Facilitating co-management in small-scale fisheries: processes and experiences of the Regional Fisheries Livelihoods Programme in Sri Lanka

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Abbreviations and acronyms

BOBLME - Bay of Bengal Large Marine Ecosystem Programme
CC and CRMD - Coast Conservation and Coastal Resources Management Department
CEA - Central Environment Authority
CENARA - Capacity Enhancement of National Aquatic Resources Agency
CIDA - Canadian International Development Agency
CSR - Corporate Social Responsibility
DFAR - Department of Fisheries and Aquatic Resources
DWLC - Department of Wild Life Conservation
EEZ - Exclusive Economic Zone
EML - Environment Management Limited
FAO - Food and Agriculture Organization
FC - Fisheries Committee
FD - Forest Department
FMA - Fisheries Management Authority
IFAD - International Fund for Agriculture Development
IUCN - International Union for Conservation of Nature
LOA - Letter of Agreement
MFARD - Ministry of Fisheries and Aquatic Resources Development
MFF - Mangroves for the Future
MOU - Memorandum of Understanding
NAQDA - National Aquaculture Development Authority
NARA - National Aquatic Resources Research and Development Agency
NC - National Consultant
NCC - National Coordinating Committee
NGO - Non-Governmental Organization
RFLP - Regional Fisheries Livelihoods Programme
SAM - Special Area Management
SRL - Sri Lanka
TOR - Terms of Reference
TURF - Territorial User Rights in Fisheries
UNDP - United Nations Development Programme
WP - Work plan
About RFLP

Across South and Southeast Asia, the livelihoods of coastal small-scale fishers are among the most insecure and vulnerable. They are dependent on an increasingly depleted and degraded resource, due to overcapacity, resource access conflicts and inadequate resource management. These communities make important but often poorly recognized contributions to the food security and development of many millions of people and to national and regional economies.

The four-year (2009 – 2013), Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) was funded by the Kingdom of Spain and implemented by the Food and Agriculture Organization of the United Nations (FAO) working in close collaboration with national authorities responsible for fisheries in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam.

The major expected outputs of RFLP were to establish:

- Co-management mechanisms for sustainable utilization of fishery resources;
- Measures to improve safety and reduce vulnerability for fisher communities;
- Measures for improved quality of fishery products and market chains;
- Diversified or strengthened income opportunities for fisher families; and,
- Better access to micro-finance services for fishers, processors and vendors.

In addition, RFLP also sought to facilitate the regional sharing of knowledge in support of livelihoods development and reduced vulnerability for fisher communities and of sustainable fisheries resource management.

RFLP project activities in Sri Lanka were implemented in the coastal areas of Gampaha and Puttalam districts. They largely centred around three important lagoon systems namely, Negombo lagoon, Chilaw lagoon and Puttalam lagoon. The Ministry of Fisheries and Aquatic Resources Development of Sri Lanka (MFARD) was the government counterpart.
1. Introduction

Sri Lanka has a century old history in fisheries management. Until the early 20th century, regulations made under a number of Ordinances were enforced through local authorities with community participation; prohibiting or restricting the use of certain fishing gear, implements and methods, particularly in the inland water bodies including lagoons.

Sri Lanka also has a fairly long history of traditional community based fisheries management of small, localized fisheries; a few of which are still being managed through traditional methods. However, most of these traditional management systems have now collapsed, due to the rapid expansion of the industry and the introduction of new technologies. Despite such a rich tradition, and the availability in recent years of centralized legislation, awaiting management problems to develop and then to find a solution and introduce a regulation specifically for that problem or issue has become the rule rather than the exception.

Although there is legislation promoting greater community participation and responsibility in fisheries management, the absence of an enabling policy has not been conducive to promote community-based fisheries management or fisheries co-management in the country. The absence of an enabling policy has not allowed co-management to be mainstreamed into the economic and social structure of the fisheries sector.

To attain successful fisheries co-management in Sri Lanka, it was consider necessary for the government to develop an enabling policy with clear cut strategies, reflected in the annual action plans and budgets of the relevant agencies. Mainstreaming co-management into the economic and social structure of fisheries would help to minimize many of the problems and constraints (institutional delays, lack of inter-agency cooperation, political interference, etc.) experienced during the implementation of many of the past initiatives.

The Regional Fisheries Livelihoods Programme has been working to improve the co-management process in Sri Lanka. A baseline survey carried out by the RFLP revealed that the concept of co-management was not being fully understood by the relevant stakeholders in the project areas (the Northwestern Districts of Negombo, Chilaw and Puttalam). The study highlighted the need to increase the capacity of the fishers, men and particularly women (who despite being very active in community organizations, and represented their husbands in the fisheries management bodies, were not being fully recognized as members of the fishers organizations), as well as government officials, to effectively improve the process of co-management.

It also became clear through the baseline survey that, for the co-management process to be successful, it was necessary that other aspects of wellbeing of fisher communities were also considered. Aware of this need, the RFLP undertook several activities for improving and diversifying livelihoods, facilitating microfinances, improving fish processing, among others.
This process note will focus on the co-management component of the RFLP. For more information on other activities implemented by the RFLP, visit www.rflp.org

The main areas undertaken by RFLP with regards to co-management were:

- Reviews - Legal, regulatory and institutional provisions for co-management and past and on-going co-management initiatives in Sri Lanka and the region;
- Strengthening legal and institutional provisions for co-management;
- Compilation of secondary data/information on RFLP-SRL co-management sites;
- Compilation of primary data/information on RFLP-SRL co-management sites;
- Training and awareness creation on resources management and habitat conservation;
- Promotion of eco-system based co-management at RFLP-SRL co-management sites;
- Development of fisheries management plans for the co-management sites;
- Support to promote habitat conservation at co-management sites; and,
- Support for implementation of fishery management plans at the co-management sites.

2. Reviews

2.1 Reviews by the National Consultant

The RFLP national consultant for co-management started by making a review of past and on-going fisheries co-management programs in Sri Lanka and the region and an assessment of existing policies, laws and regulations, co-management mechanisms and institutional arrangements related to co-management in Sri Lanka, which was completed in December 2010. The review was based on past and on-going co-management initiatives in about 10 lagoon sites, 5 coastal sites and a large number of inland fresh water reservoirs in Sri Lanka as well as co-management initiatives from India, Bangladesh, the Maldives and Viet Nam highlighted deficiencies in the current fisheries policy and the legal and institutional arrangements available for fisheries co-management in Sri Lanka.

Some of the major deficiencies identified and proposed recommendations are summarized below:

- **Need for an enabling fisheries policy** – Most of the co-management initiatives in Sri Lanka were project driven. There is a clear need for the policy on co-management to be translated into strategy and brought into the mainstream, and not allow it to operate in ‘project mode’. Implementation agencies such as DFAR and NARA need to incorporate activities promoting co-management in their annual work plans, and to allocate the necessary funds and staff.
Legal and institutional arrangements for wider stakeholder participation – The review showed clear evidence of weak institutional mechanisms for fisheries co-management from the grass roots level to the national level. The Fisheries Committees and Fisheries Management Authorities which were comprised solely of male fishers were unable to drive the CBFM and co-management processes forward, particularly in an environment of minimum government involvement and support, and being subjected to local level socio-political pressures and fall out from other economic and development activities.

The institutional structure should not only include representatives of fishery-related institutions but also representatives of civil administration in the area and, representatives of institutions that have a legal mandate to control or manage activities that can adversely impact on the health and well being of fish resources and entire ecosystems (e. g. pollution from industrial effluents, solid waste and sewage disposal, deforestation, encroachment, etc.). Women should also be involved in this process.

Fisheries development and management plans – For each and every fisheries management area declared under the Fisheries and Aquatic Resources Act, the implementation of a fisheries development and management plan should be made mandatory. A fisheries development and management plan of a Fisheries Management Authority (FMA) should be viewed as a legal framework for the implementation of fisheries development and management in that area and a public statement of the key stakeholders, of the intent of agreed actions. The plan should clearly spell out the role and responsibility of each stakeholder, implementation mechanisms, consultation and extension strategies and needs to be reviewed periodically.

