

DEMONSTRATION SITE SUMMARY SHEET

1. SITE NAME AND GEOGRAPHIC CO-ORDINATES: Prek Ampil, Kampot

Located at: Latitude 10°27' - 10°36' N and Longitude 103°54' - 104°17' E in the South-eastern Coastal Zone of Cambodia.

2. COUNTRY IN WHICH THE SITE IS LOCATED: The Kingdom of Cambodia

3. STATE OR PROVINCE IN WHICH THE SITE IS LOCATED: Kampot Province

Local government approval [yes or no]: **Yes** date: **11th June 2004**
Local government involvement [yes or no]: **Yes**
Local government co-financing [yes or no]: **Yes** if yes then in-kind or in-cash? **In-kind**

4. LINKAGE TO NATIONAL PRIORITIES, ACTION PLANS AND PROGRAMMES:

The activities at the demonstration site will address specific problems and build on the current programmes (5-year and annual fisheries management plans) of the Department of Fisheries (DoF) and local fisheries and environmental offices that are designated for managing and conserving living aquatic resources and environment. Managing living coastal resources including seagrass resources has historically been under the programmes of the DoF and local fisheries offices since 1979. Then, the government established the Ministry of Environment and Provincial Department of Environment in Kampot to accelerate the programmes for reversing environmental degradation.

Prek Ampil is adjacent, and linked to Bokor National Park, which was designated by Royal Decree of Cambodia to protect terrestrial-mountainous nature, flora and fauna. With the National Park, Prek Ampil is a coastal area, where beaches are considered to be potential destination for eco-tourism. Therefore, the activities of the demonstration site could be linked to the conservation programmes of the National Park.

In addition, the activities of the project will address issues identified in national plans and priorities on marine biological resource management and conservation, outlined in:

- National Action Plan for Seagrass and Coral Reef Management (2nd Draft),
- National Policy for Marine Fisheries Management, Conservation and Development,
- National Biodiversity and Strategic Action Programme (NBSAP) (approved by the government).

Central government involvement [yes or no]: **Yes**
Central government co-financing [yes or no]: **Yes, In-cash and In-kind**

5. DATE OF NTWG MEETING WHICH CONSIDERED THE PROPOSAL: 11th June 2004

6. NATIONAL TECHNICAL FOCAL POINT ENDORSEMENT AND/OR COMMENTS:

Seagrass beds in Kampot province form one of the most extensive meadows found in Cambodia. These seagrass meadows play a very important role as spawning and nursery grounds for marine fauna; particularly as critical habitats for juvenile finfish, molluscs and crustaceans. These seagrass meadows support small and commercial scales of fisheries, which most of local livelihoods are depending on. However, these seagrass beds are threatened by an increasing array of impacts from unsustainable and destructive fishing practices, sedimentation and waste dumping. Central and local governments have great interest in managing seagrass resources, conserving biodiversity, reversing environmental degradation, and improving the livelihoods of local communities. As the site is bordered with Phu Quoc's site of Viet Nam, it has to be jointly managed by the two countries.

Signature:.....
Name and Designation: Mr. Koch Savath
National Technical Focal Point for the SCS Project.

Date:.....

7. SITE DESCRIPTION:

Area:

Prek Ampil site is geographically located in the Southern part of the country between 10°27' - 10°36' N and 103°54' - 104°17' E in Kampot province. It lies in the eastern region of the Gulf of Thailand and the western area of the South China Sea, adjacent to Phu Quoc Island in Viet Nam. The total area is 66,733 ha, with net seagrass coverage of 25,240¹ ha (based on preliminary seagrass survey conducted in 2003 by DoF) (DoF, 2004). The seagrass habitat is divided into 3 main areas. The first extends from Prek Trapeang Ampil to Prek Khdat, covering an area of 1,795 ha; the second extends from Prek Khdat to Koh Touch, with an area of 380 ha; and the third and largest area extends from Koh Touch to Kep Municipality with a total area of 23,065 ha (map of the site as in annex 1).

Environment:

The seagrass meadows are located in parallel to the coastline of Prek Ampil, which extends 150-300m from the shoreline in front of Bokor National Park. The area has a gentle slope with the depth of the site varying from 1-4m, depending on tide level. The substrate consists of a mixture of sand and mud and the climate is tropical monsoon with a clear distinction between wet and dry seasons. The dry season runs from November to May while the wet season is from May to October. Mean annual temperature is around 26 – 27°C. Visibility in the water is dependent on the season, with reduced visibility during the wet season. Much freshwater runoff during heavy rainfall influences salinity which ranges from 25 – 30 ppt. Sea surface temperatures range from 26 - 30°C.

Habitats:

A diversity of habitats can be found in this area including seagrass meadows, coral reefs, mangroves and wetlands. The dominant marine habitat in the Prek Ampil area is the extensive seagrass meadows that cover 25,240 ha. Based on preliminary surveys with limited resources conducted by the DoF in 2003, six species of seagrass have been reported in this area: *Enhalus acoroides*, *Thalassia hemprichii*, *Halophila decipiens*, *Syringodium isoetifolium*, *Cymodocea rotundata*, *Halodule uninervis* (DoF, 2004). *Enhalus acoroides* and *Cymodocea rotundata*, are the dominant species in the area. It is likely that more species of seagrass and fauna will be identified when intensive surveys are carried out.

The seagrass meadows play a significant role not only as spawning and nursery grounds but also an integrated component of the entire coastal ecosystem. A number of other ecosystems are associated with these seagrass meadows. Small patches of coral are mixed with the seagrass beds and other patches of coral reef are located about 800m from the seagrass edge. Corals include massive *Porites* and Faviids, but no survey of coral species has been conducted at the site. On the landward side, mangrove forests and wetlands fringe the shoreline. Bokor National Park, reported to contain elephants and other terrestrial endangered species is located on the mountain beyond the mangroves and wetlands.

