

## Community Mobilisation & Environmental Awareness Strategy

Regional Development Project (Phase II) Community Mobilisation and Environmental Awareness

Male' Maldives, March 2009













Community Mobilisation & Environmental Awareness Strategy Regional Development Project (Phase II) Community Mobilisation and Environmental Awareness LOAN NO. 2170

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### **Abbreviations**

ADB: Asian Development Bank

CMEA: Community Mobilisation & Environmental

**Awareness** 

IDC: Island Development Committees

L&L: Live & Learn Environmental Education

MEEW: Ministry of Environment, Energy & Water

MOAD: Ministry of Atolls Administration

MWSA: Maldives Water and Sanitation Authority

PHAST: Participatory Hygiene and Sanitation

Transformation

PIU: Project Implementation Units
PMU: Project Management Unit
TRC: Teacher Resources Center

UNICEF: United Nations Children Fund
WDC: Women Development Committee

TRC: Teacher resource centers

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### Introduction

### 1.1 About RDP2

On the 28 April 2006 the Asian Development Bank approved a Project for \$6 million equivalent for the Regional Development Project (Phase II). The project seeks to promote regional development to support equitable access to social services and, therefore, relieve Male' of intense development population and environmental pressures. The project goal is to increase the standard of living in the Central Regions. The project objective is to improve environmental and land management through a community-centered approach. The project includes a balance of institutional, infrastructure, and environmental improvements in the focus islands and their region. The project will help safeguard public health and the environment, support community and private sector participation in waste management and sanitation, and increase public awareness of responsible environmental management practices. The project combines policy improvement, capacity building, and investment in physical facilities.

To accomplish its objective, the Project has three closely interrelated components:

- (i) Part A: Improving environmental infrastructure. This covers
  - a) sanitation and sewerage improvements,
  - b) water supply, and
  - c) integrated solid waste management.
- (ii) Part B: Strengthening planning and environmental management. This includes

a) land-use planning and management,

- b) formulation of an economic development framework study for the regional growth centers,
- c) developing an environmental awareness program, and
- d) environmental monitoring.
- (iii) Part C: Building management and implementation capacity.
  This covers
  - a) community mobilisation facilitation, and
  - b) institutional strengthening for improved project management.

The project will help safeguard public health and the environment, support community and private sector participation in waste management and sanitation, and increase public awareness of responsible environmental management practices.

### 1.2 About the Environmental Awareness and Outreach Program

In the agreement, dated 6th of January 2008 the Ministry of Environment, Energy and Water (MEEW) granted Live & Learn Environmental Education (Live & Learn) US\$ 259,973 to carry out services on environmental awareness and community mobilisation (referred to in this document as the Environmental Awareness and Outreach Program) in accordance to Contract no: 174-F/AGR/2008/01.

The goal of the services is to assist the Regional Development Project Phase II (RDPII) by developing and implementing an environmental awareness and community mobilisation program for the Central Region of the Maldives. The program will build on the experience and tools developed during the Asian Development Bank's (ADB) TA 4614-MLD Promoting Sound Environmental Management in the Aftermath of the Tsunami Disaster and will also consider the experiences from the Participatory Hygiene and Sanitation Transformation (PHAST) project jointly implemented by United Nations Children Fund (UNICEF), Maldives Water and Sanitation Authority (MWSA) and Live & Learn.

This program has been revised to ensure that it can be delivered over a period of 2.6 years in 2 phases commencing 20th January 2008 and finishing no later than 2nd August 2010. Phase I will focus on 9 islands; 2 islands from Laamu Atoll and 1 island in Thaa Atoll, 2 islands from Lhaviyani Atoll and 1 island in Noonu Atoll, 2 islands in Alif Dhaal Atoll and 1 island in Alif Atoll. Based on lessons learnt from phase I Live & Learn will replicate specific outputs with a further 11 selected islands across 7 atolls namely; 2 islands in Dhaalu Atoll and 1 island in Faafu Atoll, 2 islands from Meemu Atoll and 1 island in Vaavu Atoll, 2 islands in Baa Atoll and 1 island in Raa Atoll and 2 islands in Kaafu Atoll. To maximize opportunities to build local capacity an adapted "Train-the-Trainer" approach will be used during both Phase I and Phase II. This approach is intended promote increased sustainability and community empowerment for the project.

Live & Learn is a local non-government organisation that has been contracted to deliver the Community Mobilisation and Environmental Awareness subcomponents of the RDP II project. Live & Learn will develop and implement a Community Mobilisation and Environmental Awareness (CMEA) Strategy to support the successful implementation of all above-mentioned components using tools already developed under TA-4614-MLD Promoting Sound Environmental Management in the Aftermath of the Tsunami Disaster. In implementing the CMEA Strategy, Live & Learn will contribute to the national goals outlined above and in so doing meet the following objectives:

### Objective 1:

Strengthen planning and environmental management through the development and implementation of a community based environmental awareness program.

### Objective 2:

Build management and implementation capacity in islands of the Central region.

**Objective 1:** Strengthen planning and environmental management through the development and implementation of a community based environmental awareness program.

This outcome would focus on conducting a RAP in the 3 focus islands and documenting the community perceptions of environmental issues of concern in the Central Region. The findings of the RAP will feed into the revision of the toolkits developed under the TA 4614 and development of other trainings. Community awareness and understanding of environmental management issues will be enhanced through the training sessions conducted by the community.

Objective 2: Build management and implementation capacity in islands of the Central Region through community mobilisation and facilitation. Approaches to community organisation for environmental management in the Maldives will be reviewed and a preferred approach refined in consultation with the implementing agency. PIU and PMU dialogue and mobilisation skills strengthened through the TOT trainings. Review cooperative models, discuss with key stakeholders and develop potential framework for community-based operation and maintenance of infrastructure. Where appropriate, prepare and deliver training packages for community-based operation and maintenance of communal services, such as water tanks.

### 1.3 About the Strategy

The Inception Report was submitted in April, and upon considering comments on the Inception Report Live & Learn has conducted significant reflection on the program methodology and has placed more emphasis on better addressing the strategic approach of the methodology. The aim of this document, the Community Mobilisation & Environmental Awareness (CMEA) Strategy, is to clarify the methodology and to contextualize the strategic and interconnected nature of the approach. This project specific CMEA Strategy has been developed to give an overarching framework for the project's approach and will build on and refine the more generic EE strategy and community mobilisation guides that were developed under the ADB funded TA-4614-MLD Promoting Sound Environmental Management in the Aftermath of the Tsunami Disaster.

A strategy is a long-term plan of action designed to achieve a particular goal. Strategy is differentiated from tactics, or immediate actions, with resources at hand by its nature of being extensively premeditated, and often practically rehearsed. (http://en.wikipedia.org/wiki/Strategy)

This document forms the base of conceptual strategies to guide our work, but it is not an implementation plan, it does however provide a base from which the project actions and specifically the Framework for Community Operation & Maintenance of Infrastructure can be designed. In the absence of a comparable existing strategy, this document was developed so as to stimulate consideration on the more general concepts of Community Mobilisation and Environmental Awareness for the Maldives. It is considered that whereas this document provides the bigger concepts the details are found through specific implementation of Live & Learn RDP2 activities. The document is kept broad so as to cater to a wider audience and start from where the learner is.

The CMEA Strategy will provide the building blocks and principles identifying an alternate way of delivering environmental actions in the Maldives that leads to change and community empowerment. The key aim for the Strategy is to outline how training benefits can be sustained in the long-term and where the training sits within the community structure and within the priorities of the government. The CMEA Strategy will show how the separate components of the project are joined together in a strategic manner through the approach and methodology. In particular the Strategy will draw on previous lessons learnt to adapt existing tools so as to be more effective. Specifically, adaptation in how the materials are implemented will also be considered. The adapted approach with emphasis on increased community involvement is an outcome from the early strategic considerations that are being considered.

