

# Integrated Solid Waste Management in Vientiane Municipality Mid - Term Review

April 2004

Conducted by

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in association with

**EARTH SYSTEMS LAO**



United Nations Development Program

Public-Private Partnership for Urban  
Environment (UNDP-PPUE)



# **Integrated Solid Waste Management in Vientiane Municipality 2002-2003**

## **External Mid-Term Review**

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## Executive Summary

The *Integrated Solid Waste Management Project in Vientiane Municipality 2002-2003* (the Project) has completed 9 months of the planned 18 month duration for which an external Mid Term Review (MTR) has now been completed. The purpose of the MTR is to examine the Project's performance in terms of its stated outcomes, identify problems and suggest improvements in respect to its effectiveness, operational efficiency and management. The MTR has been conducted using a "participatory assessment approach" while also using the guidelines outlined in UNDP's *Guidelines for Evaluators*. The MTR also utilised the experience of the Public Private Partnership for the Urban Environment (PPPUE) representative who was present for the early part of the review and provided valuable contextual information for the study.

The MTR is set out in two parts: the first part is an evaluation of various aspects of the project including evaluation of project design, institutional capacity, project management structure, project impacts and project sustainability. The second part provides recommendations by focusing on the key issues which have emerged from the evaluation and for which solutions are proffered.

The MTR assessed the performance of the Project with reference to the three principle aims of the project which are described in the Project Document (March 2003). The first is the development of an effective Public-Private Partnership (PPP) between the Project's partners, the second is the development of practiced based model for source separation at the household level and the third is the development of micro-enterprises in order to increase incomes for the poor, therefore contributing to poverty alleviation.

In terms of performance, the PPP has been highly successful in implementing the second aim, which is in many respects, the heart of the Project. The Project has successfully engaged local communities through intensive education, promotion and training, at the municipal, district, village and household level. This success augers well for further up-scaling and export of the model to the remaining villages in the Vientiane Municipality and secondary towns within Lao PDR. Further improvements however can be made, to ensure that this component evolves, adapts and responds to the needs of local communities which are by no means homogenous.

The third aim, involving the development of micro-enterprises has been slow and implementation has suffered as a result of a 4 month delay in the project start up. Never the less, a number of initiatives have been initiated including the establishment of a revolving fund for the establishment of micro-collectors, small scale worm farming, small scale household composting and the production of bio-extract (BE). It is envisage that in the remaining months of the project this area will receive greater attention with existing programmes expanded and new initiatives introduced.

The first aim of forging a strong PPP has undoubtedly been the most difficult outcome to achieve to date. As with any new project the start up period is often the most challenging as new working relationships are forged, roles and responsibilities are bedded down and new systems implemented. Clear communication is critical at this stage of the project cycle and much effort is required by all participants to establish a strong platform for cooperation during the implementation stage.

Despite initial difficulties in the operation of the PPP, in particular the project management structure, there is a strong desire by all of the partners to see the PPP develop further. Given this positive commitment the key recommendation the MTR is to apply adequate resources in order to build the institutional capacity of the PPP. This can be largely achieved through modifying the current project management structure with the aim of creating a clear separation between its strategic and operational functions. The creation of an Institutional Development Plan will further facilitate the development of a robust and responsive PPP which survives beyond the term of the current project.

The continued evolution of the PPP is cause for great expectation as it builds this Project of national significance. The unique solid waste management model which is being created has resulted in a growing environmental awareness throughout Vientiane's urban areas. The impact of the Project is being felt across the municipality as communities mobilise to successfully and sustainability manage their own solid wastes. It is hoped the findings and recommendations of this add momentum to the continued evolution of Lao's first Public-Private Partnership for the Urban Environment.

## Summary of Key Recommendations

The key recommendations of this Mid Term Review are outlined under the headings below:

### 11..1. Institutional Strengthening and Project Sustainability

The Steering Committee should produce an institutional development plan, in order to strengthen the PPP and position the partnership for further up scaling of the project in Lao PDR. The key areas to be addresses are:

#### Management

- Modification of the existing project management structure as discussed below.
- Continue the development of human resources through effective internal management systems to build PPP skills and expertise.
- Continue to build financial management skills in terms of managing the Project Budget by utilising the skills and experience of the Project's Thai consultant.
- Strengthen planning skills in order to ensure outputs are delivered on time and to a high standard.
- Continue to create strong linkages with other organisations that can assist the PPP to achieve its aims and objectives.
- Consolidate and create a comprehensive data management system for PPP to ensure efficient interrogation, retrieval and delivery of data for internal and external use.
- Begin the process of creating standard operating systems for the purpose of streamlining services provided by PPP.
- Create a professional image for the PPP through the production of official logos, letter heads and associated promotional materials.

#### Project Sustainability

- Ensure PPP's financial sustainability through producing a capability statement outlining the PPP's success and expertise in the area of community solid waste management (SWM).

- Approach donors and begin discussions for further project assistance in order to provide continuous service delivery to target villages in the urban area.
- Generate plans for expansion of the project in new areas of Vientiane Capital City and begin considering how design improvements to the Project can be integrated.

### **Project Management Structure**

- Simplify the project management structure through clear separation between strategic and operational arms of the PPP.
- Reassess and clarify roles and responsibilities in light of this separation.
- Create improved communication between the strategic and operational level of the PPP through appropriate adjustments to the project management structure.
- Ensure greater representation of the project partners at both operational and strategic levels.
- The PPP must enable the project manager to operate under a system of delegated authority.

### **Project Work Plan**

- Produce a coherent Institutional Development Plan for institutional strengthening by June 30<sup>th</sup> 2004.
- Increase project time line by 3 additional months to December 31<sup>st</sup> 2004.
- Increase Project Field Officers from 4 to 6 members to commence no later than June 1, 2004 in order to complete training in 43 villages and 7 schools.
- Collect data for all areas of project activity in order to provide quantifiable data for the analysis by PPP and external stakeholders.
- Identify knowledge gaps for micro-enterprises and provide timely assistance, training and support.
- Carry out a market assessment by creating a marketing plan for the sale of recycled products, in particular those produce from organic wastes.

- Provide collection carts to selected schools to assist with the collection of recyclable materials from student and village households.

## 1. Introduction

### 1.1 Background to Current Project

The current PPPUE funded project, *Integrated Solid Waste Management in Vientiane Municipality 2003 – 2004 (ISWM VM)* has been founded on the work of two small pilot projects which have aimed to establish an effective community based system for solid waste management in Vientiane. These projects were conceived and designed by principal actors involved in solid waste management in the Capital with the aim of creating a sustainable and culturally appropriate system which would form an effective foundation for SWM in Lao PDR.

The pilot projects which were partly funded by the Royal Dutch Embassy and the German donor GTZ, created a number of “recycling banks” which were constructed to receive recyclable materials from village households that had been trained to separate these materials from organic and residual household wastes<sup>1</sup>.

**Table 1: Pilot Project Outputs – Community Based Solid Waste Management**

Year	No. Recycle Banks	In Villages	In Schools
2001	6	3	3
2002	10	6	4

Source: First Tripartite Review Document 29/03/04

As Table 1 above illustrates, the pilot project targeted both schools and villages for training residents and students in source separation and the use of recycle banks.

In the process of discussion, consultation and planning, an effective working partnership was forged between the key stakeholder groups which included:

- The Science Technology and Environment Office of Vientiane Municipality (STEO)

<sup>1</sup> Project Document, Integrated Solid Waste Management in Vientiane 2003-2004



- The Participatory Development Training Centre (PADETC)
- Lao Chareon Recycling Company (LCRC)
- Vientiane Municipality Village Offices
- Recyclers and salvage workers in the informal sector
- Schools and universities and,
- Residents in target communities<sup>2</sup>

The project was effectively implemented at the village level by the project partners with PADETC, Village Office Staff and school directors providing the majority of resources in the form of project personnel, technical input and coordination. Other stakeholders provided valuable input and project support in the form of establishment of a market outlet for recyclables, assistance with social marketing and ensuring that government and municipal offices were well informed about the progress of the project.

The project management system was effective in delivering the intended project outcomes due in part to the smaller scale of the project, which saw the partnership operate with relative autonomy, particularly in terms of responding to the needs of target communities and the ability to modify the manner in which the project was being implemented.

