 tube wells with platform were installed and 652 platforms were constructed thus, benefitting 3032 and 3391 community members respectively. 21 spring source protection-projects, one rain water harvesting project and one recharge pond has also been constructed. Thus, 21472 community people are benefitted from above mentioned schemes.
- SEAM-N worked to ensure behavioral change activities through environmental awareness raising training. 14 training related to ODF were organized in project area benefitting 3176 individuals.
- SEAM-N has supported for Construction of ICSc together with awareness raising programs on importance of ICS. In this manner, nine trainings were delivered in all project districts. Out of which 9 days intensive training to promoters was also conducted. Out of 5362, 4511 ICS were constructed in project area benefitting 23,457 community members.
- The total beneficiaries of organic farming training are 482 and 18 HHs were benefitted from cow-shed improvement program I llam and Pantchar (overall in project area more than 1000 participants).
- Nepal endorsed biogas plant construction activities In this regard six institutional biogas and 50 HH¢ biogas plants were constructed with a total capacity of 458 cubic meters. A total of 3430 individuals are directly benefitted from biogas plant.
- Accordingly, a total of nine plantation programs were launched at eight different VDCs of project district benefitting population of 18643 denizens. Plantations of ornamental and medicinal plant were done in Sijuwa, Bhogateni, Tankisinwari and Bhauni VDCs. Fruits trees were planted at Hattimuda ornamental plants at Bhedetar VDC.
- Protection of Existing Plants program was launched at Khanar VDC, where more than 500 varieties of plants planted and SEAM-N supported 2 tube wells installation and 2 hoarding boards.
- Market area of Khanar VDC the Environment subcommittee and market management committee jointly planted the 30 X. mass trees at market area of Khanar VDC in metal drums along the both sides of the road.
- Also, development of forestry nursery was done at Tharpu VDC.

- Health and sanitation trainings have been accomplished in five primary school, two early childhood centre (ECD) and one higher secondary school (HSS) of Bhedetar VDC focusing especially children. A total of 908 students were benefited from this training.
- Khanar VDC, Bhasi VDC has declared itself as plastic bag free zone.
- Household waste management training has been accomplished in eight VDC¢ of Sunsari DDC focusing on women¢ group. A total of 280 women were benefited from this training. Training program on safe handling and disposal of petro chemicals was conducted for the garbage workers in relation to their safety, benefitting 40 garbage workers.
- Hattimuda has also completed two days training on plastic reuse benefiting 35 women Health and sanitation training, and child awareness training have been completed in Hattimuda VDC benefiting 270 community people and 315 students directly.
- Orientation on the benefits of using biogas has been accomplished in Hattimuda VDC among the targeted community. 15-day intensive skills development training has been completed in Duwadgadi VDC benefiting 20 women.
- Sakhejung VDC has completed most of the basic and advance indicators required for EFLG declaration. Indicators like plastic bag free VDC, IAP free (indoor air pollution)
- VDC, ODF VDC, 100% coverage of vaccines, 100% children enrolled in schools, Spring source protected, SEPP implemented Schools, Improved cow-shed, Public toilets, landfill site, post ODF and IAP plan, organic farming, floriculture, pond renovation and creation for watershed conservation, herbal farming under biodiversity
- Total of 532 households were interviewed, 536 water samples and 1003 stool samples were analyzed for this study.
- Behavioral change activities through environmental awareness raising training. 14 training related to ODF were organized in project area benefitting 3176 individuals.
- One mobile toilet has been constructed at Itharai municipality. The total beneficiaries are 2627 individuals per day.
- During this reporting period, 283 tube wells with platform were installed and 652 platforms were constructed thus, benefitting 3032 and 3391 community members respectively. 21 spring source protection-projects, a rainwater harvesting project and recharge pond have also been constructed. Thus, 21472 community people are benefitted
- Out of which 9 days intensive training to promoters was also conducted. 4511 ICS were constructed in project area benefitting 23457 community members.
- Accordingly, a total of nine plantation programs were launched at eight different VDCs of project district benefitting a population of 18643 denizens

#### Outcomes

SEAM-N project increased spill off effects with improved public awareness and environmental management capacities within VDCs, DDCs, municipalities and industries in the project area, consequently, contributed public health and well-being by:

- Enhanced good governance in environmental planning, pollution prevention, mitigation and monitoring practices
- Capacited environmental management at the regional and local level DDCs, municipalities and VDCs have been the major implementers and stakeholders to integrate environmental aspects with related matching funds to local government periodic planning and implementation.

- Increased public pressure come through with existing community based groups such as user groups, women a groups, ward level committees and NGOs, which were effectively mobilised in the planning and implementation of the local level interventions. The VDC level environmental sub-committee were instrumental in planning and implementation of project goal in their areas.
- There is big difference between in living and being a life, ultra-poor households, women and girls were regarded highly in the field of sanitation, water safety and environmental health awareness in connection to ODF.
- increasiing ODF with safer water source protection, extended sanitation and SWM coverage through District WASH planning capacities, School Environment Promotion Program linked in potable water safety and environment and increased OH with participating tea-farming and improved industrial pollution control over waste, wastewater noise and safety management
- Urban population living in 9 municipalities of the Morang, Sunsari, Dhankuta, Ilam, Jhapa and Panchthar districts benefited substantially. Industries in the project area including the workers and population residing adjacent to the polluting industries were directly benefited. The Major Beneficiaries of the project have been the rural population of 32 VDCs in 6 project districts.
- SEAM-N has stimulated greater impacts with replicability of Ilam Green City and Dhankuta • SWM concepts and policy initiations and training modules. Ilam Green City activities have been already replicated around the project area. Both concepts have received well publicity in Nepal and replication of pecific componets are on-going. In policy development, EFLC is a driver of chace in environmental management in Nepal.
- DIFD adaptation of EFLG concept, including Environmental Monitoring and Indicators • Network (EMIN) are now in use in the project design and planning in the 14 participating DDCs. Despite in slow progress on taking up experiences and achievement from the local government to the central government in environmental management SEAM has generated a great number of policy and training modules and quideleines, which can be further developed by relevat ministries. SEAM influence and commitment to the policy developmeny of environmental administration can be quantified as follows:
  - ✓ Practical Pedagogical Modules,
  - ✓ Waste Audit,
  - ✓ Integrated Sustainable (Solid) Waste Management (ISWM),
  - ✓ Preparation of Strategic Action Plan for ISWM,
  - ✓ Health Care Waste Management (HCWM),
  - Health and Safety & Workplace Inspection Manual,
     Training course on OHSAS 18001:2007,