A Rapid Assessment of Perceptions (RAP) has been undertaken in the two target atolls for Phase I Islands. Based on the findings from the RAP the CMEA Strategy has been drafted. This is designed as a living document. This means that it accurately represents the project progress, plans and intentions, which are current in June 2008 and that these are subject to change by participatory negotiation. This is because the project is designed to incorporate ongoing learning to improve all aspects of management and implementation of the project. Because of the learning orientation of the project an emphasis on strategic use of lessons learned from other relevant development projects is incorporated. Thus in order to draw out these lessons and contextualize the project this report is structured to provide background on Maldives. This leads into the methodology, which describes how the lessons will be applied in practice. The methodology section explains the way the actual project will be implemented from the overall perspective through the scope and design to the research methods. This leads to the results and monitoring procedure followed by the work plans and outputs.

## 1.4 Achieving SustainableDevelopment through Education

Sustainable development is a key priority for the Government of the Maldives. Only by safeguarding our natural resources can we provide quality of life for our future generations. Environmental Education is a key tool in providing our people with the knowledge, attitudes and practices that leads to sustainable development. We are pleased to recognize the Asian Development Bank and Live & Learn Environmental Education as key partners in this pursuit. With the financial support of the Asian Development Bank we have been able to advance sound environmental management and with the experience of Live & Learn Environmental Education we have been able to develop educational tools that enhance the safeguarding of our natural resources. By documenting some of the key concepts this strategy can serve to support the government in developing a vision for Environmental Education in years to come. It is designed for government departments, NGOs and communities alike and has the potential to build the partnerships needed for Environmental Education to reach its full potential. A clear vision can only come when the key stakeholders become more engaged in this important dialogue, but such a vision can help us to work toward and achieve our goal of sustainable development.



## Background: Maldives

### 2.1 Context

The Maldives is a chain of 1,190 small low-lying coral islands grouped into 20 administrative atolls in the Indian Ocean: 198 islands are inhabited and 80 house tourist resorts. The islands are predominantly coastal entities and their ecosystems are among the most vulnerable in the world. The Maldives has a narrow economic base that relies on two critical sectors: tourism and fisheries. Most people are employed in these sectors; therefore, a marine environment free from polluting sources is central to any strategy. Unique geography and vulnerability pose key development challenges for the country. The dispersion of the population across the Archipelago raises the cost of delivering social services, as economies of scale are difficult to achieve in service provision. Impacts resulting from the absence of basic infrastructure and social services in the atolls were further exacerbated by the damage that followed the high waves and flooding of the Indian Ocean tsunami on 26 December 2004, leading in some cases to absolute destruction of existing infrastructure.

The two key livelihoods of the Maldives: Tourism & Fishing are both directly linked to the quality of the environment. As per previous findings from the ADB TA 4614 Promoting Sound Environmental Management in the aftermath of the Tsunami, and the ERC National Environmental Perceptions Report, the people of the Maldives are aware of key environmental management issues but unsure how to take appropriate action. More recent findings from the RDP2 RAP have further reinforced the key environmental issues the communities see as most significant. In line with these findings the CMEA Strategy will be mainly focused on three environmental issues waste, hygiene and sanitation, and coastal protection (especially land use planning), and developing appropriate strategies for community responsiveness to these issues including land use planning based on the findings of the RAP which is highlighted in section iv.

### 2.2 Environmental Management

Environmental management is presented as one of the national priorities in the 7th National Development Plan (2006-2010). The 7th NDP recognizes that the 'economic and social well-being of the population depends largely on maintaining a high level of environmental integrity and sound environmental management is fundamental to ensuring sustainable development in the Maldives and has set a specific goal for this sector:

The islands are predominantly coastal entities and their ecosystems are among the most vulnerable in the world

Goal 5: Protect the natural environment and make people and property safer.

The 7th NDP recognizes the important role of strengthening environmental governance, awareness levels and community capacity to undertake environmental management. This is further supported by the Second National Environmental Action Plan (NEAP II), by the Ministry of Home Affairs, Housing and Environment (1999).

In-line with both the 7th NDP and NEAP II, the purpose of the Regional Development project 2 is to promote sound environmental management in the Maldives. This would be conducted through the context of community concerns and government priorities. Where community concerns were undertaken in the government priorities as articulated through two inter-linked outcomes, namely: (i) strengthen planning and environmental management through the development and implementation of a community based environmental awareness program. (ii) Build management and implementation capacity in islands of the Central Region through community mobilisation and facilitation. Furthermore, Environmental Impact Assessments (EIAs) for all development projects are mandatory under the Environment Act 4/93. EIA would be used as a key tool to ensure sustainable development. Maldives has very rich biological diversity, particularly in the coral reef ecosystem. The economy and livelihoods of the people are closely linked to the well being of these ecosystems and biodiversity conservation is a top priority.

### 2.3 Water Management

Progressively higher demands made on natural resources (land, water, marine resources, building materials, timber etc) by the rapidly rising population, and by increasing economic development, are causing serious environmental degradation in many parts of the Central Region in the Maldives. Effects, which could be absorbed by the environment at low population densities, can now no longer be ignored as the population approaches 300,000, having doubled in less than 25 years. A naturally fragile ecosystem is under threat as competition for limited natural resources intensifies. Fresh water resources and the way in which they are exploited and contaminated, is central to the condition of the terrestrial environment, and also to the shallow lagoon environment of the islands. As a renewable resource, the rate of water use has to be sustainable. This means minimising both the consumption and the contamination of water to levels, which can be maintained in the longer term.

Water resource management is recognised as a key theme area of the 7th NDP. Specifically the plan responds to identified national water issues and makes the following policies that are relevant to this project: **Policy1:** Ensure the availability of safe drinking water and environmentally sound sewerage disposal facilities throughout the country

**Policy 2:** Ensure sustainable availability of water for socio-economic development

**Policy 3:** Ensure effective development of the water sector with full ownership of the beneficiary islands

As per the 7th NDP pollution of groundwater from septic tanks is widespread and on the Focus Islands, sanitation systems are proposed as part of the potential response to protect the quality of the groundwater and the marine environment. This projected improvement in groundwater quality is linked firmly to a need to minimise water use so that improved sanitation does not result in over exploitation of the limited water resources. The EAOP will specifically address these issues through a Whole Islands Approach where community understanding on the interconnected nature of the environment is enhanced.

### 2.4 Water Sanitation and Hygiene

Throughout the Maldives, the prevalence of water and sanitation related diseases continue to be a major concern with children being the most at risk. Improved hygiene practices with access to appropriate sanitation facilities are essential if transmission routes of water and sanitation related diseases and prevalent helminth infestations in children are to be overcome.

In the Maldives the prevalence of water and sanitation related diseases are evident in both the rural islands and in Male'. Diarrhea incidence rates remained constant since 2000 at 30 per 1000 of the population and rates of infection by intestinal parasites continue to be a major concern (Ministry of Health, 2001). Intestinal parasites and diarrhea may be contributing causes to the high level of malnutrition in children found in the country. Mosquito control also remains an issue while dengue fever is endemic in the country and filarial cases are still reported. Improved hygiene practices with access to appropriate water and sanitation facilities are essential if transmission routes of water and sanitation related diseases are to be reduced which the spread of water and sanitation related diseases could be prevented. The inadequate rainwater storage capacity significantly restricts the ability of island schools and communities to sustain a potable water supply during the dry season. Whilst the provision of adequate drinking water is a registration requirement it is apparent a significant number of schools do not comply with this. Additionally, the alternate supplies relied upon by schools in the islands are either inadequate or should be considered unsafe for drinking purposes. (Maldives Water and Sanitation Authority in consultation with the Ministry of Education and UNICEF 2002).



A water monitoring guideline has been drafted during the TA 4614 with the hydro geologist (assigned to the project) and Live and Learn to enable government water sector stakeholders, regional, atoll district and island office administrators and planners, and island communities to understand the importance of water monitoring, how to carry it out, the roles and contributions of different parties and the use of such information in sustaining outer island water supply and sanitation. The objectives of the guidelines are as follows:

- Determine island water resources availability
- Determine island drought vulnerability
- Enable informed island water planning
  - » Provision of water supply including irrigation
  - » Protection of water supplies
- Determine sustainable water supply infrastructure options
- Determine sustainable sanitation infrastructure options
- Minimise construction phase environmental impacts
- Minimise operational phase environmental impacts
- Optimize infrastructure operation & maintenance
- Improve community education
- Protect and improve public health

A water monitoring framework has been developed which attempts to integrate the technical expertise of central government agencies with the local presence of government health posts and the needs, aspirations, requirements and inclusion of the island communities themselves. There is a logical and sequential list of activities that need to be carried out in order to develop a realistic but effective island monitoring program, operated by the island community. Clearly the most important step is the recognition by the island community that the island requires a monitoring program in the first place.