## 1.2 Public-Private Partnerships for the Urban Environment

Based on the success of these small pilot projects, the partners applied for a grant of USD 100,000 under a UNDP Development Assistance Programme, *Public-Private Partnerships for the Urban Environment (PPPUE)*, and in March 2003 the Project Document was finalised<sup>3</sup>. The ISWM VM was one of 12 successful projects selected out of some 200 applicants who applied for funding under the PPPUE Programme which began in 2001.

The PPPUE Assistance Programme is a global facility that has been established to enable developing countries such as Lao PDR, to “obtain support in their efforts to define, promote and implement Public Private Partnerships to reduce poverty<sup>4</sup>”. The

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<sup>2</sup> ISWM VM Project Document 2003 - 2004

<sup>3</sup> Project ID No. - Lao/02/G58/A?GA/99.

<sup>4</sup> PPPUE Programme Brochure 2001

primary goal of PPPUE in respect to poverty alleviation is to increase access to basic urban services such as clean water, energy, adequate sanitation, and solid waste management. The key strategy to achieve this is through supporting the formation of effective partnerships between local government, businesses, NGOs and communities who will mobilise the appropriate resources for this to be achieved.

PPPUE grant assistance focuses on the start up phase of new PPP's with the aim of assisting them to achieve operational efficiency and an adequate level of institutional development. Once this has been achieved, projects which have been assisted under the programme are encouraged to seek funding from other sources. This will allow PPPUE to fund other new and developing Public-Private Partnerships across the region.

### **Current Partners and Potential Creating Sustainable PPP**

In the context of the three partners in the current project it is important to stress the institutional aspect of the PPP and its potential for development. The current partnership acts collaboratively as an "institution" to deliver waste management services to target villages in the urban areas of Vientiane. Given the success of the current project and commitment of its participants, it is intended that the project will be scaled up further so that the model can be introduced in urban village environments throughout Vientiane.

This in itself presumes development of the PPP beyond the term of the current project. The implications for this is that the PPP begins to resemble an independent organisation, in that it develops systems of production independently of its components and partners. In addition the PPP develops a discrete identity, information and human resource management systems as well as strong linkages with government, donors, private sector companies and local communities. This process is understood as the process of "developing institutional capacity" where the PPP begins to operate and function like a modern corporation. One of the aims of this evaluation is to provide the partners with guidance for the strengthening PPP's "institution capacity" in the next phase of the project.

## 1.3 Integrated Solid Waste Management in Vientiane

The pilot programme designed, managed and implemented by the existing local partners satisfied the criteria for inclusion in the PPPUE programme. The successful application is coordinated through the UNDP's Country Office in Vientiane.

The overall aims of the Project have been defined as:

- 1) To improve the urban environment by developing and implementing a model for waste management in urban areas of Lao PDR
- 2) To provide income generating activities for urban poor through the establishment of small scale enterprises for the collection, separation and recycling of solid waste<sup>5</sup>

In support of these aims the project has identified three outputs to be achieved throughout the course of the project<sup>6</sup>:

- 1) Establishment of partnership between public sector agencies, private businesses, non governmental organisations and communities on solid waste management.
- 2) Practice-based model/system for solid waste management, especially recycling; established, tested and operational.
- 3) Small-scale waste recycling enterprises formed and operational

The 18 month project, which was approved for commencement in March 2003, was planned for completion in September 2004.

## 1.4 Aim of the Mid-Term Review

The objective of this Mid Term Review (MTR) is to provide an external and independent analysis of the current mode of operation of the Project. The MTR aims to act as a “corrective mechanism” that diagnoses problems and suggests options for improvements in various components of the project. The MTR achieves this through “constructive criticism” with the intention of achieving long term sustainability and operational efficiency of the project<sup>7</sup>.

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<sup>5</sup> ISWM VM Project Document 2003 - 2004

<sup>6</sup> Mid Term Review - Terms of Reference, February 2004

<sup>7</sup> UNDP Guide for Evaluators (after 1997)

The areas of analysis which are included in the review are:

- a) The continuing relevance of the project
- b) The interim results
- c) The effectiveness of the approach being used
- d) The efficiency of the project management being used
- e) The quality of relationships between the various partners and
- f) The views of the beneficiaries

Simply stated the MTR will be looking to identify problems and constraints and propose immediate actions in order to see the project achieve its stated aims and objectives. This MTR will also feed into PPPUE's Global Learning Network and the findings and lessons learned made available to the regional and international network of PPP practitioners. It is envisaged that many of the challenges and successes identified in project evaluations will assist other PPP practitioners and partners to improve project design and implementation.

## **1.5 Methodology**

The methodology for the MTR has been based on a review of project related documents, attendance at the First Tripartite Review meeting and interviews with key participants. A bibliography of cited documents and an interview list is contained in appendices A and B. The MTR Report has been informed by UNDP Guidelines for Evaluators in terms of the analysis of specific issues that need to be covered in such a review. The report also addresses questions raised in the MTR Terms of Reference and relies on the Project Document as the baseline for analysis of projected outputs.

## **2. Project Evaluation**

### **2.1 Evaluation of Project Concept and Design**

#### **2.1.1 Public and Private Partnerships**

The concept for ISWM VM builds on the earlier waste separation approach utilised in the two pilot projects conducted in 2001 and 2002 respectively. In addition, the project includes two other concepts, which are instrumental to achieving long term national development goals. The first is the creation of an effective public-private partnership (PPP) between project partners and the development of an effective institution for introducing and replicating a community based SWM model in urban areas in Lao PDR. The second concept is the development of micro enterprises which utilise recyclable materials captured from the waste stream to increase incomes of the poor and contribute to poverty alleviation.

The underlying concepts driving this project are both innovative and achievable. Given its basis in the practical experience of developing alternative models of waste management systems in Vientiane, the Project had a solid foundation from which to further develop the concepts and build on successes to date.

Generally speaking the project design is adequate for achieving the stated aims of the project. However, a number of design improvements can be made, now that the project has reached a degree of operational efficiency. Potential design improvements are outlined below for each of the design key concepts.

The development of the PPP concept is aimed at establishing an effective SWM institution in order to build and replicate a sustainable community based SWM model for Lao PDR. While this public-private partnership is an innovative development in the provision of urban services for the poor, its implementation is in fact challenging and complex.

The PPP consists of the three partners from the earlier pilot projects; STEO, PADETC and LCRC. STEO represents several municipal stakeholders which contribute to the programme and participate in the decision making process. These stakeholders include the Urban Cleansing Service (UCS), VM's formal waste

management unit, the Office of VM, and the District Offices. In addition to these participants there is PPPUE, which funds the project, and the local office of UNDP that acts in a coordinating role.

### **Project Management Structure**

Designing a workable project management structure that clearly defines roles and responsibilities is a prerequisite for the successful establishment of a PPP. The project management structure should provide equitable representation for each of the participating partners at different levels of the PPP.

In support of the PPP, the project design process has attempted to identify clear roles and responsibilities for each of the partners; these are made explicit in the Project Document. The formation of a Steering Committee and a Project Team has seen a project management structure emerge which resembles similar bureaucratic structures to that which operate in Vientiane Municipality (VM). The structure has not augured well for the development of PPP, and this mode of project management has slowed the process implementation.

Unequal distribution of participants combined with poor communication between the various levels of the PPP has retarded the development of the partnership and the achievement of Project results. The opportunity exists at the project design stage to ensure that a suitable project management structure is developed and agreed by the partners. In addition to this initial design, project partners must have the facility to make corrections to the project management structure as the PPP develops.

### **Interacting with Multi-Lateral Donors**

This has proved to be a difficult period for the PPP, as delays in achieving project start up have caused considerable frustration. The reasons for the delays have been attributed to problems the PPP experienced in complying with UNDP/PPPUE processes in order to establish operational readiness to commence the project.

Despite UNDP providing an induction to its processes and policies, the PPP struggled to provide UNDP with adequate documentation for completion of the pre start up phase. In terms of project design, multi lateral donors such as UNDP/PPPUE should ensure that newly established PPP's are provided with adequate technical support, time and information about the process in order to comply with their guidelines and policy requirements.

### **Facilitation of PPP Development Process**

The formation of a functional and efficient PPP has been, and remains a challenging task for the Project partners. The current project design does not provide a systematic pathway for the establishment of the PPP but allows for more organic development of the partnership over time. While this approach allows for creativity in terms of partnership arrangements, it does not provide clear institutional development goals for the PPP. What is required in the design stage of this project are design components which support, facilitate and provide technical support for the identification and attainment of institutional goals. The project currently lacks this vital design component, which has the potential to significantly reduce some of the institutional problems identified by participants in the Project so far.