  - Environmental Monitoring and Indicators Network (EMIN),
  - Guideline for Monitoring and Measurement of EFLG Indicators
  - ✓ Pollution Control Certificates.
  - ✓ 1+4+1(ODF + Plastic Bag free, Waste Burning Free, Clean Zone, Waste Mixing + Regular Cleaning Campaigns)
  - ✓ Training Program on water quality to the Sample Collection Centers (SCC),
- The project has maintained the gender balance to the possible extent within the organization and in its fundamental implementing unit, Environmental Sub-Committee, which works under the local bodies such such as user groups, womengs groups, ward level committees and NGOs. GESI implemented several initiatives supported poor farmers belonging to the different ethnic minorities were incorporated through bee-keeping programmes, school children have been implementing the SEPP program with their eco-clubs in schools. The green city womengs group has implemented programs such as the organic kitchen garden competition, training women on a variety of environmental issues, and floriculture nursery

development and income generation activities. More than half of the total budget was spent on programs dedicated to improving the wellbeing of women, ethnic minorities, lower cost households and the poor.

 Finland supports measures that strengthen partner countriesq capacity to prepare for catastrophes and reduce vulnerability to natural disasters. In 2010, Nepal was ranked among the fourth most vulnerable country regarding climate change throughout the world. The project invested 50,2400 Euros exclusive of all admin and monitoring cost of the NAPA and Climate-Change. In synergies with this, the project has implemented various programs such as ICS, bio-gas and solar technology in the project area. CO2e saving through Biogas utilization was 1,267tn/annum and similarly, new ICSs reduced of GHG emissions about CO2e 19,576 tn/annum. In addition, ICS and bio-gas plan interventions have 20,500m3/yr fuel wood consumption savings.

#### Findings:

ET team findings from the filed visit confirmed that implementations of environmental health infrastructure are well in place and contributed public health improvement. Innovative public awareness campaign and student's engagements and public pressures for environmental improvement and law enforcement are increasing ODF in the project are.

#### Conclusions:

During the Completion Phase SEAM-N has conducted about 320 pilots on model development for the environmental administration and management. The commencement of experience with supported capacity building, public awareness campaigns, training manuals, guidelines and policy development interventions has resulted in replicable models and components for EFLG. So experiences of success from SEAM six districts are ongoing with DIFD in new 14 districts. Despite in slow progress on policy development with line ministries, SEAM local government development has fulfilled its objectives and targets and consequently, its contribution on environmental health of the beneficiaries by reducing pollution of the environment in the project area.

# SEAM Completion Phase: Proposed overall objective, project purpose and respective indicators

OVERALL OBJECTIVE	ACHIEVEMENT INDICATORS	SOURCES OF VERIFICATION	OUTCOMES BY MAY 2016
The environmental health of the beneficiaries has been improved by reducing pollution of the environment in the project area	Registered cases of environmental related diseases in the project area have decreased significantly by 2014	<ul> <li>Health statistics collected by District health authorities.</li> <li>Baseline in 2010: will be collected during bridging phase.</li> </ul>	SEAM-N contributed remarkably environmental health improvement to the project area. VDCs and DDCs continuing awareness campaigns and new strategies with schools have resulted in increased ODF areas and demand for public toilets by the main roads and public places. Public pressure and arising awareness within industries has decreased pollution level and improved environment and health within the industries. However, health data from 2014 is not yet available to quantify the current health situation within the project area.
Project Purpose:			
Good governance in environmental planning, pollution prevention, mitigation and monitoring is embedded in the local administration of the project area and supported by national policies and guidelines	<ul> <li>Environmental priorities documented in periodic plan and annual plans and progress reported annually</li> <li>Matching funds allocated annually by the local bodies from their own budget to environmental management</li> </ul>	<ul> <li>Periodic and annual plans and annual progress reports submitted to MOFALD and shared with MoE.</li> <li>Annual financial reports of DDCs and target VDCs and municipalities.</li> </ul>	DDCs and VDCs environmental priorities documented annual plans with increased budget and matching funds strengthen local government status and capabilities to operate.