There are awareness raising programs being operated by both the government and NGOs, which are attempting to highlight this issue. Ordinarily once the issue is raised, government can then be approached by the community to provide the initial technical support required to commence the process. This methodology will be detailed in the Community Mobilisation and Environmental Awareness strategy. Participatory guidelines for water management are in annex 6.

### 2.5 Solid Waste Management

The environment in the Maldives is being placed under increasing pressure from a growing population, changing lifestyles and improvements in living standards. Wastes are being generated in ever growing volumes. Without adequate treatment and disposal provision for the wastes and action, the risk of polluting the environment is



becoming even greater. The Maldives, as with many other small island developing states, has unique challenges in relation to waste management including: transportation costs, lack of infrastructure, remoteness, lack of a cost recovery mechanism and appropriate technologies.

Nationally one of the key documents that establishes the policy context for the Maldives is the National Development Plan. This document sets out national objectives across a range of sectors, including the waste management sector. The 7<sup>th</sup> National Development Plan (2006-2010) of the Government of the Republic of the Maldives has recognized the importance of waste management at the national level. The Plan identifies the following policy objective for the waste management sector:

**Policy:** Enable management of solid waste to prevent impact on human health and environment through approaches that are sustainable and locally appropriate.

In February 2008 the National Solid Waste Management Policy was launched to provide a national vision and objectives for the solid waste sector. The policy provides a systematic national approach to waste management by clearly expressing a strong, consistent vision, philosophy, strategic framework and priorities for action that will address the nation's waste issues. The targets for the policy are as follows:

### Primary target

The estimated quantity of solid wastes generated in our country will increase by 30% over the next 5 years from 248,000 tonnes in 2007 to 324, 000 tonnes in 2012. By 2012 our target is reduce the 2012 figure by 25% through recycling, reuse and influencing consumer preferences.

#### Secondary targets

- Develop a national waste awareness program and deliver at least 5 waste awareness campaigns at national, sectoral and community level. The campaigns will include messages about reducing, reusing, recycling, good waste management practice and producer responsibilities.
- Construct island waste management centres and provide equipment that will enable communities to process and manage reusable and recyclable waste materials on all islands with a population greater than 1,000 persons.
- 90% of all inhabited islands to have developed island waste management plans which will include information on how they propose to operate and manage the island waste management centres and equipment to process and manage reusable and recyclable waste materials they produce;
- All Atolls and at least 10 government Ministries to have developed Waste management plans that will

include information on how they propose to reduce, reuse and recycle the wastes they produce.

- 80% of all healthcare facilities to adhere to minimum standards for health care waste management.
- Develop an income based approach to national recycling that will encourage greater private sector participation in reclaiming major recyclable components of the household and commercial waste streams.
- Establish a framework for Extended Producer
  Responsibility where manufacturers, importers and
  retailers are required to support product return,
  collection and recovery systems or other product
  stewardship programs.

Public awareness has been identified as a key component in improving waste management practices. A Framework for Action (FFA) for the Maldives National Public Waste Awareness Program 2007-2012 has been developed to provide a clear, consistent framework and key messages for waste awareness initiatives. The framework outlines 4 key message themes; 1) waste reduction and minimization, 2) Impacts of poor waste management, 3) stakeholder responsibility and 4) polluter pays.

In considering the most appropriate approach to solid waste management in the RDPII Focus Islands many options have been considered, including controlled landfill. This approach requires substantial areas of land, which should be separate from residential areas and other sensitive land uses. This is a situation which cannot be achieved in most islands, including the islands of Naifaru and Mahibadhoo. In some islands, where there is a demand for land reclamation, inert wastes could be used as part of land reclamation schemes, but the use of degradable waste is not acceptable. Marine pollution, particularly lagoon pollution, and long-term risks of groundwater through leachate drainage, would be a severe risk in the atoll environment. Landfill also requires expensive heavy plant for compaction so this option is generally not advantageous.

Live & Learn will make great efforts to design the waste awareness training activities under the RDPII project to be consistent with these two national strategies. Specifically training and capacity building activities will focus on the key message themes under the National Public Waste Awareness Framework developed by the Ministry of Environment, Energy and Water, focusing on practical actions such as avoid, reduce, reuse and recycle, which now fall under the newly formed Ministry of Housing, Transport & Environment (MoHTE) .

### 2.6 Land Management

Traditionally land use development in the inhabited islands has responded to a land allocation process administered by the Ministry of Atolls Administration (MOAD) and the Ministry of Housing & Urban Development (MHUD), but now these issues fall under the newly formed Ministry of Housing, Transport & Environment (MoHTE). The main objective is the fair and equitable distribution of housing land to island residents. This process has often resulted in the poor location of land and building uses, and residential areas have been affected by incompatible development. Land use development has also been influenced by the decisions of individual Government line agencies. This has meant that development projects (a new road or reclamation for instance) have not always brought about the benefits they were intended to achieve. At worst they may be detrimental to the environment. Land allocation has concentrated on residential land.

Average lot sizes in housing areas are between 3-400 m<sup>2</sup> in most islands in the Central Region. Within this context population growth will increasingly put pressure on the land resources of the inhabited islands particularly the regional growth centers, where the demand for housing land will be further increased through in-migration. In islands such as Lh. Naifaru and Hinnavaru shortages of land for housing and other land uses are already apparent and there is a strong case for a more pragmatic approach to the allocation of residential land. It is within this context that the island environment requires better management of land and buildings to minimize environmental damage and conserve the natural resources. Hence if land use is planned and managed properly it can contribute to a sustainable environment, provide a context for economic development and generally lead to the social well-being of islanders and visitors alike.

Land management has also been identified as a key area of the 7th NDP. It specifically falls under the Goal 4: Create a sustainable built environment that ensures preservation of cultural heritage, and provides opportunities for equitable access to recreational and other infrastructure. Under this plan the Government of Maldives aims to develop and approve Land Use Plans for all inhabited islands within a framework for environmentally sustainable land management. The purpose of providing training awareness in land management is to improve public participation in Land Use Plans (LUPs) and ensure areas of environmental significance (wetlands, vegetated areas) are protected. Improved public participation will enable the government to implement land use policies more effectively and better respond to peoples needs.

### 2.7 Target Atolls

The Project will be implemented on three focus islands (Naifaru-Lhaviyani, Mahibadhoo-Alif Dhaal, and Fonadhoo-Laamu atolls). Naifaru and Fonadhoo islands were reported to have been highly impacted by the 2004 tsunami. The regional development project covers a group of 13 atolls, which is part of the Maldives, between 1 and 6 degrees north to 72-74 degrees east. It comprises of the South Central, Central, and North Central regions. The focus islands being Lh. Naifaru , in North central, ADH. Mahibadhoo in central and L. Fonadhoo in the South central region. MAP?