#### **2.1.2 Waste Separation and Community Operated Recycle Banks**

The concept of waste separation employed in the earlier projects is based on the assumption that source separation at the household level is the foundation stone of



School Recycle Bank

environmentally sustainable SWM. Once source separation has been successfully executed at the source, (i.e. the household) the opportunity exists to collect and utilise these materials in a number of ways, which will have long-term positive environmental and socio-economic impacts. The earlier project utilised the concept of the community and school recycle banks to provide a local storage facilities and points of

purchase for recyclable materials from participating households.

In order to achieve household separation the current Project utilised a number of design features which include:

- Establishing a close working relationship with district and village office staff
- Regularly conducting community meetings and establishment of village based working groups
- Effective community consultation
- Training of village volunteers to educate households for the separation of waste
- Design and construction of community and school operated Recycling Banks
- Awareness raising campaigns at the municipal, district and local level
- Effective use of mass media

- The use of the District office as a project implementation tool

Given the experience gained in the earlier pilot projects the recycling bank and waste separation component of the Project's design is the most advanced and successful of the three design components. PADETC, District Office staff, Village Office staff and community participants (both in villages and schools) have developed a high level of expertise in this area of the project.

The concept and design for this component remains central to the successful and sustainable management of solid wastes in village communities in Vientiane Capital.



Signage at Recycle Bank

Despite this success, PADETC as the Project's principal training experts are continually looking for ways to improve existing training and motivational techniques. New innovations introduced during the course of the project may require new inputs which require additional financial resources.

From a project design point of view, it is important for project partners to create sufficient financial reserves to ensure that new innovations and methods developed in this area can be introduced during the course of the project without the need for constant revisions within the project budget.

### **2.1.3 The Development of Micro Enterprises for Poverty Reduction**

Having established a stable market for the sale of recyclable materials through the provision of community operated recycling banks, the third concept relates to the development of micro-enterprises. These micro-enterprises include small scale collectors who buy and sell recyclable materials from participating households, organic waste recyclers, and those enterprises which aim to reuse these materials in order to produce end products for sale.

To encourage the development of micro enterprises the Project introduced the following design components:

- Provision of a revolving fund for enterprise establishment to allow micro collectors sufficient operating capital to buy and sell recyclable materials
- Provision of pushcarts and scales for the collection and weighing of recyclables



- Ensuring regular collection from Recycle Banks by Lao Chareon Recycling Company
- Provision of technical support and training for farming of earth worms and production of compost

This component could benefit from several design improvements as it is a new component from the initial pilot stage, and as such the project implementation team has less experience in this area.



Micro-collector and push-cart

While the Project aims to stimulate micro-enterprise activity to contribute to poverty alleviation in targeted communities, the project partners are only just beginning to gain expertise and mobilise in this area. Technical advice relating to the development of micro-enterprises operating in the area of urban solid waste management would be of considerable

benefit to the project at the present time and most certainly must form a component of an extension to this program beyond the end of the current project. PADETC, as project consultants in this area, are actively seeking new knowledge to transfer to the Project, as is evidenced by a recent study tour to India where community scale composting was examined. This knowledge will be used to enhance the knowledge of the Project's technical and field staff in the area of organic waste recycling.

The micro-enterprises which have been established also need to be sufficiently monitored and analysed to understand the impact that their activities are having on reducing poverty in the target communities. An ongoing monitoring programme needs to be integrated into all micro-enterprise initiatives at the project design stage.

Training micro-operators is also an important part of establishing sustainable micro-enterprises. Training programmes for small scale micro-enterprises which teach not only production techniques but micro business management, financial and risk management, and marketing of end products is essential for their long term survival. As with data collection and ongoing monitoring, training is an essential component which must be built in during the project design phase.

## 2.2 Evaluation of Institutional Capacity

One of the key areas of enquiry for this MTR is an evaluation of the institutional capacity of the current public-private partnership (PPP) component of the project. The PPP functions as a dynamic institution providing goods and services, developing internal and external relationships and has the potential to have both positive and negative impacts on the development of human resources<sup>8</sup>. The areas of institutional investigation in this MTR include an analysis of:

- Ability to effectively facilitate multi-actor cooperation on solid waste management
- Human Resource Management
- Technical knowledge for the project
- Financial management
- Capacity to respond to changes and streamline services
- Links with other government, private and development projects
- Effectiveness of decision making processes

### **Effectiveness of Multi Actor Cooperation Arrangement on Solid Waste Management**

The ability of the PPP to facilitate cooperation between various stakeholders has been very successful. This is evidenced by the number of participating organisations and participants who occupy various levels within the PPP.

**Table 2: PPP Stakeholders**

UNDP Vientiane Office	PADETC
PPPUE	LCRC
Office of Vientiane Municipality	UCS
STEO	Village Offices
District Offices	Informal recycling sector participants
Community representatives at the Village level (trainers)	Community participants (Recycle Bank Operators)
School directors, teachers and students	

<sup>8</sup> UNDP Guide for Evaluators (after 1997)

These actors involved at various levels have been working together more or less successfully for the past 9 months. The prospects for continued cooperation are sound despite some aspects within the project management structure which need to be addressed. What is clear is the strong commitment among all stakeholders to see the project succeed at all levels of implementation.



A Village Office involved in recycling programme

### **Human Resource Management**

The PPP has been very successful in the deployment of its human resource base. This has been achieved through the use of District and Village Offices, which have provided an efficient pathway for the mobilisation of human resources required to deliver various components of the Project.

PADETC and the Village Office have been particularly effective in attracting volunteers to the Project to act as community environmental workers in the delivery of training to residents in the village.

### **Effectiveness of Decision Making Processes**

At the present time the decision making process is slow and quite cumbersome as the organisational structure of the PPP is relatively hierarchical. There is a considerable knowledge gap between what is being experienced at the operational level and the Steering Committee. Generally speaking within the Project the closer one is to the operational level the more responsive and efficient the decision making becomes. Given that the Steering Committee meets once every 3 months it is predictable that this situation has evolved as the steering committee is not sufficiently engaged in the Project at the right level.

### **Degree of Technical Knowledge Required for the Project**

The level of technical knowledge within the PPP for delivery of project outcomes is relatively strong, particularly at the village and community level where the Project is being implemented. This is particularly the case for technical skills related to community and stakeholder consultation and training community participants in source separation.

However, there are weaknesses in technical knowledge in a number of areas including, general project management, management of the project budget, project planning, reporting, micro-enterprise development for solid waste, institutional strengthening and development and data management at the project level.

### **Financial Management**

The PPP has adequately managed the pool of funds which have been allocated for the Project. However, inexperience in managing project budgets of this type has led to difficulties in allocating enough funds for various line items within the budget.

There appears to be a lack of understanding in respect to how the Project budget can be managed and adjusted from time to time without breaching budget parameters set by UNDP/PPPUE.

For the duration of the current programme, funds are supplied through grant assistance from UNDP/PPPUE, enabling the programme to employ staff to affect the implementation of the programme at the community level. Financial support has also been forthcoming from the project partners, in particular the Vientiane Municipality and PADETC who are providing administrative and logistic support as well as fulltime and part time staff at various levels of the project.

### **Capacity to Respond to Changes and Streamline Services**

This is an area in which the PPP is quite weak at the present time, as it has not sufficiently developed timely decision making processes and communication channels between its various levels. In respect to streamlining service delivery, it is envisaged that this will evolve as a matter of course, as the PPP improves its institutional capacity.

### **Links with Other Government, Private and Other Development Projects**

Over the past 9 months the PPP has made successful linkages with a number of organisations as a part of the ongoing implementation of this project. These organisations are listed below:

**Table 3: PPP Organisational Relationships**

Organisations	
National University - Faculty of Architecture	Nakhonluang Television
Science Technology Environment Agency (STEa)	TAA (German Aid Organisation)
Tax Department	Wongpanit Recyclers Company - Thailand
Department of Immigration	World Church Services
Vientiane Urban Development Administrative Authority (VUDAA)	Australian Embassy
Pasasone Newspaper	GS Group
Vientiane Mai Newspaper	Vientiane Boat Racing Festival
Nakhonluang Radio	Thatluang Festival

## 2.3 Evaluation of Project Management Structure

The existing project management structure has produced a number of issues which will need to be addressed in the remaining phase of the Project if the existing partnership is to continue beyond the completion of the current project. The main problem which has been identified by participants at the PPP's operational level is related to roles and responsibilities within the project management structure.