Institutional strengthening – In the absence of an enabling policy on fisheries co-management, weaknesses in institutional arrangements at national level are to be expected as the norm rather than the exception. While DFAR needs to actively participate in co-management initiatives currently on-going, there is an increasing likelihood that more coastal fisheries will come under co-management in the years to come. A FAO/CIDA project has catalyzed the setting up of a Co-management Unit within the Management Division of DFAR. It is an ad-hoc arrangement of a collection of officers of different skills areas. This unit needs to be strengthened and institutionalized within DFAR, with dedicated staff and a budget, both centrally and regionally.

Tangible benefits from co-management – It generally takes a considerable length of time for fishers and other stakeholders to experience dividends from fisheries co-management in terms of increased catches and income, conservation of resources and habitats, etc. Many projects, in order to mobilize and sustain fisher community interest and involvement in the co-management process have provided a diverse array of tangible benefits which may be linked to fishing and/or fishery related benefits, infrastructure facilities, support for additional income generating activities, etc.
2.2 National workshop on co-management

A national workshop was conducted with the purpose of reviewing the existing co-management initiatives and identify the main issues.

RFLP received the support of IUCN Sri Lanka Country Programme to organize and conduct a workshop on “Past Experiences and Lessons Learnt from Community-Based Management Programmes Implemented in Sri Lanka”. The workshop was held over two days in November 2010 and attended by 43 persons (including 7 women) from various institutions including fisheries agencies, universities, the Coast Conservation Department, the Environment Ministry, NGO’s and fisher community representatives. Technical sessions on the co-management process for site selection, implementation methodology, institutional and legal arrangements and sustainability were followed by presentations of co-management case studies from lagoons, coastal fisheries/resources, inland fisheries and Special Area Management (SAM) initiatives of the Coast Conservation and Coastal Resources Management Department.

Open forum discussions and group work led to recommendations/guidelines for co-management site selection and co-management planning process, implementation methodology, institutional and legal arrangements, and sustainability. Some of the key recommendations were:

- **Criteria for selecting sites for co-management in coastal areas should include a coastal resources management perspective as well as a fisheries resources management perspective. An assessment of the severity of issues, economic significance, social significance and ecological significance of the site were considered essential.**

- **In the co-management planning process, it was recommended that a stakeholder analysis is done independently to assess the relationships and capacity of stakeholders, identify stakeholder conflicts and analyze issues based on secondary information. Community participation in consultations and drafting of plans for implementation would build a sense of ownership among communities for the resources. Implementation strategies need to identify all relevant agencies (government and other) and establish mechanisms for coordination.**

- **The workshop very clearly showed that co-management initiatives implemented with wider stakeholder participation (albeit with no legal basis) seemed to have been more successful and showed greater potential for sustainability compared with projects implemented only with primary stakeholder participation (e.g. fishers and the fisheries Department). While the District and Divisional Secretaries should become the main partners in implementation, full participation of all agencies and other stakeholders through a Management Plan needs to be ensured.**

- **Fisheries co-management policy should be translated into strategies and annual activity plans of relevant agencies. The Co-Management Unit of DFAR needs to be strengthened, empowered and institutionalized and extended to district level to provide overall national guidance on co-management aspects, and to coordinate with other national-level agencies to facilitate these processes.**
• Appropriate amendments need to be made to existing laws/regulations enabling participation of all stakeholders, including women, in the co-management process (bring them into the legal framework for co-management), provide legal powers to agencies/stakeholders in implementing fisheries co-management plans and provision of in-built mechanism for financial sustainability

3. Strengthening legal and institutional provisions for co-management

During the last quarter of 2010, the Co-management NC was assisted by a Legal Analyst/Consultant to review and strengthen the existing legal and institutional arrangements for co-management. The work plan of the NC for the last quarter of 2010 also incorporated the work plan of the legal consultant. Key activities in this area, jointly undertaken by both the NC co-management and the legal consultant included:

• Review of existing laws, regulations, policies and institutional provisions for co-management and identification of gaps.
• Conduct 4 stakeholder meetings to discuss legal, policy and institutional issues in co-management, and,
• Drafting of appropriate legal and regulatory frameworks in support of co-management.

The shortcomings in the existing legal provisions relating to co-management have been known for some time and, in the beginning of 2011, the Cabinet of Ministers granted approval to the Minister of Fisheries and Aquatic Resources Development to make suitable revisions and bring in other stakeholders into the system. The reviews undertaken by the NC and the findings from the national co-management lessons learned workshop, provided guidance and direction to the required revisions.

Stakeholder meetings conducted jointly by the co-management and legal consultants to discuss legal, policy and institutional issues in co-management are discussed under “Training and awareness creation”. A total of 196 fisher community and fisheries officials including 36 women participated in four awareness trainings conducted in Negombo, Chilaw and Puttalam districts. These meetings helped to identify and reach consensus on important revisions to strengthen existing legislation on co-management, particularly to accommodate other stakeholders in the co-management process. The presentations used during these meetings were prepared by the co-management consultant.

The legal consultant conducted a review of existing laws, regulations, policies and institutional provisions for co-management and identification of gaps and a report submitted to RFLP Sri Lanka.

The amendments to provisions related to co-management included establishment of a Fisheries Management Coordinating Committee in a fishery management area, inclusion of a wide spectrum of fishery as well as non-fishery stakeholders in the Fisheries Management Coordinating Committee and the need to prepare and implement a fishery management plan for the fishery management area. The NC coordinated and participated in the drafting of these amendments with the relevant legal officers of DFAR.
Although RFLP anticipated that the amendments to co-management provisions would be officially accepted and become legal within a short time, there was a long delay as MFARD and DFAR wanted to combine amendments to co-management provisions with other major amendments to the Fisheries Act. Inclusion of international obligations for Sri Lankan boats fishing on the high seas was another critical area that needed to be addressed urgently as the current Fisheries Act No: 2 of 1996 only deals with fishing activities of local boats within the EEZ of Sri Lanka. This necessitated interaction with other agencies such as the Attorney General’s Department and the External Affairs Ministry.

RFLP also assisted DFAR/MFARD to expedite the proposed amendments to the Fisheries Act, facilitating the work of a committee appointed by MFARD in July 2012, comprising the Additional Solicitor General and a State Counsel of the Attorney General’s Department, Legal Officer of the Ministry of External Affairs, Legal Officer and Legal Assistant of DFAR and RFLP consultants (co-management and project implementation support). The legal consultant recruited by RFLP in 2010 was re-engaged to work with this committee.

While drafting new regulations to control high seas fishing by local boats, the committee further reviewed the amendments relating to fisheries co-management. Representatives of women’s groups and NGOs involved in natural resources management and welfare of fisher folk within the limit of a fishery management area were included as members of the Fisheries Management Coordinating Committee of that area. In addition, all reference to “fisherman” and “fishermen” in the co-management provisions were replaced by the words “fisher” or “fishers” to facilitate the inclusion of both men and women in the co-management process.

The NC coordinated the work of the Committee with DFAR and worked closely with the RFLP legal consultant in finalizing all amendments to the Fisheries Act. The amendments to the Fisheries Act drafted by the RFLP legal consultant, were approved by MFARD in September 2012 have been cleared by the Attorney General’s Department and were submitted to the Cabinet of Ministers in March 2013.

4. Compilation of secondary data/information on RFLP co-management sites

The NC was required to prepare fisheries and environmental profiles of Negombo and Chilaw lagoons using secondary data and survey reports.