The coastal zone of Cambodia is rich in marine biodiversity; Ing (2003) reported 476 species of marine finfish, 20 species of crustaceans, 42 species of gastropods and 24 species of bivalves. Although there has been no scientific study on the taxonomy of species at the site; it is assumed that the area is representative of the rich marine fauna of the country. The area also provides habitat for economically important, migratory and endangered species; particularly sea turtle, dugong, dolphin and seahorse.

Present Use:

There are 31 villages, located in 9 communes in close proximity to the demonstration site and a socio-economic survey (Carl Bro International a/s, 1998) indicated that 42% of local families living in this area are subsistence fishers and are directly dependent on the seagrass habitat along the coastline, for food and revenue. In Kampot province, rastrelliger mackerels are the most important finfish species and fishing vessels are characteristically small, operated close to shore, and return to port on a daily basis. The Department of Fisheries reported 549 fishing vessels operating in Kampot Province in 2001 and the figure increased to 633 in 2004 (DoF, 2005). The number of fishing vessels in each size class is shown in Table 1.

¹ This seagrass area is considered a maximum since the initial survey was conducted on assumption that the seagrass distribution was uniform. It is naturally patchy distribution; and to verify the actual area further surveys will be undertaken.

Table 1 Size Classes of Fishing Vessels Registered in Kampot Province in 2001 and 2004.

Engine size	Boats w/o engines	<10 HP ²	10-30HP	31-50HP	>50 HP	Total
No. of vessels in 2001	133	151	252	1	12	549
No. of vessels in 2004	202	179	243	5	4	633

The predominant fishing practices are trawling and beach seining, while small-scale fishing gear (gill nets or traps) are also commonly used to collect fish, crab and squid, particularly juvenile crab to be fattened in cages until they reach commercial sizes. Some local fishers use hand push nets in seagrass beds to collect shrimp, small fish, and sea horse.

Mariculture is increasing in the area with seaweed farming in and near the seagrass meadows and coral reef areas. Seaweed farming involves many local people and could seriously damage seagrass and coral reefs areas as farmers put poles and ropes in seagrass beds and coral reef areas. At present no zoning has been undertaken by central or local governments. Semi-intensive shrimp farming by a few commercial enterprises is also found in the area.

The rest of the population is involved in agriculture (rice and vegetable cultivation), small businesses, and fish processing, the latter undertaken largely by women. On a larger commercial scale, some local people are employed in a processing factory that produces fish sauce, an important processed product of Kampot province.

Currently, tourism in the area is limited and dominated by local visitors; however, the government is committed to promoting eco-tourism in the future since it has both coastal and mountainous sceneries, the latter in the adjacent Bokor National Park.

Management Regime:

Natural resources, including marine living resources and environment belong to the state; and the Department of Fisheries (DoF); under the Ministry of Agriculture, Forestry and Fisheries (MAFF); is the designated government institution responsible for managing and conserving these marine resources in the marine and coastal water of the Kingdom of Cambodia. Marine resources are managed under the basic fisheries law, the Fiat Law for Fisheries Management and Administration, which came into force in March 1987 (Council of Minister, 1987). Furthermore, an important legal document related to the activities of natural resource management and conservation is the Declaration No. 1470 on the Organisation and Functioning of the DoF (MAFF, 1990). The declaration states the role and responsibility of the DoF, as being to:

- Develop and implement plans and legal instruments for fisheries resource management and conservation;
- Prepare, enhance and maintain fishing grounds and resources;
- Conduct scientific research, and disseminate results and information.

Kampot Province has its' own Fisheries Office, with 34 full time staff, and is operational under the Provincial Department of Agriculture, Forestry and Fisheries (DAFF). The Provincial Fisheries Office is responsible for the management of marine resources within provincial waters with officials responsible for day-to-day management activities. The Provincial Fisheries Office functions under the direct supervision of both the DoF and DAFF. There are also fisheries staff at district level under Kampot Provincial Fisheries Office of DAFF, whose direct responsibility is to monitor and control commercial and subsistence fisheries, and protect marine resources and habitats (mangroves, seagrass and coral reefs) from illegal and destructive practices.

Apart from fisheries and agriculture, the government has established environmental institutions to protect environment and natural resources and reverse environmental degradation. These include the Ministry of Environment (MoE) at national level, and the Provincial Department of Environment (DoE) at provincial level. The DoE operates under direct supervision of the MoE and the Kampot Provincial Governor. The responsibilities of the DoE include the conservation of natural resources; oversight of environmental protection measures; and the management and conservation of marine natural resources in Marine Protected Areas and National Parks.

² Horse power.

A *National Coastal Steering Committee* has been established to oversee management and development of the natural resources and environment for the whole coastline of the Kingdom of Cambodia involving these two Key Ministries together with the Provincial Department of Tourism, the Royal Navy and Provincial level institutions from the three coastal municipalities/provinces.

8. STAKEHOLDERS:

Key stakeholder groups having interests and involvement in marine resources are as follows:

- National government — Ministry of Agriculture, Forestry and Fisheries (Department of Fisheries), Ministry of Environment, Ministry of Tourism, Ministry of Land Use Planning, Construction and Urbanisation. Representatives from these line ministries are members of the National Coastal Steering Committee for supervising and guiding the implementation of all coastal projects and activities including the South China Sea Project.
- Local authorities — The highest level of authority at the local level is the Provincial Governor, beneath who are the District Governors, Commune councils and village leaders. These are the local authorities officially recognised in the constitution of the Kingdom of Cambodia. In Kampot province there are Provincial Technical Departments such as Department of Agriculture, Forestry and Fisheries (DAFF), Department of Environment (DoE), Department of Tourism (DoT), Department of Royal Navy (DRN), etc. These departments will serve as members of the Management Board and Management Advisory Group during implementation of the demonstration site activities (annex 6).
- Local communities — Local fishers, local villagers, schoolchildren, seaweed farmers, and Buddhist monks. Following the introduction of decentralisation of government management, and the initiation of community-based natural resource management, the government has recognised and supported local community organisations, including some coastal fisheries community organisations that are officially recognised and have responsibility for management and protection of the natural resources within their own defined areas.
 - Seaweed farming has become dominant in the area with many local people engaged in this activity. These people should be made aware of the potential adverse impacts of seaweed farming on coral reef and seagrass ecosystems in order to avoid further damage in the future. Seaweed farmers are important stakeholders in the project.
 - Currently, the marine resources are used by local fishers, who are entirely dependent on the areas for their livelihoods. They know exactly what the status of the resources is; what causes the degradation; and how to solve the problems. Their direct involvement in project implementation is indispensable to the success of the project. These local fisher communities are the main target group, as they are the primary users of the resources.
- Commercial fisheries owners, processors and fish transporters may also be considered stakeholders, even though they represent a small group in the population they are the influential people as they are comparatively wealthy. These people could potentially contribute to the conservation and management of the resources if they were aware, and understand the significant value of marine habitats and resources.
- Private Sector Tourism — Currently, there are no large business and tourism activities in the area. However, the government proposes to develop tourist resorts since the area is adjacent to Bokor National Park. Tourists visiting Bokor National Park, pass through Prek Ampil's beaches before reaching the Park therefore, these could attract more domestic and foreign tourists. Local fishers could be trained, to be service providers for tourists as well as small businessmen instead of directly exploiting the marine resources,
- Finally, there are Non-Governmental organisations (NGOs) working with communities in Kampot province, including as DANIDA, APHEDA, JICA, and WCS. The role of NGOs is very important in supporting activities, and they will be encouraged to participate in meetings and workshops for planning and developing strategy for management and conservation of resources at community level. Currently, CZM/DANIDA is conducting socio-economic survey in Kampot province, which will provide additionally valuable information for managing the demonstration site. Furthermore, APHEDA had introduced small scale aquaculture in some villages. JICA is looking for opportunity of small scale aquaculture development and marketing in three villages of three districts. WCS has been working for the conservation of endangered species including marine mammals and reptiles. These NGOs work closely with local communities in remote areas. As they have

experience in working with local communities, these NGOs could be able to provide information and or even expertise to the project. They can contribute mostly on alternatively livelihood development (aquaculture, livestock raising, and vegetable farming) and participatory approach for managing resources.

Key stakeholders and their roles in executing activities at the Kampot demonstration site are identified and detailed in Annex 2.

9. THREATS:

During the meeting on “Preparation of National Action Plan for Seagrass Management and Conservation in Cambodia” in Kampot Province, threats to seagrass beds were identified resulting from various anthropogenic activities including illegal and over-fishing activities. With potential development and population growth in the future, seagrass beds could be seriously impacted if appropriate management plans are not immediately implemented. The major threats are considered as following:

- Illegal fishing activities — trawling, which is not allowed in the water column less than 20-meter depth by the Fisheries Law No. 33 (Council of Minister, 1987), commonly occurs on seagrass beds of Kampot province. This is one of the greatest sources of damage to seagrass habitats and biodiversity particularly young seagrass shoots, small juvenile fauna, and endangered species. Trans-boundary illegal fishing activities happen everyday as Viet Nam’s fishing boats illegally enter and fish on seagrass or coral reef areas near-shore.
- Overfishing — increasing numbers of fishing boats and better fishing techniques places increasing pressure on the resources and habitats that could lead to decline in fish stocks and yields. The DoF reported an increase in the total number of fishing vessels in Kampot province from 549 in 2001 to 633 in 2005 (Table 1). Furthermore, even no concrete-scientific data to prove that the resources are overexploited; everybody from a local fisher to high rank officer admits that situation is absolutely true. Most fishermen complaint that their daily catch decreases every year, they have to increase the number of fishing gear to get the same catch.
- Pollution/sedimentation — littering, waste dumping, land clearing, coastal development and poor agricultural practices; lead to pollution, increase soil erosion and sedimentation; and cause the degradation of seagrass beds and small patches of coral reef areas.
- Seaweed farming — seaweed poles and ropes, which are built on top of seagrass beds and coral reef areas, result in the destruction of the meadows through construction methods and trampling. When seaweeds are hung on the surface, benthic corals and seagrass are deprived of light and die after few months without sunlight. This has already happened in coral reef areas of Koh Tonsay of Kep municipality, and farmers just abandoned the areas and moved to Kampot province.

The results of causal chain analysis were illustrated in Annex 3 of the document.

10. GOALS AND PURPOSE:

The primary purpose of this project is to conserve seagrass habitat and biodiversity through enhancement of more sustainable uses of the seagrass habitat, and reduction of the impacts of human activities, through the application of a new co-management strategy. The project focuses on the importance of ecologically sustainable use of the resources with strong involvement from local communities. The management strategy developed for this demonstration site can be used as a model and applied to other seagrass areas experiencing similar threats in Cambodia, and other countries bordering the South China Sea and Gulf of Thailand.

11. RATIONALE AND OBJECTIVES:

Kampot Province contains one of the largest areas of seagrass in the South China Sea, which is rich in fisheries resources, and provides the habitat for endangered and critically endangered species. Many local people are dependent on the marine resources for nutritional requirements and income generation. Current patterns of use are however not sustainable and given the potential for further economic development in the area, resulting from the government’s proposal to develop eco-tourism, there exists an urgent need to develop a co-management plan that encompasses the needs of the various stakeholders, whilst at the same time conserving the resources.

The Cambodian government is committed to taking an active role in educating communities on conservative issues, and working closely with them to conserve and sustainably use the seagrass habitats and resources of Kampot Province.

The proximity of this site to the border with Viet Nam provides an opportunity for joint management of these transboundary resources with Viet Nam and to facilitate the two governments working together to solve problems of natural resource management and use. Lessons learned from this joint management will be valuable for other trans-boundary and regional initiatives.