This utilisation of the municipal system of District and Village Offices has served the previous pilot projects and the initial start up phase of the current Project very well. Once operational efficiency has been achieved in these initial projects, human resources have been quickly mobilised to facilitate project implementation.

The current management structure is based on a hierarchical "command and control" structure rather than the "project manager" system normally used by the development sector. While this mode of operation may not cause problems for existing partners who are familiar with this system, the current structure is creating problems for PADETC and LCRC. These non government and private partners are used to operating under flatter and more autonomous management systems of where authority is more readily delegated.

What is apparent is an organisational “clash of cultures” between the Project partners which is resulting in the marginalisation of smaller partners; to the extent that the CEO of PADETC has stated that if the situation does not improve in the remaining months of the Project, his organisation will not seek reengagement with the partnership beyond the current term.

In the previous pilot projects PADETC and LCRC acted with relative autonomy as project managers and exercised complete control over the project implementation process. STEO's previous involvement secured the resources of the municipality without the accompanying command and control processes and cross over of responsibilities. In the current Project however, these two smaller partners are now required to interact with a larger group of municipal partners from both STEO and the Vientiane Municipality who act as the official executing agency and provides many of the resource required for scaling up the Project.

Project management problems have also arisen in the PPP's engagement with project funders as mentioned earlier in section 2.1.1. The problems and impacts identified in the MTR review are outlined in the table below:

**Table 4: Current Project Structure & Project Management Issues**

Problems	Impacts	Identified Causes
Delays in Project start up due to poor communication between donor agency and partners.	Project outcomes can not be achieved in the available time frame	Allocation of inexperienced staff in project start up phase as well as staff changes during the same period.
Lack of regular input to start up process	Lack of timely mobilisation of resources has caused logistic and financial headaches for project implementators at the operational level.	Partners lack project management experience in respect to the comprehension of donor processes
Micro management of operational aspects of the project's implementation by Steering Committee	Frustration experienced by PADETC when implementing project at the village level.	Unclear roles & responsibilities
	New methods of working with communities which have	Lack of experience by VM in use of “project management”

Problems	Impacts	Identified Causes
	been proposed have been vetoed by VM.	model used by development sector.
Slow response to requests from project implementation team at the village level	Project outcomes are not achieved	Hierarchical and bureaucratic project management structure - lack of ability to delegated authority.  Steering committee meets every three months while new problems and issues arise on a monthly basis.
Requests for changes in the methods used to deliver Project outcomes are not adequately discussed, considered or resolved at Steering Committee level.	PADETC/LCRC have less influence in the Project  PADETC believes they are not equal partners in this Project.	Over representation of VM on steering committee who controls project  Project Committee's lack of experience in waste management, community development and project management processes.
Project Manager is unable to act with discretion on issues pertaining to implementation of the project at the village level.	Project manager is not confident to make decisions in her own right and defers to VM Office and steering committee who often provide differing advice.	Project manager requires sign off from VM Office on new implementation activities generated at the village level

The problems outlined above are clearly related to confusion in respect to roles and responsibilities and are commonly experienced in new institutions, particularly where new working partnerships are being forged.

## **Roles and Responsibilities Under the Current Project Structure**

### **Steering Committee:**

- 1) Is charged with the responsibility for directing the project committee for the implementation of the project in order to achieve the stated aims of the Project.
- 2) Have the authority to act and solve any problem which may arise in the course of project implementation.
- 3) Coordinate with all project stakeholders in order to implement the project

The Steering Committee's stated role of "directing the project committee for the implementation of the project in order to achieve the stated aims of the Project" is in fact unnecessary. The Project Document clearly identifies the outputs, the activities and the resources required to achieve these components. The expertise and skill to deliver the outputs resides at the operational level of the Project where it is implemented. At the present time the Steering Committee's involvement in tasks other than coordination and strategic management does not contribute to the efficiency of PPP's decision making processes.

**Table 5: Steering Committee Members**

<b>Representative</b>	<b>Organisation</b>	<b>Role</b>
Mr Chommany Thatnakham	VUDDA (Deputy Chief Director)	Chairman of Steering Committee
Mr Daophet Aroune	STEO	National Project Director
Dr Sombath Somphone	PADETC (Director)	Committee member
Mr Mouson Munvised	Vientiane Urban Development Authority (VUDDA)	Committee member
Bounluem Duangngern	Vientiane Municipality (Chief Deputy of Department of Planning)	Committee member



Representative	Organisation	Role
Mr Phomvisone Keomuangthon	Chief Deputy of Chanthabouly District	Committee member
Mr Thongsuk	Chief Deputy of Sisattanak District	Committee member
Mr Somphone	Chief Deputy of Saysetha District	Committee member
Mr Thongthip	Chief Deputy of Sikhotabong District	Committee member

### **Project Management team**

- 1) Have responsibility for implementing and administering the project in order to achieve its objectives.
- 2) Coordinate with donors and other project stakeholders for broader cooperation in project implementation.
- 3) Evaluate and make request for approval for use of specialists.
- 4) Implement rules and regulations; write summary reports for VM and UNDP, request feedback and suggestions.

This particular project departs from the standard project management model used in the development sector through the use of a Project Committee as well as a Project Manager. The Project Committee is a group of six individuals who are responsible for project implementation at the operational level.

The designated project manager is an integral part of the Project Committee and appears to have at least two roles. The first role is one of an independent project manager who is held accountable for achieving projects outputs and operates under delegated authority within the project management frame work. The second role is that of a committee secretary who carries out the decisions of the committee. In this project it appears that the designated project manager is directed by the Project Committee, the Steering Committee and the office of Vientiane Municipality.

**Table 6: Project Management Team Members**

Representative	Organisation	Role
Mr Daophet Aroune	STEO	National Project Director
Ms Khamphong Phoumvongsay	STEO (Chief Deputy of STEO)	Project Manager
Mr Khamserm Manivong	PADETC (Community Development Specialist)	Project Partner
Dr Sayamang Nanthanavone	UCS (Deputy Director of UCS)	Project Partner
Mr Udone Chaanthalansy	LCRC (Director)	Project Partner
Mr Thilaphone Oudomsine	UNDP	Project Coordinator

**Project Staff**

- 1) Responsible for implementation of project at the village level.

**Table 7: Project Staff Members**

Technical Officers	Field Officers
Ms Phoukham Keobandith	Mr Khaikao
Mr Vannaeth Chanthavong	Mr Southisay
	Mr Vilayphone
	Mr Khamla

**2.4 Evaluation of Project Results**

The evaluation of project results is undertaken to measure the outcomes achieved to date, in comparison with the targets set in the original Project design. Table 8 presents an overview of results achieved in the first nine months of the Project. As can be seen, there were some delays in achieving the targets during the start up months. However, generally it is clear that the Project is performing well in terms of

achieving the planned outputs. A key area for the next phase is to expand the work in the micro-enterprise development component of the Project, including organic waste recycling ventures.



Aluminium processed for sale, LCRC

**Table 8: Results Framework**

Intended outputs	Output targets	Indicative Activity
Output One		
Multi-actor co operation agreement among public sector agencies, private businesses, non-governmental organisations and communities on the management of solid waste	2002- Agreements Signed	1.1 One day stakeholder workshops
	2003- Agreements fully implemented and monitored	1.2 Monthly meetings of the steering committee
Output Two		
Practice-based model/ system for solid waste management, especially recycling, tested and established	2002- Model established and testing started. stakeholders trained.	2.1 Hold Community meetings/ establish working groups
	2003- Model fully operational and adapted through monitoring and evaluations	2.2 Community level composting of organic waste
		2.3 Awareness raising campaign
		2.4 Monitoring
		2.5 External evaluation
	2003- End of project state: model fully evaluated and adapted for replication	2.6 Workshop for four secondary towns
Output Three		
Income generating opportunities for the urban poor developed/ enterprises formed.	2002- Income generating opportunities identified and developed in operational activities. Stakeholders have been trained.	3.1 Establish recycle banks
		3.2 Organise and assist informal refuse collectors
	First enterprises have been trained.	3.3 Assist villagers to establish micro enterprises for the raising and selling of earthworms.
	First enterprises formed (40) 2003- remainder (80) of enterprises formed and fully	