The fisheries and environment profiles compiled for the two lagoons covered the socio-economic profile of communities around the lagoons, water resources management, land and resource utilization, fisheries (fish resources, fishers and fishing fleet, fishing gear and methods, fish production, fisheries management, etc.) and aquaculture, the environmental profile of the lagoons (geology and geomorphology, soils, climate, hydrology and water quality, etc.) and other ecosystems associated with the lagoons such a mangrove, sea grass beds as well as an analysis on threats to the lagoons and its environment and an update on conservation activities undertaken.
In the case of Puttalam lagoon, IUCN in Sri Lanka had worked in Puttalam Lagoon since 2008. A project funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) focused on coastal ecosystem rehabilitation and conservation activities in critically degraded ecosystems in coastal stretches of Puttalam Lagoon in northwest Sri Lanka. Much ecological and sociological information had already been collected and analyzed during this project. The project for Improving Natural Resource Governance for the rural poor in Sri Lanka (funded by UK Aid) focused mainly on issues faced by poor communities dependent on natural resources. Here too, information has been collected and assessed. Through IUCN intervention, coastal areas of Puttalam have also benefited from small grants provided under the Mangroves for the Future (MFF) programme.

5. Compilation of primary data/information on RFLP co-management sites

RFLP provided financial support and technical support to the Department of Fisheries and Aquatic Resources for conducting a rapid fisheries frame survey on coastal marine and brackish water fisheries in the fisheries districts of Negombo, Chilaw and Puttalam, including the selected co-management sites.

The rapid fisheries frame survey involved the total enumeration of fishing households associated with the coastal and lagoon fisheries in the fisheries districts of Negombo, Chilaw and Puttalam, to provide data/information on:

- Distribution of fishing population by village;
- Fishery related activities by gender;
- Fishing craft and gear (type and quantity) by landing centre/village;
- Estimated catch by landing centres, boat and gear types and seasons;
- Marketing arrangements and post-harvest activities by village etc.; and,
- Infrastructure by village/landing centres.

DFAR submitted three reports covering the findings of the rapid fishery frame survey in the three districts, synthesizing the findings in terms of distribution of fishing population by village, fishing craft and gear (type and quantity) by landing centre/village, estimated catch by landing centre/boat and gear types, marketing arrangements and post-harvest activities by village etc.

6. Training and awareness creation

RFLP in Sri Lanka conducted three training workshops on fishery policies for community based management and livelihoods development. During the second half of 2010, MFARD was launching its newly established National Fisheries Federations with the Minister participating in officially establishing the federation at district level. By mutual agreement, RFLP Sri Lanka supported MFARD in hosting the District Federation meetings in RFLP project areas of Negombo, Chilaw and Puttalam and utilized the opportunity to address hundreds of fishing community members on RFLP programme of work in promoting co-management and livelihoods development.
6.1 Awareness creation for co-management stakeholders

Awareness creation of communities, policy makers, other stakeholders and political leadership and capacity building of fisheries officials in fisheries co-management was an important component of RFLP in Sri Lanka, particularly from 2011 onwards. Mobilizing fishers and other stakeholders into co-management, concluding with the development and implementation of co-management plans is a process requiring a considerable period of time. It involves assimilation of knowledge over a period of time and using such knowledge to develop an appropriate management system.

Therefore, in addition to training per se, all activities undertaken with fishers and other stakeholders such as preliminary meetings to discuss fisheries issues and meetings by all relevant stakeholders to negotiate management plans were an integral part of the training and awareness building process.

The main capacity building activities comprised a series of consultations with the lagoon communities (the target for fisheries co-management in all three sub-areas of the project) and the representatives of institutions concerned with co-management and ecosystem/environment conservation. Five training modules were used during the awareness creation/training on co-management provided to the communities under this output. These were as follows:

- **Analysis of fisheries and environmental issues** – a ‘Problem tree’ analysis conducted with fishers and fisheries officials at each co-management site on fisheries and environmental issues highlighted the need for co-management and the integration of fisheries management with environment conservation. The problem tree analysis of fisheries and environmental issues was the entry point to mobilize fishers into the co-management process.

- **Awareness creation on Policy, Legal and Institutional arrangements for fisheries co-management** - This training module created awareness among fishers and other stakeholders on the current Government policy on fisheries and the legal and institutional arrangements available for fisheries management in Sri Lanka. Awareness creation on the proposed revisions to the fisheries legislation concerning co-management was important for the successful mobilization of fisher community associations and other stakeholder agencies into coordinating committees chaired by the District administrators in Chilaw and Puttalam to drive the co-management process forward.

- **Awareness creation on Fisheries Co-management** - This training module focused on the need to manage fisheries (characteristics of fish resources, effect of fishing on a stock and over-fishing), objectives of fisheries management, changing concepts in fisheries management and fisheries co-management.

- **Awareness creation on ecosystem based fisheries management** - This module was used to make all stakeholder representatives aware of the need for fisheries management to be very closely integrated with environment conservation and the need for active involvement of both fishery and non-fishery stakeholders in the co-management process.
Negotiating a Fisheries development and management plan - During the task of preparing an ecosystem-based fisheries management plan for the concerned area to address fisheries and associated environmental management issues; fishers, fisheries officials and other stakeholder representatives were guided by the provision of a generic fisheries development and management plan.

6.2 Awareness creation for school children on coastal resources management and habitat conservation

RFLP Sri Lanka worked to promote awareness creation on the need for coastal resources management and habitat conservation, amongst secondary school children in the project area, particularly in schools in and around the sites selected to promote fisheries co-management, enabling RFLP to reach out to the next generation of users/custodians of the natural resources in the areas.

In consultation with the regional education authorities and DFAR district office, a total of 9 schools located around Negombo lagoon and coming under the Negombo Zonal Education Office were identified to conduct awareness seminars on the importance of coastal ecosystems such as lagoons/estuaries, mangroves, sea grass beds, coral reefs; their role in economic development of the coastal communities, current status of these ecosystems, issues and threats to sustainable use, legal status, etc. A team of scientific/technical officers from the Coast Conservation and Coastal Resources Management Department and National Aquatic Resources Research and Development Agency as well as academics from universities with extensive experience in coastal resources management and coastal environment conservation acted as resource people. All seminars were conducted in local language (Sinhala) and each seminar lasted about two and half hours. Hand-outs of all presentations were made available to school children and teachers in Sinhala language.

This activity was scheduled for the second half of 2011 and between July and mid-October, seminars were conducted in 8 schools. The dates on which seminars were conducted in different schools and the number of children that participated are given below. Children in Grades 9 to 11 were the target group for the seminars. Except for one school, all others were mixed schools and nearly 43% of the participants were girls.

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of school</th>
<th>Attendance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 08th July 2011</td>
<td>St. Mary’s College, Negombo</td>
<td>159</td>
<td>159</td>
</tr>
<tr>
<td>2 15th July 2011</td>
<td>St. Nicola College, Negombo</td>
<td>34</td>
<td>67</td>
</tr>
<tr>
<td>3 03rd Aug. 2011</td>
<td>Thalahena Maha Vidyalaya, Negombo</td>
<td>26</td>
<td>41</td>
</tr>
<tr>
<td>4 16th Sept. 2011</td>
<td>Dungalpitiya Junior School, Negombo</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>5 12th Oct. 2011</td>
<td>Basiyawatte Vidyalaya, Negombo</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>6 12th Oct. 2011</td>
<td>Pitipana Maha Vidyalaya, Negombo</td>
<td>32</td>
<td>53</td>
</tr>
<tr>
<td>7 28th Oct. 2011</td>
<td>Asirimath Deva Matha Vidyalaya , Negombo</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>8 28th Oct. 2011</td>
<td>Duwa Maha Vidyalaya, Negombo</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>374</td>
<td>281</td>
</tr>
</tbody>
</table>
The NC prepared the proposal and budget for this activity, obtained necessary approvals from education authorities, selected resource people and interacted closely with counterpart fisheries officials of the district fisheries office in Negombo, conducting seminars.