During contract negotiations, discussions were held between Live & Learn and MEEW regarding the selection of islands. MEEW provided a list of islands that were designated to develop Land Use Plans and indicated their preference for these islands to be included, where possible, in the list of islands covered by Live & Learn. Live & Learn subsequently developed a selection matrix based on the following key criteria:

- Logistics/Ease of access;
- Population densities (islands with higher populations preferred to distribute awareness more widely);
- Local knowledge of environmental issues (e.g. overcrowding, water/sanitation issues)
- Local knowledge of community dynamics (e.g. social/ political tensions);
- Land Use Plans to be developed;

The following table displays the list of islands for Phase 1 and 2 (as per the current contract):

Table 1: List of islands to be included in the project

Phase 1	Phase 2
2 islands from Lhaviyani Atoll; Naifaru, Hinnavaru 1 island in Noonu Atoll; Landhoo	2 islands from Dhaalu Atoll; Kudahuvadhoo, Maaeboodhoo 1 island from Faafu Atoll;Magoodhoo
2 islands from Laamu Atoll; Fonadhoo, Gan 1 island in Thaa Atoll; Guraidhoo	2 islands from Meemu Atoll; Dhiggaru, Maduvvari 1 island from Vaavu Atoll; Raekeedhoo
2 islands from Alif Dhaal Atoll; Mahibadhoo, Dhagethi 1 island from Alif Alif Atoll;Maalhos	2 islands from Baa atoll; Eydafushi, Kendhoo 1 island from Raa Atoll; Iguaraidhoo
	2 islands from Kaafu Atoll; Guraidhoo, Maafushi

### 2.8 Stakeholders

Everyone is a stakeholder in environmental management. All of us will feel the impact of its relative success or failure, and all of us affect the impact of public education by our behavior, which may be supportive or undermining. This generalization does not however help to identify targeted strategies of cooperation, communication or action. The effectiveness of the Environmental Awareness and Outreach Program will depend on the strength and inclusiveness of the partnerships, networks and alliances which it is able to develop, among stakeholders at all levels. Such a program can derive its energy and effectiveness only from partnerships and cooperative relationships – it is too great and too complex an undertaking for any one institution – national or international – to promote on its own.

From the outset, therefore, the detailed development of the Environmental Awareness and Outreach Program has been outward looking; seeking to make connections with initiatives, programs, groupings and networks through whom best practice in environmental management can be further promoted and implemented. This process can be quite time consuming and as such there are limitations in the scope of stakeholder feedback. Particular attention has been paid to reconnecting with both national government Ministries relevant to the RDP2, because of their central coordinating role and resources, and with civil society networks, because their grassroots connections can enable environmental management messages to fan out and down to local levels.

# 3

## Going Forward: Lessons Learned

There are a range of interconnected issues common to the communities targeted in this program. These include: environmental management, water management, water sanitation & hygiene, solid waste management and land management.

Hence from the viewpoint of L&L, the issues lessons learned indicate the need for a new theoretical perspective to be provided through the learning community project. This will be progressively developed throughout the project in the format of a theoretical framework.

### 3.1 Learning Lessons

There is a plethora of advice available for implementing development projects, but the responsiveness of donors and government to incorporate many of these lessons into the existing project approaches seems limited. Ultimately, each situation is unique but as in life we can draw on previous lessons to assist us but we can not become complacent and think that those previous lessons will give us the solution they will just help guide us on the path and we need to continually reflect and adapt as we progress. In order to nurture a social and environmental capacity for renewal, an action research methodology will be used. This emancipative approach to research has the potential to create three important outcomes, which are research data; learning for all participants involved; as well as practical social action for the community. The combination of methods and tools selected in the research design determines the outcome to be emphasized, and the current project aims to balance all three. Strategically, by using local data we are able to develop relevant learning opportunities that link to practical actions in the community.

Many lessons have been learnt since the 2004 Asian Tsunami on the role of education and learning in the delivery of capacity building and infrastructure development. This program will place great focus on using what has worked well in the past and avoid repeating mistakes. Experiences in the Maldives suggest that development interventions, in particular those involving establishment of infrastructure, work best if the communities are participating in the planning, implementation and evaluation of such.

However there are many types of participation; some have great focus on consultation and information gathering; others have great focus on capacity strengthening and community empowerment. This program takes a strength-based approach to participation acknowledging and affirming the potential, strengths and resourcefulness of Maldivian people and organisations and ensures that all training

Ultimately, each situation is unique but as in life we can draw on previous lessons to assist us but we can not become complacent and think that those previous lessons will give us the solution they will just help guide us on the path and we need to continually reflect and adapt as we progress.

activities and support builds on existing strengths. During the inception phase of the action, a number of lessons learnt have been given significant consideration. These lessons apply at various levels, ranging from strategic objectives and relationship issues to small-scale and local issues. The most significant lessons lies in how the training activities can be delivered in ways that (i) ensure sustainability beyond the training activities (ii) empower

local people to take ownership of environmental issues and their management (iii) are cost effective.

Lessons learnt from community mobilisation and capacity building activities during TA 4614-MLD Promoting Sound Environmental Management in the Aftermath of the Tsunami Disaster have helped to shape the implementation of the program and are summarized here and spelled out in more detail below:

- **Lesson 1**: Acknowledgement is required that local contexts are highly complex: capacity and context varies greatly from one island to another. Therefore activity designs require good knowledge of these variations. Interventions should specifically relate to the community their situation, their beliefs and their problems.
- **Lesson 2:** To reach maximum benefits infrastructure development should apply a 'strengths-based, inclusive approach' to community development and capacity building. This will entail the use of existing social and community fabric and endeavor to strengthen this fabric (as oppose to impose changes. Participation must include the whole community not only leaders and high profile members. Development work must find ways of meaningfully including women.
- **Lesson 3:** Community participation should be fully planned for. Realistic time and resources should be allowed for within activities. International consultants must base their intervention on community research and should in detail know the communities they are working with.
- **Lesson 4:** The community should be included in developing their own resources and processes. Any monitoring results should be made available for further community empowerment.
- **Lesson 5:** Activities should not be rushed. They must happen according to community timelines and consider local capacities and skills.
- **Lesson 6:** Workshops and trainings should be tied into results and outputs. Training and workshops for the sake of participation are meaningless.
- **Lesson 7:** Communities do not just mobilize and organize: they mobilize in response to something. It is important for the community to decide on the issues they wish to act on.
- **Lesson 8:** Each community is different so generic approaches are not very effective, flexible approaches are needed. It is important to test theoretical approaches and adapt as needed.
- **Lesson 9:** There are many obstacles to community mobilisation. It is important to reduce these obstacles by being responsive and adaptable with changing needs and strengths.
- **Lesson 10:** Building capacity for community-based environmental management is a long-term process and requires sustained support in terms of skills and physical means (infrastructure).
- **Lesson 11:** One of the biggest obstacles to community mobilisation is disempowerment of communities. Building expectations without follow through and follow up leads to disappointment and absence of good will.
- **Lesson 12:** Community mobilisation does not just happen; in many cases it requires initial and on-going support and it requires strong, strategic partnerships between civil society and the government.
- **Lesson 13:** There needs to be ongoing support for community mobilisation activities. In particular the capacity of relevant government staff should be developed in areas to link with community mobilisation initiatives.
- **Lesson 14:** Where possible the community should play a greater role in the implementation of project initiatives. Gatekeepers from within the communities may serve as facilitators to strengthen the approach, empower the community and increase sustainability.
- Lesson 15: There needs to be flexibility so as to be responsive to the stakeholders and their needs.
- **Lesson 16:** There needs to be consideration on the timings and involvement of the stakeholders on the activities and expected outcomes of the project from the very beginning of the project.



### 3.2 Theoretical Framework: Under Construction

At the reflective and critical levels of analysis, lessons have been learned by L&L from previous work with the Government and donors such as ADB, UNICEF and the World Bank. Thus our interest is to progressively build up the theoretical framework upon which programs are developed and through which advice is provided. It is important that learning being developed is incorporated into a framework for application. The strategy is to have the flexibility to be innovative but within the current project constraints this may be reduced.

history shows that unfortunately, there are no 'quick fixes' or simple solutions for environmental management – although many genuine efforts have been made. At this stage in the project, the theoretical framework tenets comprise the following. Firstly, community empowerment is the foundation for effective sustainable development¹. Strong communities with an effective knowledge and skill base of sustainable development options and ways to obtain these, begin with learning and capacity building. The strategy is to empower the communities but this takes time and needs to be supported, this project will start with developing a stronger knowledge and skill base in the communities.

The second tenet is that local knowledge of place is the starting point for learning programs<sup>2</sup>. For example, local

people have an intimate understanding of their place, the fertility of the landscape and the relationships and systems that hold these together. Language and spirituality binds these relationships into culture. These systems are the basis by which people understand the world, and improvement programs including environmental management and community development should link to them for people to comprehend their meaning and operation. Strategically by using local community facilitators we are able to make the trainings more relevant, but the reduced capacity of the community facilitators may also reduce the effectiveness.