Source: ISWM VM

**Table 9: Project Implementation Results June 03 –March 04**

WORK PLAN												
Activity	Comments	Months										
		J	A	S	O	N	D	J	F	M		
Output One												
1.1 One day stakeholder workshops	Organised at end of the 3rd quarter 03 due to project delay											
1.2 Monthly meetings of the project committee and individual urban district level	Delayed start but carried out as planned											
1.3 Quaterly meetings of the Steering Committee	Three quarterly Steering Committee meetings organised and attended											
Output Two												
2.1 Hold Community meetings/ establish working groups	Successful implementation in target village areas											
2.2 Community level composting of organic waste	This component has been launched and is still in the development stages (30 people trained)											
2.3 Awareness raising campaign	Very successful through mass media campaigns, TV radio etc.											
2.4 Monitoring	Reports have been produced but not always on time											
2.5 External evaluation	A mid term external evaluation now completed											
2.6 Workshop for four secondary towns	Not yet commenced											
Output Three												
3.1 Establish recycle banks	22 out of 50 built enough materials on hand to build 41.											
3.2 Organise and assist informal refuge collectors	Mostly in the form of workshop on which materials can be sold to LCRC											
3.3 Assist villagers to establish micro enterprises for the raising and selling of earthworms.	30 people trained however better management and technology required in this area											
Reporting												
Annual Report												
Quarterly Reports	Reports are produced every 4 months											
Final Report	Will be produced at the end of the project											
Final Workshop	To be held at the end of the project											

**SYMBOLS****Plan Activities****Actual activities carried out**

Source: First Tripartite Review 29/03/04, Quarterly Reports

## 2.5 Evaluation of Project Impacts

### **Awareness Raising Programmes**

The PPP has been highly successful in the use of mass media and have provided a raft of different strategies for social marketing. For example advertising contracts



School recycled fashion show – waste education

have been made with Vientiane Mai and Pasaone Weekly Newspapers, Nakhonluang TV and Nakhonluang Radio for the delivery of recycling advertisements. The PPP has also been present at major public events, run major competitions and distributed large amounts of written material including public signage in and around Vientiane.

According to PADETC and Project staff, the impact of these awareness raising programmes has been significant and has resulted in excellent community participation in the programme. According to Project staff, when a new village commences training in solid waste management the degree of excitement and expectation is such that there is no shortage of volunteers and participants for the programme.

On a city wide basis the impacts are being felt across the capital as the advertising through mass media begins to take effect. The public education programme initiated by the partners has been highly effective, with the incidence of littering and illegal dumping decreasing as social norms begin to change.

### **Level of Community Participation & Attitudes Towards Recycling and Appropriate SWM**

Community attitudes towards recycling in Vientiane Capital are beginning to change as residents adopt more appropriate waste management practices. However the pace of community change is slow as traditional methods of disposing of household wastes did not cause the sort of problems now being experienced in high density urban areas of Lao PDR.

Traditional means of disposal such as feeding food waste to animals, burning garden wastes and dumping wastes on vacant land did not cause the high environmental and health impacts now being experienced in the urban area. Changing consumption patterns have altered the composition of the waste stream from one high in organic and inert wastes (food, garden wastes, glass and tin) to one containing a high percentage of plastics. Waste management therefore a relatively new problem for urban planners and the community at large.

The earlier work of waste management stakeholders and the efforts of this current Project are now achieving a positive impact on attitudes and community participation in respect to sustainable waste management practices. During the last 6 months the Project's implementation team, operating at the village, level has worked hard to find new ways to engage community members in the practice of source separation. However, while some individuals will respond well to the concept, the Project teams have to work hard to convince others that source separation brings widespread benefits to the village environment. It is this re-education and the subsequent training for which the Project depends on its success.

Where the Project team has been working, the results are very good as is demonstrated in the Nongduang-Neua Village in Sikhottabong district where 272 households participate in the project. This is a participation rate of approximately 70% which is in a similar range to what it is achieved in household recycling schemes which operate in developed economies in Europe. The village office who is closely involved in the implementation has estimated that waste disposal amounts have decreased by 20% as a result of adequate source separation.

One measure of the change in community attitudes is demonstrated by the amount of new waste collection contracts being signed with the UCS (Urban Cleaning Services). For instance in Sisangvone Village, in Saysetha District, the number of waste collection contracts has increased significantly. At the time the project started in September 2003 the number of waste collection contracts increased from 127 to 225 out of a total of 262 households. A similar result occurred in Nongduang-Neua village in Sikhottabong District, where contracts with UCS increased from 96 to 159 after the SWM programme was introduced.

### **Effective Use of Recycling Banks,**



The MTR found that most of the recycling banks were being used effectively by villages and schools, providing a focus for waste management and recycling activities. However, one development which has eventuated and is impacting on the utilisation of Recycle Banks is the growth of informal micro-collectors. These collectors are collecting and purchasing recyclable materials directly from households, negating the need to cart recyclable materials to the local Recycle Bank. The increase in informal micro-collectors has resulted in the Project manager reconsidering the number of Recycle banks which should be built the target villages.

### **Impact on Poor Households and the Local Village Economy**



Items for sale made of re-used materials

The activities of the PPP and its programme have provided benefits for target communities as well as other groups. For instance, as a result of the practice of widespread source separation in the villages, the amount of recyclable material available for collection has increased substantially. This has seen a significant increase in the number of informal micro-collectors operating in

villages where the system has been introduced. In some target villages planned Recycle Banks will not be required as there is a healthy supply of collectors operating in these areas.

One of the benefits of the system of SWM being introduced is that it is highly cost effective, requiring only small amounts of time at the household level to separate waste. At the village level, once the system has been implemented it requires relatively low inputs and does not impose significant costs on the Village Office. The cost to the District and Municipal Offices is also nominal as the inputs (time) for the system to operate effectively are incurred at the household level. In fact through effective source separation of the recyclable component of the waste stream costs, savings are accrued to both the householder and the municipality as savings in transport costs to KM 18 Landfill.



There are also positive macro-economic effects which are well understood but more difficult to measure. This is particular the case for Lao's emerging tourist industry attracting ever increasing numbers of tourists from both the Asia Pacific region and also Europe.

Vientiane's reputation as a city of old-world charm is buttressed by the relative cleanliness of its streets and public areas.



Material sorters - LCRC

One of the hall marks of matured economies and well managed cities is the efficiency and completeness of their waste management services. Tourists and potential investors respond positively to these clean environments and it is evident that the cleanliness of city scapes and rural areas is an important consideration in deciding which countries to visits and where to establish new enterprises.

Investors will be particularly concerned that the wastes which their enterprises produce can be effectively collected and disposed of sustainably. Many of these companies operating under international standard of environmental best practice must in fact have access to adequate disposal and recycling facilities to fulfil their corporate environmental management obligations.

### **Impact on the Local Environment**

The institution's impact on the urban environment has been significant, particularly in those communities where the programme has been operating. According to estimates made by UCS, the reduction in the quantity of waste to landfill is estimated at approximately 5,000 tonnes during 2003<sup>9</sup>. This represents a significant decline as total waste to landfill for 2002 was just 47,015<sup>10</sup> tonnes instead of an expected 52,500 tonnes based on increases in previous 4 years.

According to interviewees at the village level, the decrease in litter and inappropriately dumped waste in target village areas has been significant as a result of the programme (see previous section). This is also evidenced by the number of new contracts being secured by UCS in these areas as residents change traditional

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<sup>9</sup> First Tripartite Review Meeting 20.03.04

<sup>10</sup> Follow up Study n Assistance for Waste Management, JICA, 2003

waste disposal behaviours such as inappropriate dumping and burning of solid wastes. The environmental and social flow on effects from these improved waste management practices. Some of these are listed below.

***Improvements as a result of appropriate disposal of residual household wastes where residual waste is collected regularly and on time:***

- reduces the opportunity for village dogs and informal collectors to scatter waste. This will result in less opportunity for vectors such as flies and rats to spread disease as a result of the purification of solid wastes.
- produce greater aesthetic beauty for the village area.
- ensure the free passage of pedestrians and vehicles
- ensure that solid waste does not enter storm water drainage systems causing blockages and resulting localised flooding.
- ensures that solid wastes are not washed into streams, rivers and wetlands, particularly during the wet season.
- Regular and cost effective waste collection will provide an alternative to dumping of solid waste in waterways and on vacant land reducing the impacts of pollution in these areas.
- the need for burning is reduced as an efficient low cost alternative is now provided. This will result in less localised and city wide air pollution, improving peoples health and reducing the incidence of chronic lung conditions.