6.3 Street drama to promote awareness on resource management and environmental conservation

In Sri Lanka, street dramas have been successfully used as a means of educating the masses on many social issues and problems (e.g. dangers of HIV infection, drug abuse, etc.). The proposal to stage a street drama in villages surrounding Negombo lagoon to promote sustainable fisheries management and environmental conservation came from the President of one of the Fisheries Committees, with a wealth of hands-on experience in many cultural activities including street dramas.

The script consisted of three parts or acts. The issues and problems facing the fishing community were described in folk songs, using native language easily understood by the community. Part one put emphasis on the RFLP message of the need for changes in attitudes, practices and outlook of the fisher community and the need to work together to solve their problems. Part two of the act analysed how the problems such as decreasing catches and income, environment degradation have increased in complexity over the years and why efforts to address these issues had failed. Agencies involved in natural resources management and environment conservation were depicted as Gods that passed the ball around but did not heed the cry of the worshipping masses. Part three focused on the need for collaboration to address fisheries and environmental issues and the need for a unifying force to rally all agencies.

The street drama took place 60 times (two per village) during a period of six months (July – December 2012). It was staged mainly during Saturdays and Sundays at venues attracting large congregations such as church premises (after Sunday mass), major fish landing centres, etc. A total of 34 shows were staged between September 2012 and February 2013 including one show staged in Colombo at the United Nations premises on 16th October to commemorate the World Food Day.

The cast consisted mainly of young school children. Due Government Public School examinations falling in December most of the students were unavailable during the November – December period and a new set of actors had to be selected and trained.

7. Promotion of eco-system based co-management at RFLP pilot sites

Three lagoons and one coastal site were selected by RFLP for the promotion of fisheries co-management. These included:

- Negombo lagoon;
- Chilaw lagoon;
- Puttalam lagoon; and,
Sea cucumber and chank fisheries in the Northwest Coast Fishery Management Area.

7.1 Pre-RFLP situation

Negombo lagoon – Sri Lanka has a fairly long history of traditional community based fisheries management. The stake net fishery in Negombo and Chilaw lagoons are examples of fisheries where territorial user rights in fisheries (TURFs) are still in force. These fisheries are comparatively well managed with a system of limited entry, which is based on criteria such as area of residence, inheritance, etc. The kattu del (stake net) fishery in Negombo lagoon dates back to 1721. Fishing is conducted from 18.00 hours to 06.00 hours the following day, throughout the year in specific areas in the lagoon.

The first attempt to promote fisheries co-management under the provisions of the Fisheries and Aquatic Resources Act No. 2 of 1996 was through a FAO/UNDP project, the “Marine Fisheries Management Project” implemented by DFAR during 1994-1996 in Negombo lagoon. Negombo lagoon, in 1998, was the first to be declared as a Fishery Management Area. A total of 10 Fisheries Committees (FCs) were established to cater to over 3,500 fishers scattered over 26 villages around the estuary. A set of management regulations prohibiting the use of some harmful fishing gear and methods, fixing fishing times, areas and quantities to be used for specific gear types were published in the Government Gazette in July 1998. The Fisheries Management Authority (FMA), composed of representatives from the 10 Fisheries Committees was established under a Government Gazette notification in November 1999. Although the experiences in co-management from Negombo estuary have not been well documented, it was reported that many issues hampered the implementation of the management regulations. Conflicts had arisen between FCs and the FMA. Many FCs were reluctant to enforce management regulations for fear of antagonizing the fishers. Fisheries committees and the management authority were considered weak with no power to enforce compliance with the regulations applicable to the management area.

These FCs and the FMA also had to contend with other bigger issues in the estuary such as pollution from industrial effluents, sewage and solid waste disposal, illegal land reclamation, destruction of mangroves, etc. and were frustrated by their inability to address such issues. In addition, the FMA has been in constant conflict with DFAR, seeking more powers for the FMA to deal with a host of non-fishery issues (disposal of sewage, industrial effluents and domestic solid waste, illegal land filling, etc.) coming under the mandate of other ministries, departments and agencies.

The situation in Negombo lagoon seems to have worsened over the years. The increased intensity and diversity of environmentally harmful activities taking place in and around the Negombo estuary have affected the lagoon water quality. There have been cases where fish tasting of kerosene could not be marketed, adversely impacting on the livelihoods of communities.

Chilaw lagoon – There was no history of fisheries management in Chilaw estuary, except for the community-based management of the traditional stake net (kattudel) fishery.
The stake net (kattudel) fishery in Chilaw lagoon dates back to 1816 and three families or clans have joined hands in managing this fishery in Chilaw lagoon. Specific fishing days have been allocated to each clan. Fishing rights pass down only to the male descendants of the clans between the ages 18-50. The stake nets have to be made according to accepted standards/specifications, with the mesh size of net not less than 38 mm. The Chilaw Lagoon Fisheries Regulations, 1993 was promulgated to settle conflicts between the stake net and cast net fishers in Chilaw lagoon. Five areas in the lagoon have been officially reserved for stake net fishing which has to be conducted between 18.00 hours and 06.00 hours the following day.

Puttalam lagoon – During 2007-2010, IUCN implemented a BMZ/Germany funded project “Ecosystem Rehabilitation and Bio-diversity Conservation of Puttalam Lagoon” with interventions focusing on sustainable fisheries management, livelihood development, ecosystem rehabilitation and bio-diversity conservation, education and awareness creation, governance and institutional strengthening. The project facilitated studies on ecological assessment of the Puttalam lagoon, fisheries profile and socio-economic condition of communities associated with the lagoon.

Puttalam lagoon was declared a FMA in August 2010, but no further progress was made in the co-management process after the project ended.

Co-management of sea cucumber and chank fisheries in Northwest Coast Fishery Management Area - This activity was intended to consolidate and carry forward a co-management initiative of a previous project executed by FAO. The project “Capacity Enhancement of the National Aquatic Resources Research and Development Agency (NARA) for marine resources surveys and stock assessment in selected fisheries/resources in the coastal waters of Sri Lanka”, abbreviated as CENARA, was implemented by NARA during 2008-2010, funded by the Canadian International Development Agency (CIDA) and executed by FAO. The CENARA project dovetailed with a sub-component “Resource assessment and community based fisheries management” of the project “Post Tsunami Coastal Rehabilitation and Resource Management Programme” funded by the International Fund for Agricultural Development (IFAD) and implemented by the Ministry of Fisheries and Aquatic Resources Development (MFARD). The overall objective was to implement a programme to enhance the capacity of NARA to undertake resource assessment surveys and studies, and to assist the Department of Fisheries and Aquatic Resources (DFAR) and MFAR in developing and implementing participatory fishery management plans, mobilizing fishers and other stakeholders and thereby to contribute to sustainable fisheries management in the country. The fisheries/resources selected for surveys and follow-up management initiatives included sea cucumber, chank (Turbinella pyrum), lobster, shrimp and marine aquarium fish in the northwest, south and east coast of Sri Lanka.

By the time the FAO/CIDA component of the project concluded in February 2010, the Northwest Coast Fishery Management Area had been officially declared, but the Fisheries Committees were not formally established. Draft management plans for chank and sea cucumber fisheries were also available, developed through stakeholder participation. There was no immediate follow-up as the Government was dissolved in December 2009, Parliamentary elections were held in April 2010 and a new Minister of Fisheries and Aquatic Resources
Development assumed office in May 2010.

In order to consolidate and carry forward the initiatives already taken under the CENARA project, promotion of co-management of chank and sea cucumber fisheries in the Northwest Coast Fishery Management Area was included as an activity in the 2011 work plan of RFLP-SRL, since part of the management area was within the Puttalam district and the divers involved in these fisheries were a target group of the “Safety at sea” component of the RFLP.

7.2 Establishing and formalizing institutional arrangements for co-management

7.2.1 Establishment of Fisheries Committees

The Department of Fisheries and Aquatic Resources received technical and financial support from RFLP in December 2010 for the establishment of 12 (twelve) Fisheries Committees in Puttalam lagoon and 12 (twelve) Fisheries Committees in Chilaw lagoon for the purpose of promoting fisheries co-management in the aforesaid lagoons, under the provisions of the Fisheries and Aquatic Resources Act, No. 2 of 1996 and the Fisheries Committee Regulations, 1998 and the provision of two reports on the establishment of fisheries committees in Chilaw and Puttalam lagoons, including the process and the methodology adopted.