The overall goal of this project is to reduce the threats to seagrass habitats in Kampot Province by applying a co-management strategy and plan developed by the participating stakeholders to ensure more sustainable use of the marine resources. The specific objectives are:

- i) To develop and establish a coordinating mechanism among national and local government agencies, local communities, and between Cambodia and Viet Nam; in managing seagrass resources in the coastal waters of Kampot Province that will be maintained following completion of the project.
- ii) To develop and implement a long-term management plan including regulations for sustainable use of seagrass resources and adjacent ecosystems.
- iii) To enhance public awareness and to improve understanding among policy makers, managers and local communities of the ecological significance and economic value of seagrass habitats through increased survey and monitoring programmes of biological, and socio-economic data. These data will be analysed and used as basic inputs for planning and management purposes.
- iv) To investigate possible mechanisms for ensuring financial sustainability of management and improving the economic conditions of coastal communities.

12. OUTCOMES:

- Formally established co-management mechanism at the national level that is maintained beyond the project duration, functioning management plan that is supported and implemented by all involved stakeholders, and is based on sound data and information regarding the biological and socio-economic conditions of the area.
- Improved status of seagrass habitats, through zoning types of use, and reduction or limitation of, the use of destructive types of fishing gear.
- Improved financial sustainability of the management system through application of appropriate agreed use fees and enhanced income for subsistence fishers through identification and introduction of alternative livelihoods.
- Joint management Mechanism involving Viet Nam and Cambodia.

13. PLANNED ACTIVITIES TO ACHIEVE OUTCOMES:

In order to achieve the above mentioned goal and objectives, five main components of planned activities were designed for implementing:

Component 1: Project Management

The purpose of this component is to manage the execution of the project, and establish a mechanism for co-ordination between national and local government agencies, local communities, and even between Kien Giang (Phu Quoc) and Kampot provinces. Detailed activities under this component include:

National Actions:

The recruitment of a demonstration site manager by the DoF and Kampot Governor. The project office will be equipped with office equipment and furniture.

A Management Advisory Group (MAG) has been established by the National Seagrass Committee in a meeting and approved by the Kampot Governor. This MAG is chaired by the Chief of Kampot Provincial Department of Agriculture, Forestry and Fisheries, and will meet four times per year to discuss project operation. A Management Board (MB) has been established by the Kampot Governor (Annex 6). This MB is chaired by the Kampot Governor, and will meet twice a year to provide oversight to project implementation. The site manager will organise these regular MAG and MB meetings.

Other management activities include project monitoring, evaluation and auditing; which will be done at the end of each year. Project monitoring will be conducted by the MB; while evaluation and auditing will be done by an independent consultant and auditor, respectively.

Bilateral Actions:

Based on the chart of management framework (Annex 6), the Cambodian MAG will meet with Viet Nam's MB once a year to discuss the cooperative framework and other technical issues such as indicators and monitoring methodology. There are totally three joint meetings, where the venue of the first meeting will be decided by the two groups. However, if the first meeting is held in Phu Quoc, the second one will be in Kampot.

Similarly, the Cambodian MB will meet with Viet Nam's Project Steering Committee once per year regarding decision making and bilateral agreement on issues raised by MAGs. The venue of the meeting will shift from one country to another, which the first one has to be decided and agreed by both groups. These meetings will be facilitated by the PCU.

Component 2: Data and Information for Management Plan Purpose

The purpose of this component is to produce data and information for developing a long-term sustainable management plan for seagrass resources and ecosystem. A base map of the demonstration site will be initially prepared by SEA START RC from satellite imagery.

A field survey will be conducted for 10 days by six people from a technical institution. Three main parameters will be collected: percentage cover of seagrass, species composition and depth. The result of this survey will be used for mapping and identifying zones. At the same time, a socio-economic survey will be conducted for 20 days by four people from a technical institution in order to collect data on socio-economics, resource use and value. These data will be used as input for updating GIS database for mapping and identifying zones; and will be used for analyses of present and potential uses, values, net incomes, costs and potential use conflicts for the establishment of financial mechanism in the management plan. When all required data are collected, they will be input into the GIS database by a GIS expert from a technical institution.

Component 3: Development of Management Plan

When having completed the data of the site including field data, socio-economics, value, uses, etc.; a draft long term management plan for the demonstration site will be prepared by the Site Manager with involvement of the MAG and external technical support. The management plan; will cover all management issues such as zones, regulation, management strategy, monitoring guideline, and establishment of financial mechanism for sustainability.

The draft management plan will be discussed during a series of stakeholder discussion. The site manager will organise a total of 4 meetings in order to discuss the draft management plan. The first 3 meetings will be conducted at village level; and the last one will be conducted for higher level of stakeholders such as local resource managers, commune councils, and private sector.

At the end of all stakeholders' meetings, the site manager will incorporate the results into the draft plan, and then it will be reviewed by MAG and MB during their regular meetings. When the plan has been finally reviewed and finalised by MB, it will be submitted to Kampot Governor for signing. The adopted plan will be translated into English, and published in Khmer and English for national and regional distribution.

Component 4: Enforcement

When the plan has been approved, the first task will be the physical work of zone marked. The site manager; with accompany some members of MAG, commune councils and chiefs of village to set the buoys for demarcating zones.

Law enforcement will be carried out as soon as the zones are clearly demarcated. A small patrol boat will be purchased and two people will be selected from the local community for conducting regular surveillance.

As soon as the survey on resource use has been conducted, a monitoring methodology for biological resources and use will be developed at the early stage by a technical institution. The draft monitoring methodology will be jointly reviewed by MAGs of the two countries. Monitoring on biological resources and use will be conducted twice during the course of the project.

Component 5: Public Awareness and Training

Public Awareness:

The first activity of awareness is the production of 500 copies of a poster of seagrass biodiversity and sustainable use. They will be distributed to communes and villages. The posters will be displayed in public places such as commune halls, schools and pagoda. The site manager will be responsible for creating the poster.