# COMPONENT 1: Local Environmental Administration

	EXPECTED RESULTS	ACHIEVEMENT INDICATORS		STATUS BY DECEMBER 2014	OUTCOMES BY MAY 2016
1.	DDCs have merged the environmental considerations in their periodic and annual planning.	All six districts have adopted this practice by 2014. Activities funded by SEAM-N in VDCs are efficiently implemented and monitored by DDCs. Gender, social inclusion and disaster risk preparation have been integrated in the plans as crosscutting issues.	-	Yes Technical committee and ESCs monitoring schedule	Continuity in environmental, gender, social development improvement and disaster preparedness secured in the participating six districts. Improved environmental health and well-being in the participating six districts
2.	DDCs have demonstrated and disseminated successful cases of environmental complaint management.	6 environmental complaint management cases successfully solved and experiences disseminated in training events.	•	DDCs of Morang and Sunsari solved 16 complain cases	Environmental awareness among the communities and industry increased. Law enforcement strengthened within DDCs related to environmental emission control.
3.	DDCs are annually issuing at least 20 new PCCs, and enforcing compliance, focusing on the major polluting industry.	20 new PCCs and at least 50 industrial inspections annually, mainly in Morang & Sunsari.	•	272 PCCs issued Inspection conducted as per monitoring schedule of DDCs	Environmental awareness and compliances of rules and regulation increased among industry Competitiveness of the participating, industry strengthened.
4.	Practical pedagogical modules for environmental education in primary schools are disseminated by the District education offices (DEO)	Training of trainers manual prepared and used in training of teachers in at least two Districts.	•	SEPP manual prepared and used in Ilam district in 17 schools and two schools in Sakhejung VDC	Practical pedagogical modules for environmental education are in use at least in 17 schools. EFLC education modules will be disseminated throughout 54 districts. Teachers influence on students, and further parent's behavior chance in environment and sanitation practices contributed health improvement and well-being with the increased OFD areas in the participating schools.
5.	Six model VDCs and their households are mobilized to	50% or more decrease in reported diarrheal cases in model VDCs.	•	Baseline report exists	SEAM-N contributed to environmental health in the

	demonstrate integrated environmental management concept. Dissemination of experiences to within the project	ODF achieved in all target VDCs also in the population segment of the ultra-poor households.	•	100% achievement	increasing of ODF area by constructing 6860 HHs toilets at model and thematic VDCs. SEAM-N Model of the selection procedure of VDCs is in use on the EFLC project, which continues environmental health improvement in 54 districts.
6.	One municipality (Ilam) has taken major steps in urban environmental management and other four target municipalities have achieved significant progress in one thematic sector	Significant progress in solid waste and septic tank management, ODF, toilet coverage, biogas utilization, water source protection, potable water safety and environmental management in squatter areas.	-	Integrated approach adopted by Ilam, Dhankuta and Dharan	Integrated Urban Environmental management (IUEM) approach is in use IIam, Dhankuta and Dharan districts. IUEM concept contributed environmental health improvement, socioeconomic development in the participating municipalities. Replicability and spill-over effects relay on IIam Green City and Dhankuta SWM concepts. IIam Green City activities have been replicated around the project area. Dhankuta SWM concept has created interest among other districts in Nepal as well as globally. SWM concept %Replicate Do Not Copy+ has been also introduced in Indonesia, Japan and Korea.
7.	Training packages for municipalities and urban VDCs on environmental management have been designed, tested and handed over to the Regional learning centre in Dharan	At least 5 successful training events organised together with RLC and training material handed over to RLC.		14 training event organized and training manual handed to municipalities under RLC	Environment Officers, Respective Municipal Department Heads, Social Mobilizers, including Doctors/Nurses from district/zonal hospitals from the model VDCs equipped with public health, environment awareness and social inclusion related to ISWM. Improved SWM results significant health impact by reducing risk of leptospirosis outbreaks in flood prone areas.

			Following training programs have implemented and handed over to RLC in Dharan. A two-day residential training of the <b>Integrated Sustainable Solid Waste</b> <b>Management (ISWM)</b> was implemented at RLC in Dharan. Environment Officers, Respective Municipal Department Heads, Social Mobilizers from the model VDCs were capacitated with environmental health awareness and related social inclusion related to ISWM.
			Preparation of Strategic Action Plan for ISWM consisted of a two- day residential workshop capacitating Executive officers and respective municipal department heads from Eastern Region with strategic action planning of urban issues related to Waste Management.
			Health Care Waste Management (HCWM) consisted of a two-day residential training on Health Care Waste Management. Participants from respective municipal department head, Doctors/Nurses from district/zonal hospitals of the project area were equipped with management, technical, social and environmental aspects of HCWM.
8. District WASH planning capacities increased	District WASH Plans completed in five districts (Dhankuta, Ilam, Jhapa, Morang and Sunsari)	<ul> <li>Jhapa, Dhankuta and Morang Completed</li> </ul>	WASH-SEAM-N cooperation contributed environment health and well being improvement, especially with poor and ultra-poor families in participating districts. To achieve this, the project focused on training and capacity building of district actors (DWASHCC) and DDC and

coordination with WASH sector actors.
District Strategic WASH was developed and implemented in three projects DDCs (Morang, Dhankuta, Jhapa) district resulted in ODF-free zones in 11 VDCs and two municipalities.

### COMPONENT 2: Industrial and Chemical Pollution Control

	EXPECTED RESULTS	ACHIEVEMENT INDICATORS	STATUS BY DEC. 2014	OUTCOMES BY MAY 2016
1.	Successful cases of pre- treatment of industrial wastewater in Biratnagar as a first step to joining the central sewage treatment system in the city.		Completed	SEAM-N increased in public awareness, knowledge and capacity about environmental pollution of the participating industries and Moron Industrial Association, which has reflected further upon improvement of wastewater management in Brinatnagar. Project improved physical and natural environment, business competitiveness and public health within the participating industries by reducing a pollution level.
2.	Success cases of source separation and recycling of industrial waste	10 cases identified with potential for source separation and recycling of industrial waste or for disposal at the regional landfill.	Completed	<ul> <li>SEAM-N increased knowledge of benefits from the proper SWM among the participating industries. Consequently, it leaded to substantial environmental emission reduction.</li> <li>Following six source separation activities were implemented:</li> <li>Recovery of the organic solid waste through the composting technology</li> </ul>