In particular, the district offices in Chilaw and Puttalam were required to:

i. Have the Chilaw lagoon declared as a Fishery Management Area (in accordance with Section 31 of the Fisheries and Aquatic Resources Act No.2 of 1996).

ii. Conduct awareness creation programs targeting fishers in Puttalam and Chilaw lagoons for the establishment of Fisheries Committees.

iii. Formally establish Fisheries Committees at Special General Meetings where the constitution is adopted and an Executive Board appointed (in accordance with the Fisheries Committee Regulations, 1997).

iv. Assist all Fisheries Committees to develop a constitution and prepare a Register of Fishers (in accordance with the Fisheries (Register) Regulations, 1997.

vi. Assist all Fisheries Committees to seek registration from the Director General, Department of Fisheries and Aquatic Resources (in accordance with the Fisheries Committee Regulations, 1997.

A total of 21 awareness creation meetings were held for Chilaw lagoon between April to October 2011, attended by 902 fishers, including 38 women. The 12 meetings establishing Fisheries Committees were held during May to November 2011, and were attended by 594 fishers, including 26 women. Chilaw lagoon was declared a fishery management area and published in
the Gazette Extraordinary, No. 1744/4 of the Democratic Socialist Republic of Sri Lanka dated 08th February 2012.

In Puttalam lagoon, 22 awareness creation meetings were held between May and October 2011 and were attended by 923 fishers, including 59 women. The 12 meetings to establish Fisheries Committees were held during October and November 2011, and were attended by a total of 1,594 fishers, including 40 women.

The Fisheries Committees established for Chilaw and Puttalam lagoons were officially registered with DFAR and published in the Government Gazette Extraordinary No. 1772/29 dated 22nd August 2012.

**7.2.2 Fisheries Management Coordinating Committees**

The RFLP national consultant for co-management worked to assist the establishment of and to formalize institutional arrangements for co-management under revised legal provisions through stakeholder participation.

Following the awareness creation programmes conducted for fishers and all other stakeholder representatives, an Interim Fisheries Management Coordinating Committee was appointed for each of the three lagoons, at meetings attended by all stakeholders. The Committee for Negombo lagoon was established in June 2011 while the Committees for the other two lagoons were established about a year later in July 2012.

For each lagoon, the Interim Fisheries Management Coordinating Committee consisted of local administrative officers (District Secretary and the Divisional Secretaries), local political authority (Chair-person of local bodies, Mayors of Municipal Councils), fisher representatives, representatives from fisheries agencies (district fisheries office, National Aquatic Resources Research and Development Agency, National Aquaculture Development Authority), other technical agencies mandated with natural resources management and environment conservation (Coast Conservation and Coastal Resources Management Department, Forest Department, Department of Wildlife Conservation, Central Environment Authority, Marine Environment Protection Authority, Land Ministry, Tourism development Authority, etc.) and enforcement agencies (Sri Lanka Police and Sri Lanka Navy).

**8. Development of fisheries management plans for the co-management sites**

The task of preparing fishery development and management plans for the three lagoons was a key activity that extended from 2011 to 2013.

The plans were developed using a template promoted by FAO for participatory fisheries resources management, adapted to suit local conditions. It required inputs on the fishery management area, status of the fishery and resources, socio-economic status of fishery participants, environment issues, jurisdiction, objectives of management and performance indicators, control mechanisms (management measures), compliance (surveillance and
enforcement, research and investigations, consultation and extension and plan monitoring and review.

RFLP facilitated negotiations among stakeholders for the development of fisheries management plans at the three sites in a transparent manner. These negotiations were facilitated at three different levels.

- **Analysis of fisheries issues with fishers and officials** – As mentioned under the section “Training and awareness creation”, the problem tree analysis of fisheries and environmental issues at each site with fishers and fisheries officials provided the basic information and guidance for the development of the fisheries management plans. Based on the findings from the literature review of the fisheries and environmental profiles of the three lagoons and the results of the rapid fisheries frame survey conducted by the district fisheries offices as well as information from “Problem tree” analysis, the NC prepared the first draft of the fishery management plans for the three lagoons. The first drafts provided basic information available on the fishery management area, status of the fishery and resources, socio-economic status of fishery participants, environment issues, jurisdiction, and some guidelines on objectives of management and performance indicators. Further elaboration on the above and inputs related to control mechanisms (management measures), compliance (surveillance and enforcement), research and investigations, consultation and extension and plan monitoring and review were left to be negotiated by the stakeholders.

- **Sub-committee meetings (DFAR/NARA/Fisheries Committees)** – The NC facilitated sub-committee meetings in the three lagoons between fisher representatives, fisheries officials and NARA for detailed discussions on control mechanisms (management measures), compliance (surveillance and enforcement), research and investigations as the other non-fishery stakeholders were not very familiar with these aspects. Two meetings each of the Sub-Committee were held in Negombo, Chilaw and Puttalam. Some issues in Negombo on the use of fishing gear where consensus could not be reached were forwarded to DFAR head office and NARA for final determination. In Puttalam, issues related to a proposed banning of certain fishing gear were investigated by a fishing gear specialist before final decisions were made. The Sub-Committees provided a forum for fishers to actively participate in the process of preparing a fishery management plan and to make contributions in areas close to their own interests and requirements based on their own experience and knowledge.

**Task Force meetings** – In each lagoon, a Task Force was established from among the members of the Interim Fisheries Management Coordinating Committee for the purpose of preparing a fishery development and management plan for each lagoon. The Task Force was headed by the District Secretary and consisted of representatives of all technical agencies in the Interim Fisheries Management Coordinating Committee (NARA, CC and CRMD, NAQDA, CEA, FD, and DWLF), fisheries agencies and fisher representatives. The first draft of the plan prepared by the NC for each lagoon was presented and discussed at the first Task Force meeting. Based on comments/feedback
from the Task Force meeting as well as inputs from the Sub-committee meeting, the plan was revised and updated by the NC and presented at the next Task Force meeting.

The Negombo lagoon fishery development and management plan was finalized after two Sub-Committee and three Task Force meetings. It was then presented and approved by the Interim Fisheries Management Coordinating Committee in July 2012. Draft copies in English and Sinhala were submitted to Director General/DFAR in April 2013.

Up to the end of 2012, two Sub-Committee meetings and two Task Force meetings had been held to prepare the fishery management plan for Puttalam lagoon. Further progress in plan preparation was delayed pending the results of an investigation into the use of fishing gears which were believed to be harmful to the aquatic resources and/or the environment and which some fishers want banned from the lagoon. RFLP facilitated this study by an experienced fishing gear consultant and the results of this study were discussed during the Fisheries Management Coordinating Committee meeting held on 20th May 2013. The draft Puttalam lagoon fisheries development and management plan was finalized with the stakeholders agreeing to include some of the recommendations from this gear study.

In the case of Chilaw lagoon, two Sub-Committee meetings and one Task Force meeting were held during 2012 to prepare a first draft of the fisheries development and management plan for Chilaw lagoon. However, there was no further progress as no Task Force or the Chilaw lagoon Fisheries Management Coordinating Committee meetings were conducted from January to the end of May 2013.

In 2011 and 2012, the Assistant Directors of Negombo, Chilaw and Puttalam district offices were responsible for scheduling all stakeholder meetings in consultation with the relevant District Secretary. In 2013, in spite repeated RFLP requests, the Assistant Director /Chilaw failed to consult the District Secretary/Puttalam and schedule the necessary meetings, claiming that staff were too busy with other official work, in particular administrative work related to fuel subsidy distribution.