Finally, sustainable economic systems exist only in the broader context of sustainable development. There is an intrinsic link between the major livelihoods (Tourism & Fishing) of the Maldives and the environment. That is, for economic systems to address environmental management, they need to be contextualized with sustainable ecological systems, sustainable socio-cultural systems and all levels of political systems. A wider range of stakeholders needs to be engaged in the concept of long term sustainability through cultural resilience, local knowledge of place, community empowerment, and food for the village first and a natural systems approach. Ultimately, the better environmental management in the communities the better the environment for tourism and fishing

### 3.3 Adapted Approach

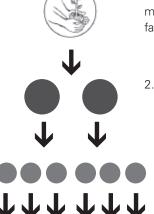
In the technical proposal submitted on the 3<sup>rd</sup> June 2007 (amended on 26 November 2007) Live & Learn proposed to deliver the training directly to the communities. The scheduling of activities sought to maximize the length of trips to selected islands and coordinate activities where appropriate in order to deliver the program as efficiently as possible. Negotiations saw an increase in the islands to be covered and reduction in the staff time available. Further discussions led to a review of the approach so as to split the community mobilisation and environmental awareness actions into two phases. The first phase will pilot and refine actions with 9 island communities in 6 Atolls. The second phase will replicate the actions to a further 11 island communities in 7 Atolls, while continuing to offer support to the Phase 1 communities.

Live & Learn discussed the approach with stakeholders (including MEEW on the 3<sup>rd</sup> February 2008) and reconsidered the proposed approach for a number of reasons. In developing the lessons learnt section for the Inception report Live & Learn reflected on past activities and identified some significant weaknesses in the proposed approach. The benefit of using Live & Learn staff members to conduct all the training sessions also has some administrative disadvantages of high travel

costs, and lost time through travel, but most significantly it has significant methodological weaknesses of reduced sustainability and potential disempowerment of the community. This is a significant concern when community mobilisation is a key goal for the actions.

Strategically, when time and resources are limited, choices need to be considered. Using the resources and time to play more of a support role to the PIU and community facilitators is a more sustainable approach, but it still requires ongoing support and continuity. Correspondingly, in terms of quality, Live & Learn's strategy is to up-skill the trainers and monitor the performance of the trainers, but the level of training that can be conducted will need to be reduced in-line with the capacity of the trainers – starting where the learner is.

As such an adapted and stronger approach more linked with the decentralized community mobilisation approach was developed, whereby two Community Facilitators are trained and resourced by Live & Learn on each island to deliver the trainings. The modified train the trainer approach with community gatekeepers is shown in the diagram above. The originally proposed trainings will remain the same but the way they are implemented in the community will change. These community facilitators will receive intensive training on how to deliver and



- Live & Learn team identifies, develop and adapt materials for community gatekeepers to act as facilitators for the project actions
  - Training of trainer's sessions conducted with selected community facilitators. This would be linked to specific training in the use of materials related to findings from the RAP.
    - 3. Sixteen community facilitators at island level use training materials to train community on improved environmental management practices.



4. People who have received the training will also be more aware and empowered to participate in environmental management activities at a household and island level.



effectively use the training materials and resources. This approach is considered to be much more aligned with the aspirations of 'regional development' with multiple benefits, including:

- 1. strengthening capacity at Atoll level (capacity),
- 2. benefits would be sustained at local level (sustainability)
- 3. links the community and trainers (empowerment) and
- 4. significantly reduces travel costs (time & money).

This approach will require increased monitoring and evaluation to ensure quality controls but the sustainability of such an approach is higher as more skills are developed within the community and there is less reliance on external inputs. Strategically, this approach will increase the local capacity and support community empowerment, but it needs to be acknowledged that these are the first steps in a long journey. An efficient strategy of the modified approach is strongly linked with adaptation of materials and specific development of skills in local community facilitators. Training materials will be developed based on the community toolkits from the TA 4614-MLD Promoting Sound Environmental Management in the Aftermath of the Tsunami Disaster.

Experience under the ADB TA4614 has shown that community uptake of concepts and overall engagement is variable. A significant variable tends to be the links with practical actions. Delays in the linking of communities and environmental infrastructure can be very detrimental.

Variations also exist in the level of support offered to communities: a lack of equity can serve to reduce the motivation of the community to become more engaged. Ultimately, the training is linked to the environmental infrastructure proposed in the RDPII. Education and training without links to practical actions is flawed.

From the time the RDPII was first designed it has had ongoing transformation, in line with these changes there have also been significant delays in the implementation of infrastructure. Such delays are one of the biggest barriers to effective community mobilisation. The awareness and training activities can help to raise community understanding, interest and skills but such activities also further build expectations for the promised RDPII infrastructure, the delays in infrastructure create tension and can also dis-empower communities. Strategically, less emphasis should be placed on the planned infrastructure and more on practical community actions for environmental management.

A strategy is a broad plan but any plan for community mobilisation requires significant flexibility. Correspondingly the major weakness of the CMEA strategy is the limited flexibility to respond to issues that are outside our control. Community Mobilisation and Environmental Awareness are long-term strategies and the RDPII can serve as another step towards this. Awareness and understanding levels can continue to be developed. Simple and strategic community actions can be promoted and significantly relationships and networks can be developed.

### 3.4 Strategic Actions

Ultimately, actions are needed and we should seek to conduct these actions in the most strategic way. This section has provided some of the considerations that guide strategic actions. The following highlights some of the key Community Mobilisation and Environmental Awareness strategies that are guiding our actions.

- Get to know the community (RAP on 3 Focus Islands & meetings with other islands)
- Start from where the learner is (RAP on 3 Focus Islands & meetings with other islands)
- Develop a base of environmental awareness. Build on what we have don't reinvent the wheel (Adapt existing Community Environmental Management Tools)
- Aim to increase quality as a priority over quantity.
   (Provide support do less but do it better)
- Develop & utilize training and other skills at a community level (Train the Trainer – community facilitators)
- Don't rush be responsive to community timelines. (Community facilitators – communication)
- Focus on simple but practical environmental actions not based on planned infrastructure
- Promote opportunities for the community to be engaged in planning (Framework for O&M)
- Develop strong networks and relationships.
   (Community facilitators, donors, etc)
- Stimulate increased dialogue on the role of environmental awareness and community mobilisation in environmental infrastructure. (CMEA, Framework & meetings)

There are many potential ways to implement the aforementioned strategies. Our strategy is to use the six-step community mobilisation approach (Plan, Listen and Learn, Discuss and Develop, Adapt and Act, Support, Evaluate) that we have been developing with communities in the Maldives. This approach was also used to design the project. Upon this basis, the process to be used is an action research model adapted by Live & Learn (L&L). This is a cyclical development process that utilizes reflection. This strategy is based on a level of reflection not just on our existing community mobilisation and environmental awareness activities but also based on past activities. The strategy although drafted earlier in the project has gained key stakeholder feedback and through reflection from the team has now been revised.

At this time the RDPII project has undergone significant changes, this tends to impact the approach we are able to take. Our plan was to link more directly with the RDPII project on environmental infrastructure (water, sanitation & waste), but due to changes and delays we have adapted our approach so as to focus more on existing community environmental actions that can be achieved. This directly builds on the previous work of the ADB TA 4614 - Promoting Sound Environmental Management in Post Tsunami Maldives.

Future actions should seek to more holistically link the software and hardware components so as to gain increased benefit from both. Ultimately, these aforementioned actions are steps towards increased environmental awareness and community mobilisation that consider links between hard and software. The real strategy of this project is to make positive steps towards this by increasing the dialogue on the role of environmental awareness and community mobilisation in regard to environmental infrastructure. This increased dialogue will also be supported by practical actions with the communities.