					<ul> <li>Installation of the bag filter to captured the Pm10,</li> <li>construction of waste (nonorganic) segregation chamber (3)</li> <li>Dairy Industry recycle caustic solution during the cleaning of equipment in order to reduce the COD load of the wastewater</li> <li>Construction of proper waste segregation chamber to separate the hazardous and nonhazardous waste,</li> <li>Establish waste water monitoring plan and the water consumption, solid waste generation, fuel consumption log book to monitor the input and output patterns.</li> </ul>
3.	Tea cooperatives and tea industry have demonstrated good practices in reducing pesticide contamination	Specific consumption of chemical pesticides in ten partner cooperatives significantly reduced compared to average.	•	Promoting of chemical free agriculture product in coordination with the Commercial Alliance Agriculture. More than 10 tea cooperatives (about 500 framers) participated	Adoption of an approach of the chemical-free agriculture production on tea-farming results in increased tea leafs price, improved working environment and health and competitiveness in price and quality on the global tea markets.
					SEAM trained more than 1000 tea farmers on organic farming. It has also worked closely with several tea cooperatives and guided them towards organic certification of their products. These measures are expected to reduce exposure levels of workers in tea plantations and industries to harmful pesticides.
4.	Selected industries have improved the health and safety condition of the workers and complied with the minimum OHS condition as indicated in the Labour Act.	The amount/rates of the accident cases have been reduced and safety measures are in place at least in 10 industries.		Health statistics collected from industry/district HO by 2016	SEAM-N contributed to a reduction of accident cases by safety measure's development, training and capacity development of stakeholders. MoLE/OSHP and Labour Offices approved SEAM-N tested a new

	version of Health and Safety & Workplace Inspection Manual, which consists of the guideline and safety audit checklist on the most hazardous industry. Health and Safety & Workplace Inspection Manual was taken into use in 2014.
	A lead auditor training course on OHSAS 18001:2007 organized jointly with MoLE capacitated 19 participants from DoL, OSHP, Mol, MoHP, MoFALD in November 2014.
	Injury data from 2014 is not yet available to quantify the current injury situation and related costs.

# COMPONENT 3: Regional Environmental Monitoring and Communication

EXPECTED RESULTS	ACHIEVEMENT INDICATORS	STATUS BY DEC. 2014	OUTCOMES BY MAY 2016
<ol> <li>ENSC has been established as a company and is sustainably providing services to public agencies and industrial clients</li> </ol>		<ul> <li>Registration pending at company registrar office</li> <li>Enough revenue generated through income</li> </ul>	ENSC generates funding for its operation from raising public awareness, specifically in connection to industrial environmental pollution. Ultimately, this is contributing better living conditions and environment health within the industries in the participating districts. ENSC operation and financial sustainability has been weakening considerably after SEAM closure and earthquake in 2015, resignation of Main Chemistry and Office In- Charge, and in addition, participating VDCs have stopped the laboratory support. According to Morang Merchant Association (MMA) the year 2015 resulted in losses to

					ENSC. Current physical year (2016) is positive. Team advised ENSC to focus on market oriented business approach to sustain its sustainability.
2.	Monitoring data is regularly reported to the national environmental monitoring system and utilized in district profiles, periodic planning and national progress reports	Quality of district level annual reports regarding environmental aspects.	-	Due to absence of national monitoring system the result is not achieved	Platform for EMIN has set by creating pathways for environmental monitoring programs, sharing of environmental data and creating modalities, which will facilitate project development, approval process and consequently sustainable development
					Yet, nationwide system can only disseminate promptly environmental information/data to all governmental bodies, media, social networks, communities and individuals at large in timely actions. This revolutionizes Nepalese environmental management.
3.	District level sample collection centers act as partners for ENSC and support district level water users groups in ensuring water safety.	Levels of E.coli, total coliform bacteria, nitrate and arsenic in the drinking water sources are monitored in two model districts in compliance with the national standard and action taken in cases of exceeding the limits.	•	Monitoring conducted as a part of SEAM program supported to promote the services of lab	Water sampling and lab-tests have been successfully conducted before and after Kumbha Fair, and further sanitary/safe drinking water awareness activities have been introduced to local communities to secure safety water use. Lab-tests are fundamental to prove and secure safe water use. Subsequently, the event also promoted ENSC services to sustain its sustainability.

COMPONENT 4: Central Level Support to Local Environmental Management

	EXPECTED RESULTS	ACHIEVEMENT INDICATORS		STATUS BY DEC. 2014	OUTCOMES BY MAY 2016
1.	National guidelines on selected industrial pollution abatement issues are approved and existing guidelines revised	DDCs are utilising the new guidelines in improving the efficiency of industrial compliance monitoring and enforcement.	-	Guidelines prepared and submitted to DOE and MOSTE Central level cooperation with local bodies need to enhance further	Environmental sections of DDCs and sub-committees use current models and practices for issuing PCC created by SEAM, subsequently, improved environmental and health within participating industries. MoST, MoI and MoFALD and other relevant authorities are well equipped to coordinate and guide to the local- level environmental planning, monitoring and issues of industrial pollution abatement. Guidelines to rationalize national industrial pollution control and emission abatement are waiting for MoPE actions.
2.	Core elements of a national (water) pollution monitoring program are designed and demonstrated in pilot districts	Districts are collecting and reporting pollution monitoring data in a systematic way. State of Environment Report (2013/2014) has utilised regional data produced by the model districts and ENSC.		DDC environmental sections are made capable MOSTE did not have plan to issue SOE report during completion phase a	System is in place in Briatnagar to serve local authority¢ data needs in project design and water pollution monitoring. Monitoring was successfully piloted through a water monitoring program in the project districts. However, the continuation and success of this monitoring program depends on local authorities, stakeholders, and the public and whether they utilize the tools and procedures created by the project for improved monitoring.
3.	Principles agreed by MOFALD & MOSTE for incorporating environmental aspects in periodic planning and MCPM (minimum conditions performance monitoring system)	Environmental aspects are for the first time used in the MCPM system to award municipalities and DDCs that have achieved significant progress in this sector.	•	EFLG introduced by MOFALD supported by Project rigorously	Project facilitated dissemination of EFLG framework in the project area. Implementation of EFLG was initiated in the six Model VDCs and Ilam Green City with the decision of PSC meeting. SEAM-N prepared the indicators for four thematic areas such as Offices,