9. Support for implementation of co-management plans

In order to harness and sustain fisher and other stakeholder interest and commitment in the co-management process RFLP implemented certain activities that provided immediate tangible benefits to the fishers and stakeholders. These were implemented in response to stakeholder requests and many were activities identified in the fishery development and management plans of the three lagoons.

9.1 Multi-functional boat for Negombo lagoon

The RFLP Sri Lanka office provided a multi-functional small FRP boat, under the request of the Assistant Director/District Fisheries Office in Negombo. In response, a 18 foot FRP boat powered by a 40 horse power (hp) OBM engine was provided with remote steering facility in the front, removable canopy and seating for 6 people and appropriate safety equipment, such as life buoy and life jackets.
Negombo lagoon is one of the co-management sites of RFLP-SRL. This boat was provided to strengthen the MCS capability of the district fisheries office to enforce fisheries regulations included in the fisheries development and management plan finalized for the lagoon with RFLP assistance. In addition, the boat will be used by the Negombo Lagoon Fisheries Management Authority for promoting co-management initiatives in the lagoon - coordination between the 10 Fisheries Committees, enforcement of fisheries regulations jointly by the fishing community and fisheries officials, etc. In addition the boat will also be available for the District Fisheries Office, Negombo for emergency use /response to natural disasters (e.g. floods) and for other stakeholder agencies involved in fisheries management and environment conservation in the lagoon.

While the boat, engine and all accessories belong to the DFAR/District Fisheries Office, Negombo, the Negombo Lagoon Fisheries Management Authority will use/operate the boat under an MOU with DFAR. The Assistant Director/District Fisheries Office, Negombo will monitor the use of the boat, while the Negombo Lagoon Fisheries Management Authority is responsible for management and maintenance of the boat.

**9.2 Fish catch monitoring in lagoons**

During the preliminary activities implemented to promote co-management in the three lagoons (preparation of fisheries and environment profiles, problem tree analysis, etc.) it became clear that there was no mechanism in place to collect regular fish catch data from the lagoons and other brackish water bodies in Sri Lanka. Fish catch data from lagoons and estuaries are usually integrated with those of coastal fisheries. As the fishing gears and aquatic species taken from lagoons and estuaries are quite different and diverse from those in coastal fisheries, there was a need for a comprehensive data collection system exclusively for lagoons and estuaries. The need to introduce a fish catch monitoring programme was also recognized in the draft fishery management plans prepared for the three lagoons.

The NC was involved in having preliminary discussions with DFAR district fisheries officials, researchers from NARA and fisher representatives of the three lagoons on sampling strategies, species and fishing gear, data collection forms, etc. Fishery data collection is one of the many functions of Fisheries Inspectors of DFAR. However, their knowledge on systematic sampling of lagoon fisheries was limited. They need greater knowledge on taxonomy and species identification, sampling methodologies and data collection. Therefore, introducing a fish catch monitoring system for lagoons needs to start with building the capacity of the human resources involved in data collection; i.e. the Fisheries Inspectors.

NARA supported this process by establishing and running a pilot fish catch monitoring programme for Negombo lagoon. Due to the delays in implementing co-management activities in Chilaw and Puttalam lagoons and the financial constraints faced by RFLP, this activity was limited to Negombo lagoon. NARA also planned to develop and field test fish catch data collection forms, develop a sampling strategy, develop a database for storing and analysis, prepare a fish identification field guide, train Fisheries Inspectors and facilitate and monitor field
data collection for 2-3 months. However, there were some unforeseen delays carrying out the work.

9.3 Habitat conservation at co-management sites

RFLP in Sri Lanka also focused in promoting an ecosystem based fisheries co-management approach at the three pilot sites. The following were the key habitat conservation activities undertaken by RFLP Sri Lanka:

- Establishment of lagoon boundaries and reservations
- Mangrove management plans for Chilaw, Puttalam and Negombo lagoons, and,
- Assist to clear Negombo lagoon waterways impeding movement of fishing boats.

9.3.1 Establishment of lagoon boundaries

During meetings held with district administrative officials and fishing communities of the three lagoons, illegal encroachment and destruction of mangrove habitats were identified as the biggest threats to the lagoons and their bio-diversity and RFLP was requested to assist in establishing boundaries of the three lagoons.

This activity has been carried forward from 2011 onwards. However, there have been changes in its scope and RFLP commitment in subsequent years, based on the progress made and funds available.

An unsuccessful and incomplete attempt to establish boundaries around Negombo lagoon was first made under the ADB financed Coastal Resources Management Project (CRMP) implemented by the Ministry of Fisheries and Aquatic Resources Development during 2002-2004. Under this project, a 10 m reservation area was marked from the high water mark and a total of 2,400 boundary posts were fixed every 10 m apart along the perimeter of the lagoon. A total of 24 schedules (tracings) showing land and property ownership within the area were gazetted in 2005. However, this reservation area was not acquired by the state and still belongs to the individual owners. Over time, there was encroachment into the reservation in many places, particularly in areas of high population density. In addition a total of 686 boundary posts were reported missing.

RFLP was first requested to replace these missing boundary poles. Under the RFLP 2011 workplan, a sum of LKR 500,000 was allocated to replace about 686 missing boundary poles in Negombo lagoon and to initiate and support boundary demarcation of Puttalam and Chilaw lagoons. However, the officials of Survey Department then informed RFLP that replacing the missing boundary poles alone was inadequate and that the lagoon need to be surveyed and a Preliminary Plan prepared.

RFLP in Sri Lanka facilitated two meetings of all stakeholders (District Secretary, Divisional Secretaries, representatives of the Land Ministry, Survey Department, Forest Department, Department of Wildlife, Coast Conservation and Coastal Resources Management Department and fisher representatives) in August (for Chilaw and Puttalam lagoons ) and in October (for Negombo lagoon) 2011. At both meetings there was concern that fixing lagoon boundaries at the...
current water edge would legalize all illegal encroachments that had already taken place, but as it was too complicated and difficult to determine and move back the lagoon boundaries to where they were 10-20 years ago, it was thought to be more prudent to introduce measures to prevent any further illegal encroachment.

For Chilaw and Puttalam lagoons, the strategy for determining the boundary of the water area was to be decided subject to results from trial fixing of some zero contour points at strategic locations. An estimate of LKR 332,640 to establish zero contour lines at 09 locations in Chilaw and Puttalam lagoons was provided by the District Survey Office, Puttalam in September 2011, but there were delays that limited the completion of this activity.

This activity and the budgetary allocation were tried again during 2012, in the hope that proposals prepared for establishing lagoon boundaries in the three lagoons could be marketed to generate funds for conducting surveys and other follow-up activities. For Negombo lagoon, it was recommended that in addition to replacing the missing boundary poles, a Preliminary Plan (PP) should be prepared using the water edge as the lagoon boundary. A proposal and a budget including fees for the Survey Department to conduct GPS surveys (including establishment of 18 GPS control points at six sites) and a Preliminary Plan for Negombo lagoon, provision of pre-cast concrete boundary poles, installation, etc. was presented by the district fisheries office in November 2011. The total estimated cost of nearly LKR. 4.0 million far exceeded the RFLP allocation of LKR 500,000 for this activity in all three lagoons.

Considering the importance of securing legalized lagoon boundaries in Negombo lagoon and as a pioneering activity, RFLP provided LKR. 3.6 million under its 2013 work plan to the District Secretary, Gampaha for a comprehensive survey and establishment of the boundary around Negombo lagoon. A Committee comprising of the Divisional Secretary, Negombo and representatives of the district fisheries office, Negombo, fisher representatives of Negombo lagoon and RFLP, coordinated the activities related to survey and demarcation of the Negombo lagoon boundary, with technical support provided by the Survey Department.

9.3.2 Formulation of mangrove management plans
Mangrove constitutes a highly productive ecosystem associated and they were therefore considered by RFLP in the project sites. With the support and supervision of the NC, RFLP Sri Lanka engaged EML Consultants to prepare mangrove management plans for mangrove areas associated with Negombo, Chilaw and Puttalam lagoons.