# Monitoring, Evaluation and Reporting

The purpose of M&E in this project is understood as supporting the development of functional learning in communities and at project management level. Thus, it is important that M&E enables effective use of staff and community resources, that it integrates with action research cycles and that it is a collaborative learning endeavor for all stakeholders. Reflection and recording are part of each planning and each action stage of the MAIA. Further, it is a basic education tenet that good assessment tasks are productive learning opportunities therefore each element of the process has built-in learning, research and recording/analysis/ evaluation activities.

A Monitoring and Evaluation (M&E) framework has been developed for the project. The purpose of the Monitoring and Evaluation Framework (M&EF) is to guide the overall implementation of the monitoring and evaluation activities for Environmental Awareness and Community Mobilisation subcomponents, by identifying:

- Tools and techniques for collecting M&E data;
- The target groups to be involved;
- The key questions to be answered;
- The data that needs to be collected; and
- The estimated timeframe and resources needed for implementation.

By conducting these activities, it will enable MEEW to:

- Provide feedback to stakeholders and the community;
- Be responsive and reassess approaches and directions taken; and
- Measure the relative effectiveness, impact and sustainability of particular approaches or initiatives.

The purpose of the Monitoring and Evaluation Framework (M&EF) is to guide the overall implementation of the monitoring and evaluation activities for Environmental Awareness and Community Mobilisation subcomponents



# 5

## Conclusions and Recommendations

There will be a need for coherence and coordination to avoid overlap and duplication of effort, to present a coherent and focused message to the public and gain collective backing for future action. However, such coordination should not imply control or centralized decision-making. In-line with moves toward decentralization environmental management must belong to communities. Government and other national bodies such as NGO networks or donors or private sector alliances must see their role as strengthening local action. With this in mind it is important to be responsive to stakeholder needs. The roles and responsibilities are critical, they impact potential outputs for existing community and government structures.

Education and learning for sustainable development is often pre-occupied with providing packaged solutions to immediate problems, as opposed to developing the necessary thinking skills and good will that leads to sustainable practice. If communities have not been participating in setting the environmental agenda and finding the solutions, sustainable outputs will be difficult to achieve. Often communities expect the government to take responsibility for the majority of problems and this is a sign of disempowerment.

The CMEA provides some strategic actions to work towards increasing community empowerment so the government can provide sound policy and guidance towards sustainable island environments. Whilst environmental awareness and outreach programs alone are unlikely to inculcate all the values needed to sustain the fragile environments in the Maldives, it constitutes the central pillar of strategies to promote sustainable practice and is a strategic starting point. Alongside positive policies, education is our best chance of promoting and rooting the values and behaviors which sustainable development implies. This document will be further supported by the tools designed in line with the strategy and the RAP

If communities have not been participating in setting the environmental agenda and finding the solutions, sustainable outputs will be difficult to achieve.

## Annex 1: Methodologies

The purpose of the Monitoring and Evaluation Framework (M&EF) is to guide the overall implementation of the monitoring and evaluation activities for Environmental Awareness and Community Mobilisation subcomponents

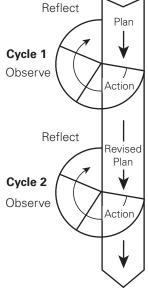
### Action Research

In order to nurture a social and environmental capacity for renewal, an action research methodology will be used. This emancipative approach to research has the potential to create three important outcomes. These are research data; learning for all participants involved; as well as practical social action for the community. The combination of methods and tools selected in the research design determines the outcome to be emphasized, and the current project aims to balance all three.

Action research is a collaborative enterprise involving researchers and participants working together in a manner characterized by honesty and trust. It is process-based, and oriented to problem solving and social improvement. Action research requires a focused, systematic approach to method selection and implementation. Importantly it also demands attention to ongoing data collection, analysis and sharing. The key to the process is its cyclical basis hence there can not be a static, pre-set design. Rather it is a dynamic, responsive, context-based, emergent methodology with an explicit agenda of empowerment and social transformation. There are many ways of implementing action research however all adapt cycles involving planning, action, observing/describing, and reflection. Below is a widely cited diagram that was originally produced by Kemmis, which very simply introduces action research.



Technical Proposal for this project, is reproduced overleaf.



(Mobilisation, Anticipation, Innovation and Action). The diagram used in the L&L

### Six-step Community Mobilisation

The six-step approach to community mobilisation has been developed by Live & Learn and adapts and simplifies many other community approaches, it includes: Plan, Listen and Learn, Discuss and Develop, Adapt and Act, Support, Evaluate. The phases of the project were designed and detailed based on this six step approach. The original approach from the inception report has been slightly adapted, through the strategic reflection under deliverable 6, as shown below to provide more specific direction and linkages to the learning community project. This structure enables the development of the short and long-term work plans that are logical and easy to follow.



### 1. Plan

- Finalize and simplify approach
- Preparations (research/workplan)
- Stakeholder coordination
- Select target communes
- Partner identification

### 2. Listen & Learn

- Provincial Visits to each community:
   RAP & mobilization
- Rapid Assessment of Perceptions
- Community mobilization
- Critical and creative thinking
- Draft learning community model

### 3. Discuss & Develop

- Discuss LC model
- Develop learning community model
- Awareness/edutainment
- Pretest learning community model
- Provincial visits to each community: pre-test participatory learning approach
- Stakeholder forum

### 4. Adapt & Act

- Implement learning community model
- Technical livelihoods training
- Conduct community trainings
- Collate policy information
- Develop mid-term report
- Provincial Visits to each community: Implementation of Participatory Learning Approach

### 5. Support & Monitor

- Implement best practices
- Develop networking links
- Link community feedback to policy
- Monitoring of results to date
- Provincial visits to each community: practical support and best practice actions.

### 6. Evaluate

- Data collection
- Analysis of data
- Draw conclusions on findings
- Recommendation for futher action

#### The MAIA

The purpose of the project is to effectively design for community mobilisation and action-learning for empowerment and sustainable development. The design basis is the six-step community mobilisation planner: Plan, Listen and Learn, Discuss and Develop, Adapt and Act, Support, Evaluate. On this basis the phases of the project were designed and detailed, enabling the development of the short and long term work plans. However in order to ensure the project is participative and directly responsive to community needs, an action research model is being used as a process for continuous review. Hence the basis upon which day to day decisions are made is the work plans which were developed according to the sixstep community mobilisation planner (whilst preparing the project), but the action research process enables continuous renegotiation of the work plans due to emergent data and contextual contingencies (caring for the project during implementation).

Thus, the project will progress through reflexive use and adaptation of the MAIA, a basic action research model comprising stages of Mobilisation (*Meet together*), Anticipation (*Are we ready?*), Innovation (*Is it new?*) and Action (*Act - what and how*). Hence, the MAIA will also function as the basis of the model for learning community

development. The groundwork for this is shown in figure 5 overleaf. The structure of this model comprises two basic planning stages and two basic action stages, each with an in-built reflective requirement. The two planning stages are mobilisation and anticipation and the two action stages are action and innovation. These form the basis of each cycle. It is important that the cyclical pattern is understood as it is a fundamental part of action research.

The model is iterative in that it may be used to progress from one stage to another in any order although in the beginning while the model is being used for the first time, it is recommended that work begin with the planning stages and progress to the action stages. Reflection is vital in each stage and should be participative. Thus, each stage comprises activities - either planning or action activities - with reflection on them. It is essential that good records be made of each activity to support reflective tasks. Records may take a wide variety of forms, from photographs to survey data, and help to keep the reflection focused. The records become the basis for monitoring and evaluation (M&E) which begins soon after the project begins. As with all action research, 'intention' on the part of the learning community participants is a success indicator. If the group commit themselves to achieving the objectives of the activity, the desired outcomes are more likely to be achieved.

Figure 4: MAIA – L&L's action research model for social research, learning and practical action.