***Environmental improvements as a result of separating recyclables out of the waste stream include:***

- reduces the amount of waste to landfill (reducing fuel consumption of landfill machinery), reduces the amount of leachate produced as a result of recycling the organic fraction from the waste stream.
- reduces the number of trips to landfill reducing carbon dioxide (Co<sup>2</sup>) emissions as result of reduced fuel consumption
- reduces the amount of plastic committed to landfill which in turn reduces fuel for landfill fires which can produce serious localised impacts on air quality.
- Reduction in waste to landfill will also mean less land is used for land filling operations and available for other uses including food production.
- decreases the amount of raw materials required for consumption, conserving the earth's pool of non renewable resources.

## **2.6 Evaluation of Project Sustainability**

### **Financial Sustainability of PPP**

It is clear from this evaluation that additional funds will be required from time to time over the course of the Project, however as the partners now recognise, once programme budgets have been allocated and approved there is little scope to increase or significantly modify these budgets. For PPP to operate effectively, respond to demand, and develop institutional capacity, it must draw on a pool of funding which can use to satisfy these financial demands. This will require the PPP to develop an effective financial management system, which is able to capture, account for and allocate funds efficiently on an ongoing basis.

There are a number of opportunities for ongoing funding of the institution and its programme and some of these are listed below.

- 1) Funds from bilateral and multilateral donors to fund programme and institutional capacity building as per the current project
- 2) Funds generated from community management of waste collection services and involvement in community based SWM enterprises.
- 3) Funds allocated by Vientiane Municipality and Provincial governments where the programme is introduced
- 4) Human and physical resources provided by project partners
- 5) Sponsorship from private sector companies.

Given the situation of the institution at the present time, the best opportunity for ongoing financial support is through donor funding. New funding needs to be secured and available prior to the end of the current project to avoid a disruption in service provision and development of the programme.

### **Sustainability of Community Based SWM**

Providing the community has been adequately trained, provided with technical support and collection services, the system of household separation will continue indefinitely. PADETC has found that once households begin separating recyclables and see the benefits accrued in their local community, then the activity becomes self sustaining. This is evidenced by the high participation rates still being experienced in the villages who took part in the earlier pilot projects.

### **Sustainability of Schools Recycling Education**

School Recycle Banks and recycling education has produced some of the most successful results in the programme so far. Once a school has adopted the programme and school teachers trained, the system is self sustaining. Moreover, students have proved to be energetic advocates of household source separation and it is recognised that household participation is secured through this pathway. In addition the Project has stimulated the development of environmental curriculum within the school system where children are exposed to environmental education at an early age. This particular strategy which the Project is employing, has been identified as a key driver for sustained environmental awareness across the globe.

### **Sustainability of Micro – Enterprises**



Plastics processed for export to Thailand

The sustainability prospects for micro-enterprises is not fully understood at this stage of the project and it is envisaged that close monitoring and data collection will provide a greater understanding of this component of the Project in the future. This is particularly the case for those micro-collectors who have been issued small capital loans out of the revolving fund.



## 3. Recommendations

### 3.1 Strengthening Institutional Capacity

Given that the partners are committed to creating a strong partnership, capable of delivering the community based SWM model to the remaining areas of Lao PDR, it is imperative that institutional capacity building be prioritised over the remaining months of the Project.

The responsibility for increasing institution capacity is best managed by the project partners through the existing Steering Committee. As mentioned previously, for effective implementation of the waste management model at the national level, the PPP must act and think like a modern corporation. Existing systems of work must be standardised and be easily understood carried out by new participants joining the PPP SWM project. This is best achieved through the development of a plan for institutional development which sets a programme for completion of various tasks of institutional strengthening. The plan should look to address the following institutional components:

#### Management

- Modification of the project management structure (outlined below). An effective project management structure will allow the partnership to operate with greater efficiency, respond quickly to customer demand and create clear communication between various levels throughout the institution.
- Continue to build financial management skills in terms of managing the Project budget by utilising the skills and experience of the Project's Thai consultant in order to rework the budget and produce a realistic work plan.
- Planning processes need to be strengthened in order to produce various outputs required by the Project. Assistance in this area should be acquired as soon as practicable by the project manager in order to ensure all outputs are achieved in a timely fashion.

- Ensure adequate knowledge and skills in understanding and acting upon donors requirements in respect to the creation of acceptable project budgets, work plans and other processes which are required prior to and during project implementation. Retain a skilled advisor to assist in these matters from time to time in order to successfully negotiate these important project management processes.
- HR Management System should be formalised with the continuing development of Position Descriptions, employment contracts as well as staff training and induction for all position within PPP. The HR management system should include a clear explanation of the roles and responsibilities within the PPP and nomination of a CEO to represent the group. It is recommended that the current chairman of the Steering Committee take on this role if this is possible.
- HR development should include a data base of technical and associate specialists that can be consulted from time to time. Among these specialists will be individuals who have expertise in institutional development and who can be called upon to assist PPP with the tasks at hand.
- Create a professional identity for PPP such as an official logo, letter heads and associated promotional material.

#### Operational

- Begin the systemisation, standardisation and streamlining of project services for example all aspects of training, media outputs, technical support and advice. Produce standardised operating procedures for all aspects of the programme
- Centralised and comprehensive data management system in Lao and English, in particular the Project's sub component programmes such as micro enterprise development, plans for institutional strengthening, plans for community based solid waste management, media strategy, market development for recycled products etc. Ensure all documentation is accessible to the PPP and its partners in order that data required for use by third parties such as the donor community, evaluators and researchers is readily available. *(The strength of an institutions data management system is a key indicator for evaluating the internal strength of the organisation).*

### Project Sustainability

- Ensure PPP/Project financial sustainability through securing further funding through channels outlined in section 2.6. In support of this the Project Steering Committee should oversee the production of a PPP Proposal for project funding which includes a Capability Statement and a clear outline of how the expanded project will be delivered.
- Generate plans for expansion of the project in new village areas of Vientiane Capital and begin considering how design improvements to the project can be integrated in the new village areas.
- Approach donors and begin discussions for further project assistance in order to provide continuous service delivering training to target villages in the urban area.
- Continue to make linkages with other SWM stakeholders including international bilateral and multilateral donors in order to support the development of the projects in various ways. Ensure that the PPP can supply experienced and high level representation from the steering committee to facilitate relationships and negotiate on the PPP's behalf.

## **3.2 Increasing Efficiency of Project Management Structure**

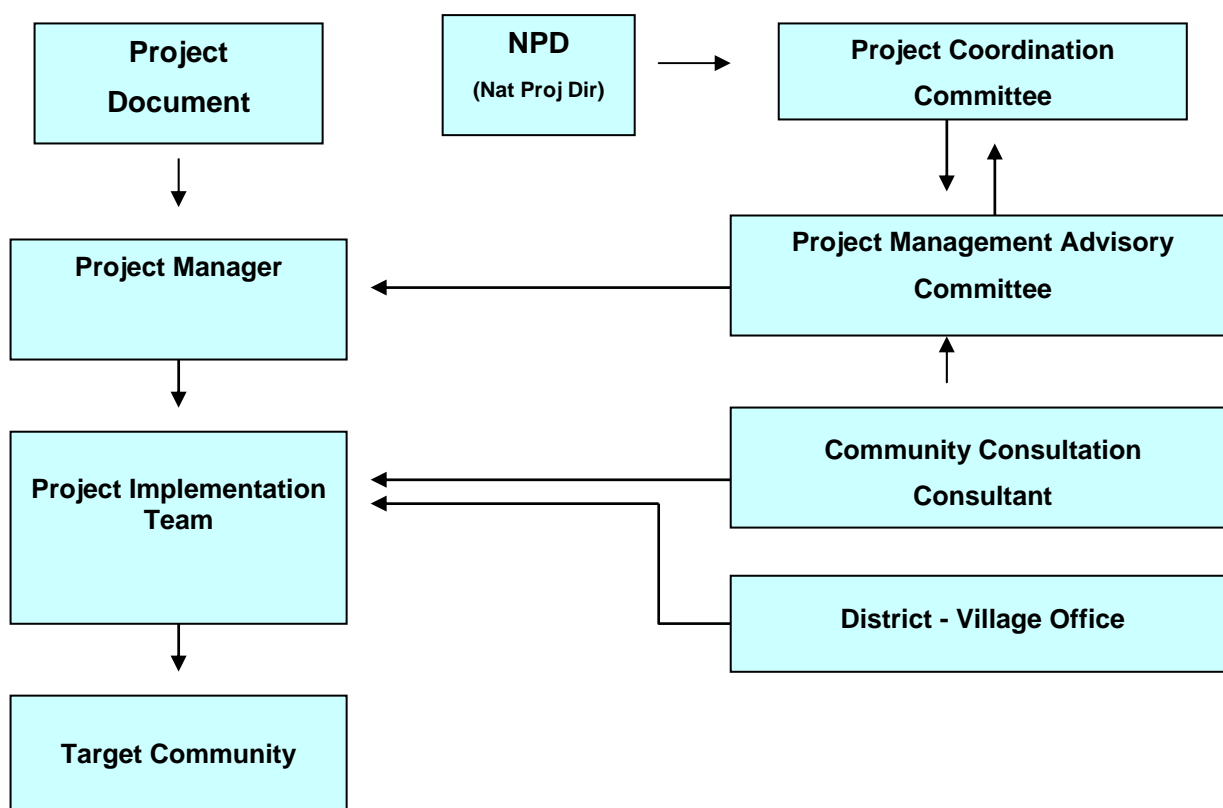
Increasing the efficiency of the project management structure through a review of roles and responsibilities in the PPP will facilitate an effective working relationship between the Project's stakeholders. Clarifying roles and responsibilities will further ensure clear communication and efficient decision making and in turn provide the opportunity to strengthen institutional capacity.