Another activity is the production of 5,000 small-size leaflets in easy-read Khmer language focussing on the significance of seagrass biodiversity and how to use it sustainably. These leaflets will be distributed to most relevant stakeholders such as fishers, school children, monks, community leaders, and farmers. The site manager will be responsible for creating the leaflets.

Another important awareness activity is the production of six Video scenes (15 minutes each) showing the significance of seagrass biodiversity and sustainable use of the resources. The National Television will be hired for regular broadcasting this Video in 15 minutes for 12 times. These Video will also be shown during workshops on seagrass at village level. The site manager will be responsible to create the Video film.

The most important target group is local people or local fishers. They have to understand basic aspects of seagrass biology and resources. Five workshops will be held in selected village halls within and/or surrounding the demonstration site. Very simple and comprehensive presentations will be delivered to these audiences. Demonstration in the field will also be conducted. The site manager will organise the workshops.

Most local authorities do not understand about the seagrass resources and ecosystem; therefore, a seminar on seagrass biodiversity and sustainable use will be held primarily at district hall with participation of 20 people for local government offices; particularly district offices, commune councils and village leaders. This should be done by presentations and a short field trip to the seagrass bed within the demonstration site. The site manager will organise the seminar with presentations from SEA, other technical institutions, and NGOs.

A five-day study visit to Phu Quoc demonstration site will be conducted with participation of 10 selected commune councils and village leaders. Dealing with language difficulty, an interpreter will accompany these participants in order to let them fully understand about the management activities in Phu Quoc. The site manager in liaison with Viet Nam counterpart will organise the study tour.

A seven-day study tour will be organised for members of MB and MAG to the most successful seagrass demonstration site in the SCS in order to expose them to the best experience of the management strategy from that site. The site manager in liaison with that demonstration site manager will organise the study tour.

Training:

In order to enhance the project's implementation, a short course on project administration and management and an English and report writing course will be provided to the site manager and 5 other relevant people in MB and MAG.

When research methodology is developed and adopted, 20 Cambodian researchers (including site manager and some local communities) should be trained by an invited regional expert. The site manager will organise the training course.

14. SUSTAINABILITY ANALYSIS AND RISK ASSESSMENT:

Sustainability Analysis:

The sustainability of this project is dependent on effective management, financial support and capacity building.

- **Management** — this project will play a major role in the development of management strategy, which will continue to implement in the future. Upon completion of the project, the Department of Fisheries will continue to be the main responsible agency to coordinate co-management in the area; as the Cambodian government commits itself to ensuring the protection, management and recovery of marine resources, threatened species and habitats. With experience gained from this project, the Department of Fisheries will continue to work closely with local communities and other government line agencies to manage and protect Cambodia's seagrass ecosystem. Co-management approach of the seagrass site will continue to play an important role after gaining experience and lessons learned during the project period, with the potential to address many marine management and conservation issues at local level. Local communities will participate in monitoring and controlling fishing activities within their own defined areas.
- **Capacity building** — transfer of knowledge and skills through on-the-job training, workshops, training courses and awareness manuals; will promote the sustainability of the project at the community, provincial and national levels. Building awareness of the importance of seagrass habitats to local communities will also contribute to ecologically sustainable management of the area.
- **Financial support** — Financial support from UNEP/GEF is very important in the initial phase of long-term conservation and management of this seagrass site. However, the Cambodian government plans to establish a user-pay fee system, with revenue raised through eco-tourism and fishing licenses contributing to the costs involved with the sustainable management of the area. The government will also continue to provide as much in-kind support as possible after the project life.

Risk Assessment:

Most likely risks anticipated in this project are as follows:

- i) **Information creating public awareness reaches only a small number of people.**
Information creating public awareness will be distributed in a variety of ways using a variety of means. Isolated individuals, who are unable to attend a meeting or workshop, will be provided information via local leaders/authorities.
- ii) **Local communities may show little interest in the co-management of their resources.**
Workshops and awareness programme will demonstrate the benefits to local communities from their participation in sustainable fisheries management.
- iii) **Inappropriate seagrass monitoring methods may be unable to detect changes.**
The project management team together with management team from Phu Quoc of Viet Nam will jointly develop appropriate methods and guidelines to monitor changes in seagrass ecosystem within Kampot's site as well as in Phu Quoc's site of Viet Nam.
- iv) **Illegal fishing activities.**
Increasing public awareness on the ecological significance of seagrass to fisheries production, regular monitoring resources the local communities, and promoting alternative livelihood initiatives; should contribute to the reduction of illegal fishing activities and of waste discharges in/into seagrass site.
- v) **Inadequate numbers of trained staff for project implementation.**
Training programmes (including on-the-job training) and workshops incorporated in the project will ensure adequate numbers of skilled staff. Some staff (such as members of national coral reef and seagrass committee) are already aware and understand the concept of the project since the preparatory phase. They have had some background and experience in working with the project.