					Schools, Industries and Religious & Cultural places. With these indicators, the EFLG framework becomes all-inclusive. After the project closure, DIFD adopted EFLG concept, including Environmental Monitoring and Indicators Network (EMIN), which plays now major role on the project design and planning in DDCs.
4.	Capacity of the Environmental Management Section of MOFALD is strengthened in supporting DDCs and municipalities in fulfilling their mandate in environmental management	The performance of the target DDCs and municipalities in environmental management is annually monitored by MLD.	•	Monitoring and evaluation manual for EFLG prepared by SEAM is handed to MOFALD	MoFALD is capacitated with training Compliance and Enforcement of Environmental Law, Guideline for Monitoring and Measurement of EFLG Indicators including the library to enhance MoFALD and the other ministries' environment administration and management capabilities. This will impact on an increase in management capabilities for a reduction of industrial emissions.
5.	Technical and Environmental Division of Mol is capacitated to disseminate knowhow to the district level in CP, EMS, chemical safety.	Mol is using SEAM material in disseminating awareness and experiences in these topics.	•	TOT manuals and training materials provided to MOI	SEAM-N training materials are in use. From Mol initiative, more than 150 Government officials from various ministries and departments capacitated with knowledge of IEE and EIA implementation. In addition, Mol selected series of International Standards' training modules regarding energy, environment and occupational health for the development of the auditing capacity for the government officials.
6.	Sustainability of SEAM good practices promoted through government policies, other programs.	Dissemination of some of the good practices from SEAM to other regions is verified		Environmental administration model (environmental sections at DDC) copied to EFLG framework is to be established in all 75 districts	Implementation of EFLG was initiated in the six Model VDCs and Ilam Green City with the decision of PSC meeting. This decision opened a window to replicate the green city concept, which is intent to support

	environmental health management, livelihood and well-being in the large scale.
	SEAM-N replicability relies on Ilam Green City and Dhankuta SWM concepts. Both concepts have received well publicity in Nepal. Dhankuta SWM concept Replicate Do Not Copy+has also experienced in international attention.
	EFLG with a strong linkage to these two components is expediting a strengthening of the environmental management in Nepal increasing in well-being and social cohesion among the communities.

## Annex 7 Budgets and costs

In this Annex the ET gives details to answer the following questions: Has SEAM-N fulfilled the criteria for value of money? Is the quality and quantity of the produced results and outputs in accordance with the plans? What were the costs per output? The amount in percentage the project has spent on a) administration and b) traveling expenses?

### Public Finance Management in VDC, DDC and Municipality level

The Ministry of Local Development (MLD) is accountable and responsible for implementing and monitoring of Public Expenditure and Financial Accountability and Fiduciary Risks Reduction Action Plan (PEFA-FRRAP). Local Development Officers of DDCs, Executive Officers of Municipalities and VDC Secretaries are responsible for implementation of the plan at the local level.

According to the literature review, fund's flow has been occasionally slow because of banking procedures. Generally, District Development Fund and the Municipal Development Fund management and accountability were satisfactory.

The Public Expenditure and Financial Accountability (PFM) of Nepal has improved since 2012. Accroding to World Bank, PFM reform process have been significant, but there is still a long way to go. PFM is the necessary link between policy vision and actual realization. The policy vision of Nepal is to increase the provision of key services to citizens in sectors like health, education, agriculture, transportation or post-earthquake reconstruction and renew with recent performance in economic growth.

### **Fund Management SEAM-N**

The Chief Technical Adviser (CTA) was responsible for overall financial administration including project-related authorisations. In the absence of the CTA the Deputy Team Leader was authorised to work on behalf of the CTA. The Head of Ilam Project Office had an authority limit of NPR 20,000, and transactions exceeding the specified level required approval of the CTA. The CTA ensured that financial transactions were appropriate, accurate and complies with guidelines and procedures. The Chief Administration Cum- Account Officer provided translation of the vouchers to English language to enable an accurate approval. KPMG reviewed the vouchers of procurement in Ilam Project Office on sampling basis and found that no transaction above NPR 20,000 has been taken place.

### Fund supply and use of SEAM-N

The financial administration in Dharan project office prepared a money request, including a cash flow and sent it to FCG Finland by email and as a copy to the CTA. The request was reviewed and checked by the Administrative Co-coordinator. Remittances to Dharan project office occurred regularly.

According to KPMG audited FCG monitoring control, payment system, and fund management of support funds. It is noted that FCG had its own guidelines for the implementation of pilot projects, for instance, school projects. It had standard procedures for the selection, implementation, monitoring and payment of financial support to the concerned party.

### A project selection procedure

A school will send an application for the construction of +composting facility+with a letter of interest to DDC/VDC. Based on the request of the school, DDC/VDC recommends to the school to conduct a need-analyse and commitment spirit assessment of the school committee. Monitoring team will be formed, which consists of technical persons and some members from SEAM. After monitoring committee visit to a site, the final decision will be done. Based on the decision of the committee, a Memorandum of Understanding (MOU) will be signed between SEAM, Local government body, and school for the implementation of the project. MOU includes all the terms of the payment and monitoring procedures. First instalment (70% of SEAM part) will be paid on signing of the MOU and

the last instalment (30% of SEAM part) is paid after receipt of the completion report and monitoring committees final report. SEAM will verify the monitoring report before the closing payments of the project.

SEAM Project cost was 12.94" million for the full 13 year intervention, i.e. about 1 million per year. Total budget for the completion phase was 2,998,448". Local government development budget was 1,168,000". Finnish Government contribution was 63.95% and local contribution without industry support 36.05%.