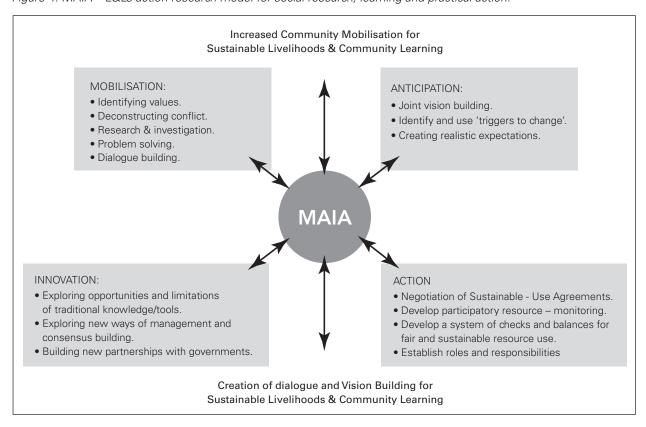


Figure 5: MAIA Model-in-Preparation for Adaptation in the community mobilisation approach

Creation of dialogues and vision building for sustainable livelihoods and community learning Planning Phases Mobilisation Anticipation (Are we ready? (Meet & talk) All dreams & plans) Purpose • Identifying values Purpose Deconstructing conflict • Joint vision building Research and investigation • Identifying and using 'triggers to change' Problem mapping/solving • Creating realistic expectations Dialogue building Problem solving Innovation Action (Is It New?) (Act – What & How) Purpose Purpose • Implementing innovations designed Implementing learning & development in previous stages activities designed in planning stages • Exploring opportunities & limitations • Negotiation of sustainable use agreements of traditional knowledge/tools • Developing participatory resource monitoring · Exploring new ways of management • Developing a system of checks and balances & consensus-building for fair & reasonable resource-use · Building new partnerships · Establishing roles and with governments responsibilities **Action Phases** 

Increased community mobilisation for sustainable livelihoods and community learning

It can be rather difficult to understand the way this project has been designed using the six-step community mobilisation planner as 'preparing for' stage with the MAIA as the 'caring for' stage. Therefore, the analogy of preparing for then caring for an upland chamcar is put forward. To understand this story it is helpful to remember that MAIA stands for **M**eet and talk - **A**re we ready? – **I**s it new? – **A**ct: what and how?

### Preparing For<sup>1</sup>

When we are **preparing** to go fishing, we speak to other fishermen and check the weather. Based on the weather and feedback from others we decide what we are fishing for. We get the right gear ready for the type of fish we want to catch, and make sure it is all in good working order. We will also plan to have fishing gear for different species so if there is a change we can catch different fish. This completes the '**preparing for**' stage of our project, and it is equivalent to the six-step community mobilisation planner.

### Caring For

When we go fishing, it is important to care for the fishery to the best of our ability. Even though we have carefully prepared, there are many decisions we will need to make while we are fishing to get the best catch. This is because there are usually unforeseen events that we did not expect. For example we may notice a sudden change in weather making a storm, or a different species of fish may be plentiful. So we continually watch the environment and speak to other people - especially other fishermen, and make plans in response to the changing conditions. We then act on those plans - we might decide to fish for a different species or go to a different fishing area that is more protected from the storm. If the change in plan was successful and you catch a different species or find protection from the storm this is a lesson learned. If not, and you find yourself in a similar position you will devise another solution.

Delivering the fish to the market completes the 'caring for' stage of our project. The cyclical process of meeting and talking, devising plans, developing innovative ideas and acting on them is the 'caring for' phase, or the MAIA model.

This story about 'preparing for' and 'caring for' illustrates the way the six-step planner works with the MAIA as the model for engagement and responsiveness.

 $1\,$  An Italic script has been used for this section as it is an illustration rather than part of the project description.

In summary this emancipative methodology incorporates a wide variety of methods for planning, action, record keeping, reflection and M&E from the beginning of the project to the end. The methodology itself has application in project implementation as well as management.

## Adaptive Management and Operationalisation

As part of the innovative theoretical framework being used in this project, action research provides the foundation for all aspects of implementation. To this point in this report reference has been made only to the target communities, with the use of the MAIA to plan, review and respond to their progress. However with this methodology as well as development 'out there' the potential for learning, research and social action also occurs at project management levels. These levels are capacity building and professional development on the part of the project team members as well as the learning potential within the project board and advisory groups. This is because innovation does not happen in isolation – it requires integrated planning.

As in field-work the same deliberative reflection upon data and flexibility to respond, enables development and learning at each project level. The process requires a certain mind-frame though comprising a willingness to participate and commitment to learn at the personal as well as institutional levels. This implies a genuine shared responsibility for learning and adaptation at all levels. Essentially, it is anticipated that a spirit of constructivism will pervade project management and implementation at all levels. Should other stakeholders wish to participate in implementing the MAIA action research process as part of the management approach, the group will need to decide upon data collection and recording methods. A simple format for recording lessons learned and anticipatory decisions at each meeting has been developed. Thus, flexibility is a key word in adaptive management together with shared responsibility for achieving agreed outcomes and standards. This approach will present ideal opportunities for management-level discussions about operationalizing the project through provincial and district staff.

### Research Scope and Design

The target communities will agree to participate in activities designed to develop and empower themselves. The basis for planning this task is the six-phase mobilisation planner comprising: plan, listen & learn, discuss & develop, adapt & act, support and evaluate. This forms the preparation for

the entire project: it provides the content of the project as it is conceived at the outset. The MAIA methodology works to guide the activities in a reflective, cyclical way throughout each phase as well as over the duration of the project. This cares for the developing learning community by ensuring that learning and social actions are participative and guided by sound research. It also ensures that good data is produced and that M&E is ongoing.

Please note that the MAIA methodology takes precedence over the six-phase mobilisation approach. That is, through constant cycles of planning/reflection and action/reflection the project will be continuously revised, renegotiated, renewed and redesigned in response to emergent data or decisions made. This is to ensure that the project remains oriented towards community empowerment at the same

time as sustainable development. Good opportunities to pursue these two goals cannot necessarily all be predicted beforehand therefore flexibility is essential to the process.

The variety of methods of data collection together with the diversity of participating groups and individuals from each community provide triangulation, thus ensuring valid results. The project will be conducted in two phases, utilizing local community facilitators. In this way, systematic learning from the first phase can strengthen actions in the second phase. The modeling is still being developed but from such research stronger lessons can be learned for on-going initiatives.

Figure 7: Diagrammatic Representation of the Proposed Research Design for the Project. Please note that it is subject to change as the MAIA process is applied to project progress.

Dates	Mobilisation Phase 1	Atoll/Island	Activities Being Implemented
	1. Planning		Inception Report CMEA
	2. Listen and Learn	L.Fonadhoo, Lh. Naofaru, ADH. Mahibadhoo	RAP
	3. Discuss and Develop	Live & Learn with Community facilitators, PMU and PIU staff discuss the concepts	Community methodology/ strategies
	4. Adapt and Act	Train Community facilitators from 9 selected communities and PIU & PMU	ToT trainings
	5. Support and Monitor	Community facilitators conduct training in 9 islands and report back to L&L	Trainings conducted at the island level by community facilitators
	6. Evaluate/ Conclude	L&L provide feedback and support	Support and monitoring undertaken by Live & Learn

Dates	Mobilisation Phase 2	Atoll/Island	Activities Being Implemented
	1. Planning	Reflect on the lessons learnt form phase 1.	Interim Review - Reflection
	2. Listen and Learn	Revise and review if necessary the toolkits and the approaches to be replicated based on the RAP.	RAP
	3. Discuss and Develop	Live & Learn with Community facilitators, PMU and PIU staff discuss the changes if any.	Community Methodology/ strategies
	4. Adapt and Act	Live & Learn with Community facilitators, PMU and PIU staff discuss the concepts	ToT trainings
	5. Support and Monitor	Community facilitators conduct training in 11 islands and report back to L&L	Trainings conducted at the island level by community facilitators with the assistance of L&L.
	6. Evaluate/ Conclude	L&L provide feedback and support to the 11 communities	Support and monitoring undertaken by Live & Learn

## Rapid Assessment of Perceptions (RAP)

As described earlier, research implemented and reviewed through the MAIA process provides the participative decision making structure through which progress is reviewed and monitored. This allows the active involvement of all stakeholders in the ongoing project development process. Consequently, information provided below may need to be updated as decisions to improve it are made when prerequisite information is ascertained. Therefore the final selection of research and learning methods and tools in each phase will be made during the phase.