- vi) ***Future development may potentially impact seagrass site.***
The establishment of a Management Board and Management Advisory Group, which members are representatives from both national and local governmental agencies, will ensure that the government is aware of the ecological importance of the seagrass and its' contribution to local economy through fisheries and eco-tourism. Most of them are members of "National Coastal Steering Committee (Project Steering Committee)", whose responsibility is to oversee coastal zone management and development. These, planners and policy makers will attend a workshop on the importance of seagrass and consider the potential impacts of future development on the seagrass ecosystem, and reverse the environmental degradation. In this case, before any future development being taken place, it has to be considered and advised by this committee to ensure the development is environmental consideration with minimizing impacts on seagrass.
- vii) ***Lack of resources for law enforcement.***
Through the establishment of community fisheries, local communities will be encouraged to participate in monitoring their defined areas and reporting any illegal fishing activity to the concerned authorities. At the same time, more staff of provincial agencies will be trained and will participate in monitoring and control the resources.
- viii) ***Conflict between management agencies.***
All decisions and processes will be undertaken in a transparent manner, with tasks and obligations are clearly defined and outlined, to assist any conflict resolution between parties involved. The involvement of other ministries and provincial departments in the Management Board and Management Advisory Group will play a key role in facilitating and co-ordinating if issues and conflicts of interest arise between those institutions.
- ix) ***Local communities may not actively participate in the project.***
Workshops and meetings will ensure that local people are informed about the project's objectives, activities and outcomes. They have to be clearly explained that the objectives of the project aims at not only improving the quality of environment but also their living standards through enhancing the resources and environment and introducing alternative livelihood initiatives. They are the main target group, and their participation in implementing activities is indispensable to achieving the project's goal. When they clearly understand that this project is for them and help them and designed to improve their living standards; they will actively participate in all activities.
- x) ***Tasks not completed.***
The site manager and SEA will ensure strict adherence to clearly defined tasks and schedules to make certain all activities are completed within the appropriate timeframe.
- xi) ***Project not financially sustainable.***
The development of eco-tourism, establishment of community fishery and continued support of the government will ensure the management of the area is financially sustainable. The introduction of user-pay fee, which budget will go to a trust fund for operating the project, is very crucial to ensure financial sustainability after the project.

15. BUDGET (IN US\$):

Total estimated budget of the trans-boundary demonstration site project for Cambodia's side is **US\$290,443**, including:

▪ GEF funding:	US\$163,147
▪ Government co-funding in-kind:	US\$119,650
▪ Government co-funding in-cash:	US\$7,646

15.1 Summary Budget by Activities (US\$)

Sub-components/ Activities Budget (in \$US)	GEF	Co-Funding		Total
		In-cash	In-kind	
1.1. National Actions	44,580	630	27,600	72,810
1.2. Bilateral Actions	23,780	160	21,560	45,500
2.1. Map baseline and satellite image	2,000	0	0	2,000
2.2. Field Surveys	6,050	450	4,200	10,700
2.3. Use Surveys (for GIS database and Financial Sustainability)	4,391	597	5,880	10,868
2.4. GIS Database	1,000	0	0	1,000
3.1. Development of Management Plan	7,880	0	4,200	12,080
4.1. Surveillance	34,530	80	2,380	36,990
4.2. Biological and Use Monitoring	3,701	69	4,480	8,250
5.1. Awareness	24,127	4,740	33,670	62,537
5.2. Training	11,108	920	15,680	27,708
TOTAL	163,147	7,646	119,650	290,443

15.2 Summary Budget by Object of Expenditure (US\$)

Object of Expenditure		Grand Total			
		GEF	Co-funding		Total
			In-cash	In-kind	
1000. Project Personal Component		35,454	2,943	46,060	84,457
1100	Project Personnel	18,000	0	0	18,000
1200	Consultant	11,956	105	37,940	50,001
1300	Administration support	3,000	0	0	3,000
1600	Travel on official business	2,498	2,838	8,120	13,456
2000. Sub-Contract Component		18,460	0	0	18,460
2200	Sub-Contract Component	18,460	0	0	18,460
3000. Training Component		49,258	4,703	58,590	112,551
3200	Group Training	19,618	4,103	20,230	43,951
3300	Meeting/Conference	29,640	600	38,360	68,600
4000. Equipment Component		36,940	0	15,000	51,940
4100	Expendable Equipment	1,500	0	0	1,500
4200	Non Expendable Equipment	6,940	0	0	6,940
4300	Premises	28,500	0	15,000	43,500
5000. Miscellaneous component		23,035	0	0	23,035
5200	Reporting Costs	18,215	0	0	18,215
5300	Sundry	4,820	0	0	4,820
TOTAL		163,147	7,646	119,650	290,443

16. IMPLEMENTATION PLAN:

OBJECTIVES/ COMPONENTS	Sub-components	ACTIVITIES	2006				2007				2008		RESPONSIBLE AGENCIES
			1	2	3	4	1	2	3	4	1	2	
1. Project Management	1.1 National Actions	1.1.1 Recruitment of site manager and an administrative assistant											Kampot Governor, SEA
		1.1.2 Purchase project office equipment and furniture											Site Manager (SM)
		1.1.3 Organisation of quarter meetings for MAG (10 meetings)											SM, Chief of DAFF
		1.1.4 Organisation of regular meetings for MB twice a year (5 meetings)											SM, Governor
		1.1.5 Project monitoring and evaluation, auditing					Au				Au		MB, Technical Institution (TI), auditor
	1.2 Bilateral Actions	1.2.1 Joint meetings of MAGs once a year (3 meetings)											PCU
		1.2.2 Joint meeting of MBs once a year (3 meetings)											PCU
2. Data and Information for Management Plan Purpose	2.1 Map Baseline and Satellite Image	2.1.1 SEA START RC to prepare a draft base map from satellite image											SEA START RC
	2.2 Field Surveys	2.2.1 Field survey for percentage cover, species composition, depth											TI
		2.2.2 Mapping and identification of recognised zones based on field data											SM
	2.3 Use Surveys	2.3.1 Survey on socio-economics and uses (by socio-economist)											TI
		2.3.2 Analysis present and potential uses, values, net incomes and costs (by socio-economist)											TI (consultant)
		2.3.3 Analysis of potential use conflicts and future management needs costs (socio-economist)											TI (consultant)
		2.3.4 Prepare data for GIS database (mapping and identifying zones)											SM
	2.4 GIS Database	2.4.1 GIS database Development (by GIS expert)											TI
3. Development of Management Plan	3.1 Development of Management Plan	3.1.1 Draft management plan (zones, regulation, strategy, monitoring methodology on biological resource and use, establishment of financial mechanisms for sustainability, etc.)											TI
		3.1.2 Review the management plan by stakeholders (in 3 meetings at village level, 1 higher level)											MAG
		3.1.3 Review the management plan (by MAG and MB in meetings)											MAG, MB
		3.1.4 Sign the management plan by the governor							x				Kampot Governor
		3.1.5 Translation the Management Plan											TI
		3.1.6 Publication of the Management Plan in Khmer (100 copies)											Publisher
4. Enforcement	4.1 Surveillance	4.1.1 Demarcation of zones (buoy setting)											SM, MAG, local communities
		4.1.2 Small patrol boat purchasing											SM
		4.1.3 Regular patrolling with involvement of local community											Rangers, local communities
	4.2 Biological and Use Monitoring	4.2.1 Development of methodology for monitoring (drafted by a TI, jointly reviewed by MAGs)											TI, MAGs (Cam&VN)
		4.2.2 Regular monitoring activity with involvement of local community (2 times)											TI, local communities

16. cont.