A workshop was held in Colombo to seek major stakeholder consensus for the plans. Based on feedback from the stakeholders the mangrove management plans were finalized and translated into local languages. The plans (in Sinhala) for Negombo and Puttalam lagoons were presented at the Fisheries Management Coordinating Committee meetings held in Negombo and Puttalam. The implementation of the Negombo and Puttalam mangrove management plans will be done through village-level Cluster Management Committees and a Mangrove Management Task Force under the Fisheries Management Coordinating Committees of the two lagoons. If the Chilaw plan is later approved, it will be implemented following the same mechanism.
9.3.3 Retrieval of sunken fishing boats from Negombo lagoon

The RFLP also assisted the clearance of Negombo lagoon waterways to improve the movement of fishing boats.

Negombo lagoon, a shallow basin estuary is one of the co-management sites supported by the RFLP Sri Lanka. There were 8 waterways that helped maintain water circulation in the lagoon. Some of the waterways had been blocked for some time, due to sedimentation and sunken boats, impeding water circulation and hampering movement of fishing boats. A total of 22 such sunken boats were located in the lagoon, some submerged on the bottom. These included old and un-serviceable boats that had been abandoned by their owners and boats confiscated by the Courts and were lying unattended in the lagoon for a long time, and had eventually found their way to the lagoon bottom. In addition, some boats were damaged and sunk during the December 2004 Tsunami, while a few offshore boats that were anchored in the lagoon were burnt and sank during a fire in late 2005.

The removal of the sunken fishing boats was one of the major requests of the Negombo lagoon fishers for a long time – articulated at meetings with officials of the Ministry of Fisheries and Aquatic Resources Development (MFARD) and also at monthly progress review meetings of the Gampaha District Development Council, chaired by the District Secretary, the chief administrative office of the district. The Negombo Lagoon Fisheries Management Authority (NLFMA), established in 1998 under the Fisheries and Aquatic Resources Act, No. 2 of 1996 to manage fisheries in the lagoon, has been in the forefront of these agitations and forwarded a proposal with a budget of LKR 5,000,000 to MFARD and the District Secretary for the retrieval of the sunken boats.

In late 2010, MFARD released 50% of the required budget to the District Secretary, Gampaha under whose supervision the project was to be implemented by the NLFMA. The RFLP office in Sri Lanka agreed to provide the balance of LKR 2,500,000 to the District Secretary, Gampaha, under a Letter of Agreement (LOA).

Retrieval and disposal of sunken boats was undertaken by the NLFMA under the supervision of the Divisional Secretary, Negombo and the Assistant Director, Fisheries of the Negombo District Fisheries Office. The boats were hauled off the lagoon bottom in a traditional way, without resorting to the use of modern heavy machinery. Retrieval operations began in early January and were concluded in August 2011. The cannibalized boat parts were removed to a Negombo Municipality disposal site about 6 km away from the lagoon.

The NC coordinated and assisted in conducting the GPS survey of the Negombo Lagoon to locate and fix the position of the 22 sunken fishing boats; monitored the retrieval operation through field visits and provided technical assistance to the District Secretary, Gampaha in the preparation of progress reports and the final report as required under the LoA.
10. Major difficulties faced during implementation

Setting up co-management systems in lagoons with an element of environment conservation proved to be very complex and demanding, needing mobilization of wider stakeholder participation.

10.1 Inadequate counterpart support

The legal mandate for fisheries management lies with DFAR, which was the leading counterpart for RFLP co-management initiatives. It was necessary to work very closely with DFAR and the district fisheries offices of Negombo, Chilaw and Puttalam to promote co-management at the three pilot sites. Mobilizing other stakeholder agencies in the absence of an enabling legal framework and institutional mechanisms (proposed amendments to the Fisheries and Aquatic Resources Act No. 2 of 1996 were still in the pipeline) proved a challenge. Although the District Secretaries of Gampaha (for Negombo lagoon) and Puttalam (for Chilaw and Puttalam lagoons) were very cooperative and were instrumental in mobilizing all other stakeholder agencies to join the co-management initiatives, the absence of a formal arrangement between DFAR and the District Secretaries negatively affected the work plan and schedule.

One major problem encountered was caused by delays in the counterpart (DFAR) meeting its obligations.

- **Delays in completing activities under the LOA** – The LOA with DFAR required DFAR to conduct a rapid fisheries frame survey in the three fisheries districts and also to establish institutional arrangements for co-management in Chilaw and Puttalam lagoons. The LOA signed in late December 2010 required DFAR to complete these activities within seven months. However, in spite of a further extension of three months, the frame survey was completed and reports were only made available in April 2012.

Although the LOA was signed in December 2010, the retirement of the Director General of DFAR in early January delayed the commencement of activities related to the LOA until April 2011. Provincial elections held during mid-2011 also caused additional delays as all government staff in the area were called up for election duty and fisheries officials were also reluctant to have meetings with fishing communities during the period that coincided with the election campaign.

The Interim Fisheries Management Coordinating Committees for the two lagoons could not be established without having duly elected representatives from fishing communities. The delay in establishing Fisheries Committees in Chilaw and Puttalam lagoons until November 2011 and the subsequent delay due to fisher unrest in the area following the fuel price hike in February 2012, meant that the Interim Fishery Management Coordinating Committees were established only in July 2012. This delay in establishing the Fisheries Committees and Interim Fisheries Management Coordinating Committees was a serious setback to meeting the implementation schedule for planned co-management activities at these two sites.
• **Delays in scheduling meetings** – The district officials were expected to schedule all meetings related to implementation of co-management activities – Fisheries Committee meetings, Task Force meetings and Fisheries Management Coordinating Committee meetings.

Activities of the work plan required the NC to “Mobilize all stakeholders (agencies/institutions) associated with the lagoon and to provide awareness creation on co-management (regular meetings/consultations)” in the three lagoons. Although a total of four meetings/trainings were scheduled for each lagoon during the year, only one meeting was held mobilizing all stakeholders in each lagoon.

The explanation provided by district fisheries officials was that they were busy with other official work. In the absence of a regular and functional monitoring mechanism between RFLP and DFAR, the district officers of DFAR were not accountable either to their superiors in DFAR head office or to RFLP.

• Inadequate technical capacity of the counterpart officers to promote co-management was another major problem encountered in the field. The majority of the field staff in all districts had no previous co-management experience. In addition, during the rapid fisheries assessment survey there were clear indications that the technical knowledge of many field staff about fishing gears, boats, catches, etc., was far from satisfactory.

10.2 **Inadequate interaction between partners**

This was the major reason for the lack of commitment by fisheries field officers towards RFLP activities, in particular those related to co-management. While the six-monthly NCC meeting was not a forum to discuss field level implementation issues, there were no regular meetings between the main implementing partners where field level implementation issues could be discussed and resolved. Only two National Steering Committee (NSC) meetings were held involving RFLP, MFARD and DFAR staff towards the tail end of 2012, chaired by the Secretary for fisheries. The lack of a platform for regular interaction between the project, and its partners (MFARD and DFAR) severely restricted the progress of co-management activities as the DFAR field staff was under no compulsion to comply with RFLP implementation schedules. They were not answerable or held responsible for RFLP activities.

During the period RFLP was active in Sri Lanka, DFAR was also involved in promoting fisheries co-management under a project funded by IFAD. In late 2012, a British funded INGO (Practical Action) also entered into a MOU with DFAR to promote co-management at several lagoon sites. It is unfortunate that there was no interaction between these agencies to share experiences in planning and implementation of co-management activities, which would have been invaluable for all parties concerned.

10.3 **Lack of awareness among fishers**

Fishers and their associations tended to downplay issues related to fishing – what they themselves were doing in terms of use of illegal and harmful gear and methods, high fishing
intensity, declining catches and income, etc., but were more concerned with addressing issues related to pollution of the lagoon ecosystems due to industrial effluents, waste and sewage disposal, illegal encroachment, destruction of associated mangrove and sea grass, etc.