SEAM Nepal and District Development Support Phase III in NR									
Support	VDCs Model	VDC Thematic	DDC Committee	Municipality	Total				
District	10,567,951	17,405,757	6,377,293	14,123,498	48,474,499				
SEAM	27,650,835	21,637,882	16,157,961	20,557,587	86,004,265				
Total	38,218,786	39,043,639	22,535,254	34,681,085	134,478,764				
Local Gov support	27.65%	44.58%	28.30%	40.72%	36.05%				
SEAM support	72.35%	55.42%	71.70%	59.28%	63.95%				

### Costs per output

The Completion Phase constructed 6860 household toilets in model and thematic VDC s in order to enhance the sanitation status and to support VDC to be declared as ODF benefiting 35,672 community people having a unit price of 0.44 " per inhabitant

Although the initial cost of EcoSan toilets, which is about Rs. 16,500, is slightly higher than ordinary pit latrines or offset double pit latrines, EcoSan toilets provide benefits in terms of fertilizer. A financial analysis of cost and benefits of EcoSan toilets indicates that the pay-back period for an EcoSan toilet is about nine years and the Financial Internal Rate of Return (FIRR) is 8.11 percent. A WaterAid in Nepal publication September 2008

• Sulav HH toilet for 5 family member costs about 5,200 NR (48 ")

Categorizing the resources spent under the programs and activities listed as per the priorities options for adaptation and mitigation in the NAPA and Climate Change policy 2011 documents, project invested 50,2407 " exclusive of all admin and monitoring cost. This is 17% of the SEAM-Nepal total budget.

In synergies with this, the project has implemented various programs like ICS, bio-gas and solar technology at VDC, DDC and Municipality of 6 project districts. These interventions have help in the reduction of GHG emissions in large quantity. ICS units of 7,807 and 513 m<sup>3</sup> capacities of bio-gas have been implemented with unit cost 4.00 "/pc, which is equal to current market price 560NR.

SEAM has implemented formulation of the WASH policy and strategies at the district level related to ODF campaining and increased access to safe drinking water. This support comprises of software, hardware interventions and institutional development. Altogether 272,361 " exclusive of admin and monitoring cost have been spent in the related headings for public health adaptation strategies against climate change. WASH district planning capacity building for Jhapa, Dhankuta and Morang

- Bio-briquette plant (1) 1,684 "
- Management (ISO training) 5,737 "
- Biogas Capacity 518 (m<sup>3</sup>), 27,290 ", unit cost 52.68 "/m<sup>3</sup>
- Solar power 26.67 (KVA) 26,167 ", unit cost 1,409.5 "/KVA
- ICS 7,807pc 31,189", unit cost 4.00 "/pc. Equal to current market price 560NR
- IEM planning Unit cost 13,226 "

- Clean zoning 4,687 "
- Plastic bag banning 18,326 "
- Composting 18,340 "
- SWM 20,769 "
- Health Care 6,923 "
- Green City 12,738 "
- The amount in percentage the project has spent on a) administration and b) traveling expenses?

Budget and Expenditure table consists of the admin and travelling costs in f lines: administration and travelling expenses International TA, Int TA Related Reimbursable Costs Local Recruitments, Other TA Related Reimbursable Costs and Vehicles and Equipment. However, it is impossible to assess properly the required tasks while lines represent the consolidated sum from expenses.

# Annex 8 Quality assurance statement QUALITY ASSESSMENT GRID<sup>1)</sup>

SCORES:

1 = unacceptable = criteria mostly not fulfilled or totally absent

2 = weak = criteria partially fulfilled

3 = good = criteria mostly fulfilled

4 = very good = criteria entirely fulfilled

5 = excellent = criteria entirely fulfilled in a clear and original way

In relation to the criteria and sub-criterion below, the evaluation report is rated <sup>15</sup> :	1	2	3	4	5
1. Meeting needs:					
a) Does the report precisely describe that which is evaluated, including the intervention logic in the form of a logical framework?			X		
b) Does the report clearly cover the requested period of time, and the target groups and socio-geographical areas linked to the project /programme?				x	
c) Has the evolution of the project / programme been taken into account in the evaluation process?				X	
d) Does the evaluation deal with and respond to all ToR requests? If not, are justifications given?				x	

### Give justification to your scores:

A logical framework is missing. Besides the team could have described that which is evaluated in its own words reflecting their views and findings rather than repeating what is described in the TOR.

For example, a map would have helped illustrate to readers the project area and its expansion during the different project phases. This would also have helped understand the challenges of spreading project resources thinly.

In addition to the TOR requests the evaluation covered additional questions and hypotheses.

2. Relevant scope								
Are the rationale of the intervention and its set of outputs, results and impacts examined fully, including both intended and unexpected policy interactions and consequences?			x					
Give justification to your scores: The rationale of the intervention was not clear e.g. how Phase								
I was justified to start during a time of insurgency, when environmental units expected to be								

I was justified to start during a time of insurgency, when environmental units expected to be strengthened did not even exist, how the project was run during such a time, how it was possible to achieve targets during such a time and why the geographical area of the project was extended during Phase II. On the other hand according to the TOR more emphasis is placed on the most recent phases.