Unless this is substantially achieved, further scaling up of this programme is not advisable as the basic institutional components will not be sufficiently developed. Given the demonstrated commitment by all of the stakeholders to see this project succeed it is envisaged that the suggested modifications to the project management structure will not be difficult.

In considering the current project management structure and its inherent problems as discussed above in section 2.3 it is recommended that the following tasks be undertaken and issues addressed.

- 1) The project management structure needs to be simplified through a clear separation between the programme's operational arm and its strategic efforts to support the project through achieving strategic goals.
- 2) A reassessment of roles and responsibilities must be completed, as there is some confusion and cross over for what each partner is responsible for in terms of the different components of the Project's implementation.
- 3) There needs to be greater representation of PADETC and LCRC at the strategic level (i.e. current Steering Committee).
- 4) The Project Manager must be able to operate under delegated authority in order to manage the Project as per the Project Document.
- 5) Improved communication between the strategic level and the operational level should be prioritised and necessary adjustments to the internal communication system made.
- 6) The current Steering Committee should appoint a secretary who is responsible for actioning the Committee's resolutions and who will liaise closely with the existing Project Management Team
- 7) The National Project Director should work closely with the chairman of the current steering Committee in order to strengthen leadership of the PPP and through the development and expansion of PPP's institutional capacity.



**Figure 1: Suggested Improvements to Project Management Structure for PPP**

The above diagram shows the relationship between the different parts of the institution and is provided to stimulate a dialogue between relevant stakeholders. A commentary on the relationship between each part is provided below.

## **Suggested Roles and Responsibilities**

### **Project Coordination Committee (Ex Steering Committee)**

The Project Co-ordination Committee should act as a high level component of the PPP and should concentrate on three main roles. The first is a coordinating role at the outset of the Project's inception phase where all stakeholders and partners are mobilised for their part in the Project.

Once this phase has been completed the second role of the Coordinating Committee should be to resolve problems and overcome obstacles raised by the Project Manager in the course of implementing the project at the operating level. The nature

of these issues is that they are strategic issues outside the sphere of influence of the Project Manager or the Project Management Advisory Committee.

The third role is that of developing the institutional capacity of the PPP. This important task will involve planning for institutional development of the PPP through addressing such issues as financial sustainability, streamlining of services and effective resource management.

The fourth role is one where the Committee provides political leadership for the development of solid waste strategy in order to provide the framework for the introduction of the SWM model throughout the Provinces and Districts of Lao PDR.

The Committee should meet on an as needs basis rather than every 3 months as many of the issues raised at the operational level require immediate attention in order to avoid a delays in the programme. An executive consisting of the chairman, vice chairman and one other member from the Committee should be formed and have delegated authority to act on behalf of the Committee on matters requiring prompt attention.

### **National Project Director (NPD)**

Having a sound understanding of Project implementation through participation in the current Project Management Team, should now depart from the Project Management Team and concentrate on providing leadership and support at the strategic level of the PPP. This can be largely achieved through the NPD driving the process of institutional development through the creation of an Institutional Development Plan.

### **Project Manager**

The Project Manager coordinates participants and project resources to achieve outcomes as per Project Document and Project Budget. The Project Manager, while supported by the Project Management Advisory Committee, must be permitted to act under delegated authority and exercise discretion on matters pertaining to the management of the project. The Project Managers role should not be converted to that of a secretary to a management committee, but an autonomous manager who is accountable through the standard project management system used in the development sector. The project partners must exercise greater trust in each other and operate through an established system of delegated authority in particular the autonomy of the Project Manager.

### **Project Management Advisory Committee (Ex Project Management Team)**

The Project Management Advisory Committee's role is to provide advice, assistance and support for the Project Manager and the project Implementation team in achieving the project outcomes. Problems and challenges which are encountered at the village/community level are best solved at this point, as this is where the resident expertise of the projects implementation resides. Given the high quality and breadth of skills which exist within the current project committee input and assistance could include:

- Complying with donor processes and policies in respect to the Project Document and management of the Project and its Budget
- Provide advice on all aspects of collection, storage, sale and markets for recyclable materials
- Provide information and guidance in respect to working with the formal waste collection sector
- Training communities in effective source separation
- Provide feedback on the development of new training measures planned for implementation by the training teams and the project's Community Consultation and Training Consultants
- Provide input into programmes for the development, monitoring and expansion of micro-enterprises.
- Provide advice on Municipal processes of governance

Issues which cannot be satisfactorily dealt with at this level can be referred to the project Co-ordinating Committee for assistance and support.

### **Project Implementation Team (Project Technical Staff and Field Officers)**

The project implementation team works with the Village Office, schools & target community to achieve Project outcomes. The team also work closely with the Project's Community Consultation Specialists to develop new methods for community participation.

### 3.3 Project Work Plan and Budget

A number of changes are recommended to the future work plan in order to achieve the Project's planned objectives. The principal recommendations are outlined below in Table 10. The first recommendation is that the project is extended for an additional 3 month period until December 31<sup>st</sup> 2004, to allow the Project team to satisfactorily complete training in the 43 target villages and 7 schools. The community recycling separation component remains an important priority in the Project, the quality of which must not be compromised in any way.

In support of this objective it is recommended that the number of field officers be increased from 4 to 6 to assist with training and relieve pressure on village training teams. It is also recommended that the project is scaled back slightly in terms of the number of recycle banks that are constructed and the number of loans disbursed from the revolving micro-enterprise fund. The MTR recommends that the Project budget be revised by the project manager in order to facilitate changes to the work plan described above.

Other recommendations provided in Table 10, should also be given strong consideration by the Project Manager, in particular the data collection components. The collected data will be instrumental in providing quantities assessment of the project at the operational level. This data will support the other success indicators of the Project in terms of its impact on waste minimisation and poverty reduction. This information will assist donors in their assessment of the project as quantifiable data of this nature will enable future impacts of the project to be calculated.

**Table10: Modifications and Additions to Work Plan**

Area	Description
Institutional Strengthening of PPP	<ul style="list-style-type: none"> <li>Produce an Institutional Development Plan as per recommendations above.</li> </ul>
The Project time line	<ul style="list-style-type: none"> <li>Extend the project time line 3 months to December 2004.</li> </ul>
Work plan and budget	<ul style="list-style-type: none"> <li>Create new work plan and revise project budget to reflect changes adopted as a part of lessons learned through the MTR. Ensure compliance with UNDP's new project planning system.</li> </ul>
Project Staff	<ul style="list-style-type: none"> <li>Increase the number of field offices from 4 to 6. (starting 01/05/04)</li> </ul>
Household survey data	<ul style="list-style-type: none"> <li>Carry out a household waste composition survey on the quantity and type of recyclables collected as well as the total quantity of waste collected by UCS for each household in the sample.</li> </ul>
Recycle Banks (Buildings)	<ul style="list-style-type: none"> <li>Ensure adequate security by strengthening locks and doors to prevent theft by the end of the end of the current project.</li> <li>Paint and/or have school children paint murals on recycling bank walls to make more attractive by the end of the project.</li> <li>Have logo's of PPP's/partners attached to recycle bank as each recycle bank is completed.</li> </ul>
Collection Carts	<ul style="list-style-type: none"> <li>Provide collection cart to a project school for the collection of recyclables from student households. Monitor this initiative and if successful provide carts to other schools in program.</li> </ul>
Revolving fund	<ul style="list-style-type: none"> <li>Ensure grants issued from the revolving fund to target villages and schools are adequately monitored and provide assessment of all aspects of their activities in the Steering Committee reports.</li> </ul>
Micro-collectors	<ul style="list-style-type: none"> <li>Provide analysis of the impacts micro-collector grants. (Chose a small sample and include a survey of the amount of material collected and sold, the profit margin, no of houses serviced etc in order to assess the economic viability of these micro enterprises).</li> <li>Continue support for micro-collectors by identifying gaps in their knowledge and provide training in these areas.</li> </ul>
Micro-enterprises	<ul style="list-style-type: none"> <li>Establish a database all micro-enterprises assisted under the programme, the number, type, the type of training and nature of technical assistance provided.</li> <li>Ensure ongoing economic assessment of the impact that micro-enterprises are having in terms of providing incomes for operators.</li> <li>Evaluate the effectiveness of composting and worm farming techniques which have been introduced in terms of total KGs of waste processed</li> </ul>
Market development for recycled products	<ul style="list-style-type: none"> <li>Plan for the marketing and sale of compost, Bio-extract, worm casting and worms.</li> <li>Collect data and assess the success of products made from recycled products. Assist with the development of marketing plans where appropriate.</li> </ul>