Although this could be construed as lack of understanding / awareness on the part of Chilaw and Puttalam lagoon fishers, who have not been exposed to any fisheries management previously, it cannot be so for Negombo lagoon fishers, as management initiatives have been introduced there since 1998. In a situation where fishers were keener on punishing other wrong doers and turning a blind eye to their own faults, mobilizing them to actively participate in the evolution of management controls for their own activities during the development of fishery management plans, needed both time and tact.

10.4 Inadequate pre-planning in activity identification

Some important activities were included in the work plans with insufficient background data and information in terms of the complexity, scope and funds required for implementation. These required of mid-stream changes to downsize the activity, and the added challenge of seeking additional funds, etc. For example, funds required for establishing lagoon boundaries and preparation of mangrove management plans far exceeded the initial budgetary allocations.

10.5 High stakeholder expectations

RFLP in Sri Lanka attempted to promote fisheries co-management integrated with environment conservation and this led to high expectations among fishers and other stakeholders that the solutions to all their problems/issues could be addressed through the Project. In addition, as RFLP worked in three fisheries districts, there were strong requests from stakeholders that all activities were replicated in all three districts. These included activities requiring substantial funds such as dredging (including provision of a dredger), lagoon boundary demarcation, provision of boats, development of mangrove management plans, etc. It is unlikely that RFLP or any other project would have the capacity to deal with all the complex demands of the stakeholders at all co-management sites. Refusing some requests which stakeholders perceived important made maintaining stakeholder interest and commitment to advance the co-management process a greater challenge.

11. Follow-up actions

The follow-up actions identified below refer in general to the need for DFAR to strengthen its capacity and commitment for fisheries co-management per se and in particular for the sustainability of RFLP co-management initiatives in Negombo, Chilaw and Puttalam lagoons.

- **Mainstreaming co-management** - Although the government policy articulated in Mahinda Chinthanaya calls for “Exploiting the country’s aquatic resources in a sustainable manner, while conserving the coastal environment”, this policy needs to be translated into the work plan of DFAR and district fisheries offices. At present, only project supported initiatives are in place (IFAD and RFLP). Even the sustainability of
these initiatives beyond the project life is doubtful, unless these activities are incorporated into the annual work plans of respective fisheries districts and necessary budgets and dedicated staff is allocated.

- **Institutional strengthening** – A Co-management Unit was set up within the management division of DFAR when the FAO/CIDA funded CINARA project was implemented during 2008-2009 period. This unit needs to be institutionalized and strengthened, with adequate trained staff and facilities and similar sub-units to be established in district offices.

- “**Ownership**” is the major issue that needs to be addressed. Currently, co-management initiatives are very much project driven. For sustainability, DFAR needs to take ownership and make the district offices responsible and accountable. This can only happen if “Ownership” is taken at head office level.

The following is a summary of recommended follow-up actions:

<table>
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<tr>
<th>Key activity</th>
<th>Follow-up actions to be taken by DFAR</th>
</tr>
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</table>
| 1. Amendments to Fisheries Act                    | • Effective enforcement of new provisions to strengthen co-management.  
  • RFLP co-management initiatives, including implementation of fishery management plans in Negombo, Chilaw and Puttalam lagoons to be continued, without waiting until the Fisheries Act is amended.  
  • Awareness creation among all stakeholders. |
| 2. Mainstreaming co-management within DFAR       | **Strengthening Co-management unit in DFAR**  
  • The Co-management unit within DFAR should be institutionalized with dedicated staff, facilities and funds.  
  • A suitable mechanism to be set up to harness support of outside agencies (e.g. NARA, NAQDA, CCD) to work with the Co-management Unit to promote ecosystem based approach to fisheries management.  
  • Include co-management in Negombo, Chilaw and Puttalam lagoons as specific activities within the annual DFAR work plan and of respective district office work plans with necessary budgetary and staff allocations. |
| 3. Strengthening Co-mgt: capacity in District Offices | • Co-management sub-units with dedicated staff to be established in district offices.  
  • One officer to be deployed full-time to coordinate all co- |
<table>
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<tr>
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<th>Follow-up actions to be taken by DFAR</th>
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</table>
| 4. Implementing Fisheries development and management plan in Negombo lagoon  | • DFAR to get the plan approved and gazetted by the Hon. Minister as per the revised Fisheries Act.  
  • Negombo district fisheries office to take over implementation of the Fisheries development and management plan.  
  • Introduce and implement a fish catch monitoring system in the lagoon from 2013 onwards. |
| 5. Introduce fisheries co-management in Chilaw lagoon                        | • Complete formulation of the plan and get the plan approved and gazetted by the Hon. Minister as per the revised Fisheries Act.  
  • Chilaw district fisheries office to take over implementation of the Fisheries development and management plan.  
  • Make linkages/arrangements with Practical Action (British funded INGO) to carry forward the co-management initiative.  
  • Introduce and implement a fish catch monitoring system in the lagoon from 2014 onwards. |
| 6. Introduce Fisheries Co-management in Puttalam lagoon                      | • Complete formulation of the plan and get the plan approved and gazetted by the Hon. Minister as per the revised Fisheries Act.  
  • Puttalam district fisheries office to take over implementation of the Fisheries development and management plan.  
  • Introduce and implement a fish catch monitoring system in the lagoon from 2014 onwards. |
| 7. Demarcation of lagoon boundaries                                          | • District Fisheries office, Negombo to coordinate all activities with the District Secretary, Divisional Secretaries and the Survey Department to complete demarcation of Negombo lagoon boundary as soon as possible.  
  • District offices of Chilaw and Puttalam to coordinate activities through the respective Fisheries Management Coordinating Committees to prepare proposals for establishing boundaries in Chilaw and Puttalam lagoons. |
<p>| 8. Implementation of                                                          | • Facilitate with other stakeholders in the Coordinating |</p>
<table>
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<tr>
<td>Mangrove management plans for Negombo, Chilaw and Puttalam lagoons</td>
<td>Committees of Negombo, Chilaw and Puttalam lagoons to finalize and integrate the mangrove management plans into the fishery management plans of the respective lagoons and assist in implementation of the plans.</td>
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<td>• Seek funds for implementation from private sector (under CSR - Corporate Social Responsibility) and donors.</td>
</tr>
</tbody>
</table>

**12. Recommendations**

- At the outset, project activities agreed on by the donor, recipient / implementing agency and the executing agency need to be included in the recipient / implementing agency’s annual work plans to ensure their full commitment and active participation.

- A high level Committee or a Task Force needs to be set up from the beginning to monitor and support the implementation of project activities through regular meetings. Such a Committee/Task Force should include senior officials of the Project, recipient/implementing agency, executing agency and senior counterparts from the field.

- Some key Government counterpart staff (both at head office and field offices), need to be released and seconded full-time to the project for the entire project duration. They could facilitate interaction between project personnel and the counterparts and play a key role in the implementation of project activities.

- An analysis of the skills/capacity of the counterpart agency and its officers should be conducted at project commencement to ascertain their ability to take part in the project and to identify any skills gaps and training needs. Based on the findings and if necessary, develop and implement a training programme for the counterpart agencies/officers early during the project life.

**List of reports prepared by the Co-management NC and others mentioned in the text**

In addition to the first four reports which the NC was personally responsible, all other reports listed below were also prepared entirely by the NC for co-management.


Other reports developed by the RFLP were:


About RFLP
The Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) sets out to strengthen capacity among participating small-scale fishing communities and their supporting institutions in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam. By doing so the RFLP seeks to improve the livelihoods of fisher folk and their families while fostering more sustainable fisheries resources management practices. The four-year (2009 – 2013) RFLP is funded by the Kingdom of Spain and implemented by the Food and Agriculture Organization of the United Nations (FAO) working in close collaboration with the national authorities responsible for fisheries in participating countries. For more information about the Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) see www.rflp.org or contact the Regional Information Officer Steve.needham@fao.org