<sup>&</sup>lt;sup>1)</sup>Modified from the quality assessment grid of the European Commission

In relation to the criteria and sub-criterion below, the evaluation report is rated <sup>15</sup> :	1	2	3	4	5
3. Appropriate design					
a) Does the report explain how the evaluation design takes into account the project / programme rationale, cause-effect relationships, impacts, policy context, stakeholders' interests, etc.?			x		
b) Is the evaluation method clearly and adequately described in enough detail?				X	
c) Are there well-defined indicators selected in order to provide evidence about the project / programme and its context?				X	
d) Does the report point out the limitations, risks and potential biases associated with the evaluation method?			x		
Give justification to your scores: Stakeholdersqinterests etc. we report did not explain explicitly how the evaluation design takes the				bunt bu	ut the
4. Reliable data					
a) Is the data collection approach explained and is it coherent with the overall evaluation design?				x	
b) Are the sources of information clearly identified in the report?				x	
c) Are the data collection tools (samples, focus groups, etc.) applied in accordance with standards?				x	
d) Have the collected data been cross-checked?				x	
e) Have data collection limitations and biases been explained and discussed?			x		
<b>Give justification to your scores:</b> Methods of data collection a details in Annexes 4 and 5. The evaluation team visited 4 out of 6 p coverage. However, justifications for choice of districts are not give only in the Inception Report. Whether time elapsed from the project and reliability of data was not discussed in the report.	roject en in tl	district ne eva	ts whic aluatio	ch is a n repo	good rt bu
5. Sound analysis					
a) Is the analysis based on the collected data?				x	
b) Does the analysis focus well on the most relevant cause/effect assumptions underlying the intervention logic?				X	
c) Is the context taken into account adequately in the analysis?				x	
d) Are inputs from most important stakeholders used in a balanced way?				X	
e) Are the limitations of the analysis identified, discussed and presented in the report, as well as the contradictions with available knowledge, if there are any?				X	
<b>Give justification to your scores:</b> Analysis is discussed thoroughly evaluation matrix the team developed during Inception Phase helpe in analysis.					

In relation to the criteria and sub-criterion below, the evaluation report is rated <sup>15</sup> :	1	2	3	4	5	
6. Credible results						
a) Are the results derived from the data and analyses?				х		
b) Is the generalisability of results discussed?			x			
c) Are interpretations and extrapolations justified and supported by sound arguments?				x		
<b>Give justification to your scores:</b> The team visited most of the project districts and were able to interview a large number and a wide range of stakeholders. Certain practices and models are						

interview a large number and a wide range of stakeholders. Certain practices and models are recommended for application nation-wide but generalisability of results is not separately discussed in the report.

7. Valid conclusions				
a) Are the conclusions coherent and logically linked to the findings?			x	
b) Does the report draw overall conclusions on each of the five DAC criteria?			x	
c) Are conclusions free of personal or partisan considerations?		X		

**Give justification to your scores:** It is hard to judge whether controversial points are presented in a fair and balanced way without taking part in the evaluation process with the team. The team is presented in some details in the last annex which is uncommon. However, it is good information for readers to judge what experience and subject matter knowledge lay behind the considerations and opinions. +There is no view unless you have a viewpoint+quote from Gunnar Myrdahl, famous institutional economist.

0. Upoful recommendations					
8. Useful recommendations					
a) Are the recommendations consistent with the conclusions?				x	
b) Are recommendations operational, realistic and sufficiently explicit to provide guidelines for taking action?				X	
c) Are the recommendations drafted for the different target stakeholders of the evaluation?				X	
d) When necessary, have the recommendations been clustered and prioritised?				X	
Give justification to your scores: A time frame is also purecommendation	ropose	d in	regard	dof	some
9. Clear report					
a) Does the report include a relevant and concise executive summary?					X
b) Is the report well structured and adapted to its various audiences?				X	
c) Are specialised concepts clearly defined and not used more than necessary? Is there a list of acronyms?				X	
d) Is the length of the various chapters and annexes well balanced?				X	

Give justification to your scores       The evaluation report is easier to read when detailed descriptions of methodology, the assessment by outputs and outcomes as well as budgets and costs are presented in annexes.         Considering the nine previous criteria, what is the overall quality of the report?       Image: Considering the nine previous criteria, what is the overall quality of the report?         Give justification to your scores:       The report fulfils well the requirements in TOR.         Any other remarks related to quality assurance measures of aspects that the quality assurance experts have undertaken or to which they have intervened or on which they have given advice during the evaluation process under their quality assurance.         In a report repetition of the TOR and the proposal should be minimised.         The team could have provided their views, opinions, findings, lessons learnt in regard of programme design and scope of work seperately. Instead these are found scattered among other criteria in the report. Programme design and scope of work were not a criterion but interesting considering the two main objectives of the TOR: (i) what lessons the Government of Nepal may learn on how to strengthen the environmental administration and management. (ii) what the government of Finland may learn about how to run development projects related to environmental management.	In relation to the criteria and sub-criterion below, the evaluation report is rated <sup>15</sup> :	1	2	3	4	5		
quality of the report?       Image: Construct of the construction of the constenee con	descriptions of methodology, the assessment by outputs and outcomes as well as budgets and							
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	Finland may learn about how to run development projects related to environmental							

### Annex 9 Profile of the evaluation team

### Dr. Göran Nilsson Axberg, Team Leader

Holds a PhD in Forest Economics with additional university studies in business administration, Environmental Impact Assessment (EIA) and several natural science subjects. He is a sustainable development, environmental, management and leadership development expert with strong experience designing and implementing organizational strategies and activities of institutions, both when working as Deputy Director and Senior Researcher at Stockholm Environment Institute (SEI) between 2001 and 2011 and in a great number of developing country assignments.

Dr. Axberg is a skilful Team Leader with a total of 64 assignments in Asia (49) and Africa (15). He has solid experience in developing country project/programme evaluations (14 mid-term, annual or final evaluations), program appraisals (3 missions), identification (9 missions) and formulation (10 missions). His work has often included mainstreaming of good governance and CCOs, including gender, environment and climate change, integration of human rights, equality aspects and aid effectiveness. Dr Axberg has a thorough knowledge of PCM, RBM, LFA and M&E and their use in project identification, design, appraisal and evaluation. He has experience from institutional and organisational development, leadership development, change and risk management, and financial management for both public and private sectors in developing countries, and experience providing services to ADB, EC, UNDP, UNEP, WB, IDB, FAO, NFD, MRC, Sida, Finnida, Danida, Norad, the Netherlands, DFID, national ministries, commercial companies, and several NGOs. He has extensive experience on the use of participatory and facilitation methods. He has experience also in mainstreaming good governance and transparency, accountability and integrity measures. Dr Axberg is since Oct 2011 leading his own consulting company, Outcome Consulting. Lately, he has developed a leadership skills development training package and with this given two training courses in a developing country.