IMPLEMENTATION PLAN:

OBJECTIVES/ COMPONENTS	Sub-components	ACTIVITIES	2006				2007				2008		RESPONSIBLE AGENCIES
			1	2	3	4	1	2	3	4	1	2	
5. Public Awareness and Training	5.1 Public Awareness	5.1.1 Create posters on seagrass importance and sustainable use											SM, publisher
		5.1.2 Development and publication of leaflets on seagrass biodiversity and sustainable use (5000 copies)											SM, publisher
		5.1.3 Production of short Video films on seagrass and use (6 of 15-minute movies)											TI
		5.1.4 Broadcasting on Public Television (12 times for 15 minutes each)											Public Television
		5.1.5 Seminar on seagrass biodiversity and sustainable use for policy makers at provincial and district levels (20 participants)											SM
		5.1.6 Workshops at village level about significant seagrass resources (5 workshops)											SM
		5.1.7 Study tour of village and community leaders for visiting Phu Quoc demonstration site (5 days)											SM
		5.1.8 Study tour of MB and MAG to visit the most successful seagrass demonstration site (7 days)											SM
	5.2 Trainings	5.2.1. Training on project management and administration (including financing) for site manager and 5 people from (MAG&MB) (1 course)											TI
		5.2.2 Training on English and report writing for site manager and 5 people from MAG&MB (1 course)											TI
		5.2.3 Training on seagrass monitoring for 20 most relevant people (monitors, site manager, and local community).											SM

17. PROPOSED MANAGEMENT OF THE ACTIVITIES:

Before the demonstration site was proposed, there is an existing inter-agency called *National Coastal Steering Committee* (Project Steering Committee), with members from relevant line ministries and coastal provincial departments including the four coastal governors. Since this project focuses on Kampot province only, the proposed members of Management Board (MB) and Management Advisory Group (MAG) are less than the total membership of the National Coastal Steering Committee. However, the same local members from Kampot province are member of both National Coastal Steering Committee and MB. In this case, it could be used as linkage between national and provincial government agencies.

The MB is chaired by the Kampot Provincial Governor; and its members are representatives from provincial-technical departments such as DAFF, DoE, DoT, etc., including the District Governor (in which the site is located). The MAG is the organisation which will provide advices to implementing agencies including site manager to ensure the execution is on the right track. The number of MAG's members is narrowed down to the most technical relevant agencies, namely, DoF, DAFF, DoE, Kampot Provincial Fisheries Office, and Kampot Provincial Office of Natural Protection and Conservation. A list of those management bodies (MB and MAG) to be involved in the project can be seen in Annex 6.

Due to limitation of human resource at provincial level in implementing the project, it is decided that the Department of Fisheries of the Ministry of Agriculture, Forestry and Fisheries; the Specialised Executing Agency (SEA) for Coral Reef and Seagrass Sub-components, will also be the Executing Agency for the demonstration site. Therefore, there are representatives from the DoF in management bodies.

Even though commune council, village leaders and local communities; are not included in the MB; they are the main target groups of the project. In this case, they will play a very active role in decision making, planning and making strategy for management and conservation of resources in their areas. They are the main stakeholders who will get benefit from the project. In this case, commune councils and village leaders of the demonstration site should be included as members of the MAG in order to allow them to have opportunity in decision making.

The site manager will be responsible for executing the project including developing the management plan and methodology, organising relevant meetings and workshops for reviewing such plan and methodology, organising beach clean-up campaign, regular monitoring on the seagrass demonstration site, holding community meetings, and reporting to MB, MAG and the SEA. The SEA will report to National Technical Working Group, Regional Working Group on Seagrass, and the PCU. The MB will report the activities and outcomes of the project to IMC, who will continually report to the PSC.

The success and experience gained from the implementation of this project can be transferred and applied to other locations in Cambodia and the South China Sea through existing networks of National Technical Working Group, Regional Working Group on Seagrass and the PCU. The continued exchange of information and expertise between demonstration sites of the UNEP/GEF SCS project, through regular meetings and study tours, communication and linkage between countries in the region; will be carried out.

18. INFORMATION ON PROPOSED EXECUTING AGENCY (IES):

The Department of Fisheries is located in the building No. 186, Preah Norodom Boulevard, Chamcarmon District, Phnom Penh, the Kingdom of Cambodia. It is responsible for managing the country's fisheries and aquaculture (Master Plan for Fisheries 2001-2010). It was established as a separate entity in the Ministry of Agriculture in 1960; and has undergone restructuring on several occasions during the past four decades. In July 2001, the currently institutional structure was adopted. Totally, the DoF has 1,557 staff working at different levels and locations including Provincial Fisheries Offices; and there is a director and four deputy directors. The DoF has eight lower management and administrative offices, four fisheries inspection units, a fisheries research unit, a fisheries research station, two fishing research units and a state fisheries enterprise (KAMFIMEX³).

³ Kampuchea Fisheries Import and Export.

Similar to freshwater fisheries, those management offices deal with marine fisheries resources conservation and management including fishing ground defining and/or inventory, sustainable exploitation of marine resources, inspection, mariculture development, marine research and awareness raising.