## 4. Lessons Learned

Analysing lessons learned provides the opportunity to look beyond the immediate context of the current project, and to draw out generic lessons that might be applicable for a range of projects aiming for social and/or environmental improvement. Understanding and sharing the lessons provides UNDP with an opportunity for continual learning, and for improving future assistance programs. Looking beyond the recommendations specific to this project, there are a number of issues that can be highlighted.

### **Improving the Relationship between the Donor and National Counter-Part**

The donor community is looking to implement projects that make a difference. To know whether or not they have made a difference, they require outcomes and measures successes. On the other hand, implementing agencies are often driven by other priorities, such as long term sustainability and local skill development, and may not prioritise meeting donor expectations. And sometimes these expectations are unrealistic, or need to be adapted as the needs and priorities change with time and experience. However, the commonality is that local partners are also involved because they want to make a difference. It is this common vision that should provide the context to provide strong working partnerships, and work through the differences.

The implementing partners must work to understand the donor requirements and work within what can sometimes seem a bureaucratic system. This is made even more difficult with the emphasis on English language as the main means of communication. And for the donors themselves, they must work toward partnerships in the true sense. That is an equal share of decision-making and ownership, with an understanding of the partner needs, and appropriate resourcing of these requirements. It also requires the flexibility to adapt to new requirements as the people and the project grow.

### **Improving Start-Up Planning and Communication**

A critical issue in this relationship is communication. In this project, the communication prior to the start-up phase could have been improved, allowing the more timely development of work plans. The start-up phase of any project requires intensive work and thorough planning, yet it is often under-resourced. Both donors

and counter-parts expected outcomes before there had been adequate time for planning. A key lesson is to allow adequate time for planning, and for the various agencies involved to develop a clear operating context and productive working relationship as a well resourced priority.

### **Defining Roles and Responsibilities**

One of the important steps to achieve in the start up phase is the development of clear roles and responsibilities. This is particularly the case in PPPs, where the working relationships are more complex, and potentially more difficult. The structure of management and advisory bodies must be carefully planned to ensure a balanced mix of skills and perspectives. Any structure must provide an effective pathway for achieving the project aims. There should be a clear delineation between strategic issues and project management issues, in order to best utilise the visionary and practical skills of those involved. This separation will also help to achieve an efficient and responsive structure for the day to day operations of the project.

### **Developing the PPP Relationships**

As well as clarity in roles and responsibilities, this project would have been assisted through greater attention to developing the skills of the PPP as a group. The themes arising in discussions with project partners are not uncommon when different organisations come together in a new working relationship. There are often different styles of working, varying world views and perspectives, and certainly different personalities. In order to move beyond differences, people need to acknowledge and accept that each person or organisational culture has something to offer. As a group, participants need to find ways to work effectively together towards the common goals. A skilled facilitator conducting group development workshops, particularly in the initial planning and start up phase, could add tangible value to the process. Ongoing dialogue for discussing issues and strengthening working relationships could ensure that problems are not only resolved more effectively, but that the core elements of partnership, trust and good-will, are not eroded.

In addition, partners need to develop an appreciation of the fact that their relationship itself is a new kind of institution. They are not simply coming together to improve waste management in Vientiane, they are also building a new type of organisation. There needs to be a commitment to building the partnership as an effective means to ongoing improvements in project delivery. This pooling of expertise and resources

can be a powerful means to undertake a range of environmental improvement and community change projects in Vientiane.

### **The Sustainability of Aid**

The essence of distilling these types of lessons is in order to improve the sustainability of aid. This project evaluation is interesting as a case study. The idea and concepts of the project are inspirational, and have the potential to provide an innovative model for other parts of the region or the globe. The skills and resources of the project partners provide an excellent basis for effective project delivery and expansion. The donor funds are available for this project, and it is likely that ongoing funding will be accessible to build on the current successes. In addition, over the long term, the model has every reason to be self-funding and sustainable.

And yet there is also every chance that the partnership will not be strong enough to survive the initial challenges and continue the development of the PPP. Unless the key players can work together in a manner which is equitable and adaptive, this project may not move beyond the term of this current funding. Whilst there is an emphasis on grass-roots development models in many projects, in reality, as a project scales up, a common occurrence is the marginalisation of smaller participants. Yet it is the implementers at a grass roots level that are critical to the project's success. Project implementers must have a voice in the project planning structure. They must also be well supported in terms of resources and skill development to ensure the project's sustainability. This will be critical in the ongoing sustainability of this particular project.

### **Adaptive Timeframes**

In a project which is essentially community-driven and operated, a project driven time frame is inappropriate. This project is essentially about community change, which requires a combination of dynamic ideas and delivery mechanisms at a village and a household level. For the sustainability of this project, the key is long term working relationships and effective modes of operating. The focus must be on quality rather than numbers. To build 50 recycling banks in the timeframe of this project is currently unrealistic. But it is not a failure to build less. The failure would have been to not adapt, rigidly sticking to arbitrary targets rather than working the most effectively within resource constraints.



## Consultation & Interview list

**Table 11: List of People Consulted during MTR**

Name	Organisation	Relationship to Project
Tsutomu Nishimura	PPPUE/UNDP	Programme Coordinator
Thilaphong Oudomsine	UNDP Lao PDR	Programme Coordinator (Project Committee)
Khamfong Phoumvongsay	STEO	Project Manager (Project Committee)
Mr Daophet Aruone	STEO	National Project Director Steering/Project Committee)
Mr Chommany Thatnakham	VUDAA (Dep Ch Dir)	Chairman of Steering Committee
Dr Sombath Somphone	PADETC (Dir)	Steering Committee member
Mr Mouson Munvised	VUDAA	Steering Committee member
Bounluem Duangngern	Vientiane Capital CDC Planning Dept	Steering Committee member
Mr Phomvisone Keomuangthon	CD Chanthabouly Dist	Steering Committee member
Mr Thongsuk	CD Sisattanak Dis	Steering Committee member
Mr Somphone	CD Saysetha Dist	Steering Committee member
Mr Thongthip	CD Sikhotabong Dist	Steering Committee member
Mr Khamserm Manivong	PADETC (Com Dev Specialist)	Project Committee
Dr Sayamang Nanthanavone	UCS (Dep Dir)	Project Committee
Mr Udone Chaanthalansy	LCRC (Dir)	Project Committee
Mr Viengkham	LCRC (Manager)	Project Partner
Ms Phoukham Keobandith	ISWM VC Project	Technical Officer
Mr Vannaeth Chanthavong	ISWM VC Project	Technical Officer
Mr Khaikao	ISWM VC Project	Field Officer
Mr Southisay	ISWM VC Project	Field Officer
Vilayphone	ISWM VC Project	Field Officer
Mr Khamla	ISWM VC Project	Field Officer
Ms Sautsanguam	VC Village Chief (Phonesinuum)	Pilot project village participant
Mrs Phetsamone Sivorravong	VC Village Deputy (Nongduang-Neua)	Village Co-ordinator
Mr Phouthavong	VC Village Chief	Village Co-ordinator

Name	Organisation	Relationship to Project
	(Sisanvone)	
Ms Viengphet	Director (Dongnasok Primary School)	School Coordinator
Mr Phouthian	Sisanvone community	Village SWM team

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