### Mr. Hannu Pelkonen, International Expert

His professional experience spans over 25 years, residing in both developed and developing countries. Mr. Pelkonen holds a MSc. in Environmental Technology and Management, and Civil Engineering degree. He has a great involvement in all stages of the project cycle, including institutional development and organizational analysis, project preparation, design, management and evaluation, planning, financing and implementation. He is well acquainted with the technical, environmental, social, economic, financial and institutional aspect of the WS&S rural and urban development.

Familiarity with the bi- and multi-lateral lending agenciesq financial products by working for Asian Development Bank (ADB), World Bank (WB), UNICEF, Sida, the Finland Ministry of Foreign Affairs (FMFA), and EU financed projects.

He has over 5.5 years working experiences in Africa and nearly 20 years working exposure in Asian having TL position 12 years in WS&S, Flood Control and Solid Waste Management projects. More specifically, as an International Expert has a proven competency by working together, which combines strong technical skills of urban and rural development affairs, spawning the value of diversity in views, culture and national needs He has in-depth knowledge in urban green development issues, technical capacity for conceptualising/spearheading/prioritizing of projects and programs, which has resulted in professional recognition and awards from EU-Life programme and Asia-Europe Environmental Technology Centre (AEETC) as significant achievements in the Solid Waste Management development and In addition, Mr. Pelkonen has received a special recognition for dynamic leadership by the Philippines-Finland Association for promoting environmentally beneficial investments, trade and cultural ties between the Philippines and Finland.

### Ms. Kanchan Lama, National Expert

Master of Political Science (B.A.Hons) with Programme Development Management qualification from Asian Institute of Management, the Philippines, Kanchan Lama promotes the value of Right Based Approach to human development. Beginning with Action Aid and Food and Agriculture Organization of the UN, she shaped her career on Gender Equality and Social inclusion+developing expertise on Gender and Inclusion mainstreaming, outcome assessment and Impact evaluation, design and Implementation of programme on Womeng Economic Empowerment (WEE), capacity building of public and private sector, participatory research and training, policy and strategy review and design, advocacy related to gender equality, womeng empowerment and social inclusion.

More than twenty seven years' experience in senior management positions with multiple roles in INGOs, e.g., Action Aid, Lutheran World Federation, bilateral agencies, e.g., Canadian Cooperation Office (CCO), Finnish International Development Agency (Finnida/Integrated watershed management project), The Netherlands Development Organization (SNV), German Technical Cooperation (GTZ) and in multilateral agencies, e.g., Food and Agriculture Organization of the UN (FAO) and International Fund for Agriculture Development (IFAD) and United Nation Development Fund for Women (East Asia Pacific UNIFEM). Consultancies with ADB, UNWomen, SDC, CARE, Ministry of Forest and Soil Conservation-Nepal, CYMMIT, World Wildlife Fund, USAID, UNDP and UNICEF-Afghanistan and UNICEF-India, Afghanaid, etc. Most of her work concentrated on gender and inclusion impact assessment and strategy development within agriculture, forest and irrigation sectors, including climate adaptation.

Policy advocacy: Advocating on woments rights on CEDAW, BPFA, Agenda 21, Rights to Natural Resources and development benefits at national and international level policy making forums, conferences, representing ‰ omen major group+, e.g., UNFF, CSD, TFD, UNFCCC, Global Farmers Forum, Food security and Nutrition Forum of FAO, High Level panel of the United Nations on strategy development for effective implementation of Post 2015 sustainable development agenda (SDG).

Advancing evaluation skills through Qutcome mapping and impact assessment training+in Washington D.C. from The Evaluators Institute under Claremont Graduate University USA, Menpact evaluation, Theory, practice and decision making+by CLEAR SOUTH Asia+, Conducting evaluation in post-disaster and other humanitarian context+by International Initiative for Impact Evaluation-3ie; Sevaluation in the era of sustainable development+by Natalia Kasheleva and Sevaluating the impact of WASH programme+ by International Initiative for Impact Evaluation for WASH programme+ by International Initiative for Impact Evaluation-3ie.

Organizational affiliation: BoD member in Women Organizing for Change in Agriculture and Natural Resource Management . regd in USA (<u>WOCAN-www.wocan.org</u>); BoD-Community of Evaluators (COE-<u>www.coe-nepal.org.np</u>); Chairperson-Women Leading for Change in NRM (WLCN); Advisor to a number of NGOs, including PWEDO (Population, Women, Environment and Development Organization

Countries worked: Afghanistan, Bhutan, India, Nepal, Pakistan and Timor Leste (East Timor), including USA

### Mr. Dilli Joshi, National Expert

Dilli Raj Joshi has over 25 years of experience working in South Asia and West Africa on livelihoods, monitoring and evaluation. Between 1990 and 2010, he worked for the Nepal Academy of Science and Technology, contributing to planning and monitoring of the academy programmes and projects. After leaving the public sector he has contributed to several evaluation of projects and programmes.

Dilli has conducted and/or contributed to over 50 national and international assignments including evaluation, monitoring, assessments, perception surveys on technical issues such as livelihoods, climate change, environmental management, institutional and policy analysis. He is conversant in designing planning, monitoring and evaluation (PME) systems and uses participatory need assessment, participatory sectoral analysis and strategic planning, livelihoods assessment, baseline, institutional/context/result monitoring, mid-term evaluation, outcome mapping, output to purpose review, and impact evaluation tools. Dilli Joshi has completed Mastercs degree in Development Economics from University of Strathclyde, UK and Statistics from Garhwal University, India.