The RAP is a battery of mobilisation, learning and needs assessment tools designed with the specific context of each community in mind, taking into account the project objectives. It is to be carried out in the first implementation field trip, and is planned to provide a shared understanding of villagers' perceptions of their community context whilst at the same time starting to build working relationships. The idea is to use minimum impact, high-yield tools to provide a consensual starting point for development. L&L has substantial experience in implementing the RAP,

thus has accumulated considerable learning about its application. Therefore, the following principles (L&L, nd.) will guide our use of the approach:

- 1. Programs should start from where the communities are at.
- 2. Research and learning should have an emphasis on systems thinking, that is on identifying and working with interrelated contextual issues.
- Programs should provide an opportunity for learning that involves developing and practicing critical thinking.
- Programs should involve developing partnerships between key people and institutions in the community and society.
- 5. Programs should be process oriented and focus on the interrelationships between issues.
- Programs should involve learning through doing, and all tools should be directed towards empowering action that leads to improvement.
- 7. Programs should promote empowerment from within communities.

From reflection on the package of baseline information that is revealed, education materials and further research methods will be collaboratively designed to elaborate upon, or address the identified needs as negotiated. Where appropriate, links with relevant organisations will be facilitated where this will benefit the community. Importantly, the RAP is itself the first stage in learning community development, stressing the need for open, participative discussion of the process, the results and their implications.

### RDP2 RAP Research

### Objective

This Rapid Assessment of Perceptions (RAP) is a social investigative research method, which aims to assess community perceptions on issues relating to sustainable development and then use these perceptions in shaping effective tools to change knowledge, attitude and practices. Live & Learn has developed and tested the RAP in Melanesia, Cambodia and the Maldives, where it has been highly effective in creating an environment for community mobilisation and empowerment.

The research carried out in this RAP will be used to guide in the development of (i) a strategy for environmental education; (ii) a facilitators resource guide; and furthermore, to advance sound environmental management in the Maldives. The tools chosen will be based on the tools developed for the ADB TA 4164, and the communities' existing knowledge base and perceptions along with a review of existing approaches to environmental education. A range of findings emerged from the research that will assist with identification of appropriate tools and methodologies for promoting sound environmental management within the island community in general. This research also forms the base-line for evaluation of project outcomes.

### **Participants**

The RAP was carried out in communities from three islands with a total of 102 participants: 79 attending group activities and 23 one-to-one interviews. Men and women were equally represented with 52 males and 50 females participating. The age range of interviewees was 21 to 52 years with a median age of 38.

Table 2: Number and gender of participants, by community

Activities	Gender	Lh. Naifaru	L. Fonadhoo	ADh. Mahibadhoo
Group activities	Males Females	17 20	12 12	13 5
One-to-one interviews	Male Female	8 4	0 6	2 3
Total		49	30	23

### Key issues

Figure 1: Ranking of issues as perceived by community members (1 = most important)

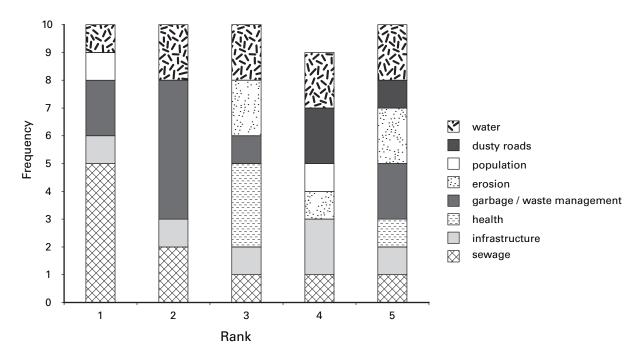
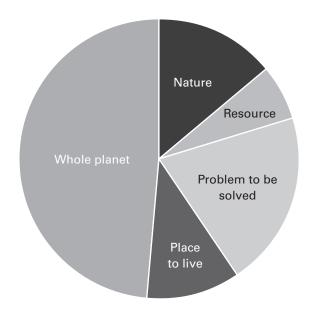


Figure 2: Summary of issues faced by communities (considering frequency and ranking)



Community specific issues identified were:

LH. Naifaru Housing difficulties and sea wall destroyed
 ADH. Mahibadhoo Flooding of roads and oil found in ground water
 L. Fonadhoo Beach erosion, inadequate health and harbor facilities

It is very important to stress that all privately collected data will be used in the project without identification. It is also important to share collated information gathered as soon as possible, and to formally present the analyzed data to the community at the next visit, to use it as the basis upon which to collaboratively plan progress.

## Annex 2 Monitoring & Evaluation Guiding Principles

The monitoring and evaluation framework has been designed on the following principle: **Making evaluation meaningful to communities.** 

The purpose of evaluation is multi-faceted. In part, it is used by the implementing organisation and funding agency to assess the benefits and impact of the work carried out. But the evaluation should also benefit the communities in which the work is being carried out. Too often communities never see such data and therefore have no opportunity to use the data to further improve practice and capacity. People from outside the community who do not "live" the many challenges experienced by the people within the communities themselves do often impact evaluations. With some guidance, communities are well placed to evaluate impact, as they experience any changes first-hand. Leading community participation is key to meaningful evaluation. One effective method to enhance this is the Most Significant Change (MSC) technique. It is a form of participatory monitoring and evaluation in which stories of change are collected from the community. The process involves the collection of significant change stories from the field (classroom) and the systematic selection of the most significant stories by project stakeholders and partners. Project stakeholders then discuss the value of the stories; how successes can be replicated, and how to identify limitations and opportunities. It is participatory because many project stakeholders are involved both in deciding the sorts of change to be recorded and in analysing the data. The MSC techniques are well suited to programs that are (i) complex and produce diverse and emergent outcomes, (ii) have numerous organisational layers and (iii) are focused on social change and advocacy.

The development of the M&E framework has taken into consideration that many communities in the Maldives, post-tsunami, may have experienced monitoring and evaluation from International and national agencies. In this regard, the framework has been designed to minimize disruption to people's lives and ensure that it is meaningful to the communities. The M&E process must also be careful not to build expectations or disempower communities by dwelling on negatives. In this framework Live & Learn will seek to look at the delivery of outcomes and outputs, as outlined in the project summary. In particular, the framework will be designed

### Annex 2 - Monitoring & Evaluation: Guiding principles

to consider the effectiveness, impact and sustainability of the environmental awareness and community mobilisation program. That is:

- > Effectiveness the extent to which program activities are achieved in practice.
- Impact- the extent to which the program has had a positive or negative impact on target groups.
- Sustainability- the extent to which the messages from the program will sustain awareness after the completion of the program.

As this project involves 12 atolls, the framework has been designed to monitor and evaluate each of these Atolls during Phase 1 and 2. Monitoring and Evaluation activities will be scheduled as follows:

- Baseline survey to understand baseline conditions prior to commencement of the project (Rapid Assessment of Perceptions).
- Mid-term review conducted at end of Phase 1 to collect monitoring data to provide early indications of progress, assess effectiveness, impact and sustainability.
- Final Evaluation at the end of Phase 2 to assess effectiveness, impact and sustainability of the program.

The primary role and responsibility for undertaking monitoring, evaluation and reporting activities under this framework rests with Live & Learn Environmental Education (the Consultant). Community members and stakeholders however will be encouraged to participate in the M&E activities. A Monitoring and Evaluation Matrix has been developed describing key features of and procedures for monitoring and evaluating the project. It describes the key outputs and outcomes and questions to be answered. It also describes the procedures for each indicator, including research methods, sampling strategy, data collection timing/frequency, responsibility for data collection and the data report.

It should be noted that performance questions and key outcomes will be monitored and evaluated during the baseline, mid-term and final evaluation visits. That is, each outcome will not be monitored separately on separate visits. Rather the questionnaires will be tailored to collect all the data at one time, to minimize disruption to the informants and improve efficiency.

### (Endnotes)

- 1. Hamyaran Iran NGO Resource Centre/World Bank (2006, pp. 48 68).
- 2. UNESCO (nd.).