In February 2001, the government established a new Community Fisheries Development Office (CFDO) under the DoF in order to promote locally community-based resource management within defined areas. In this case, the CFDO has an important role in facilitating and coordinating activities with local communities. Furthermore, the role of the CFDO is to provide legal approval to a community fishery; and at the same time the Office conducts monitoring and evaluation programme on implementing activities.

Until now, the DoF is the main institution in terms of research and monitoring activities on marine resources. It has qualified staff to be able to conduct research and monitoring on marine fisheries, coral reefs, seagrass and mangroves.

19. EXECUTING AGENCY CONTACT PERSON:

Mr. Ouk Vibol, Vice Chief of Fishery Domain and Extension Office, and
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Department of Fisheries, Ministry of Agriculture, Forestry and Fisheries
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REFERENCE:

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Appendix 1 - Site Characterisation and Description of Prek Ampil, Kampot

1. Geographic Location:

Prek Ampil site is geographically located in the Southern part of the country between 10°27' - 10°36' N and 103°54' - 104°17' E in Kampot province. It is in the eastern region of Gulf of Thailand and the western part of the South China Sea, situated in the border of Phu Quoc of Viet Nam. The total site area is 66,733 ha, with a net seagrass coverage area of 25,240 ha, which is divided into 3 smaller areas.

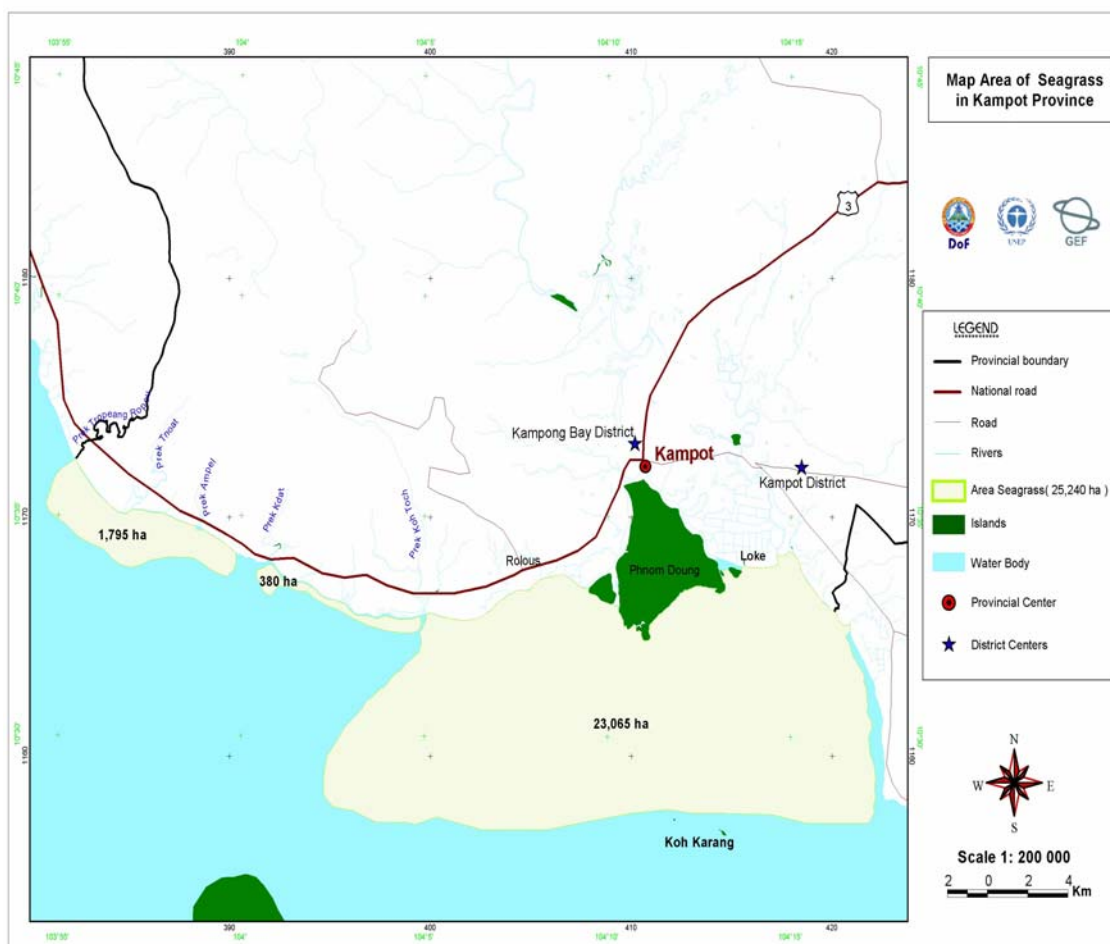


Figure 1 Map of Prek Ampil Seagrass Demonstration Site in Kampot Province.

2. Some Physical Characteristics and Climate:

The area has a gentle slope with the depth of the site varying from 1-4m, depends on tide level. The substrate consists variously a mixture of sand and mud. Climate at Prek Ampil is tropical monsoon with clear distinction between wet and dry season. The dry season occurs from November to May while the wet season is from May to October. Mean annual temperature is around 26 – 27°C. Visibility in the water is dependent on the season, with reduced visibility during the wet season. Much freshwater runoff during heavy rainfall influences salinity which ranges from 25 – 30 ppt. Sea surface temperatures range from 26 - 30°C.

3. Biological Characteristics and Other Ecosystems:

Seagrasses can be found in most shallow waters of Cambodia's coastal zone. Recent surveys have provided information about the locality of significant areas of seagrass. However, the composition of seagrass species and variations in their distribution and abundance over time are largely unknown (DoF, 2004).

Extensive seagrass beds occur in waters adjacent to Kampot Province and Kep Municipality, with seagrass and/or mixed seagrass and *Caulerpa* beds found along the entire coast to the Cambodia-Vietnam border (Ethirmannasingam 1996 in Nelson 1999).

There have been some surveys aimed at determining seagrass distribution in national waters, mostly financed by the South China Sea Project of UNEP/GEF. The Survey Manual for Tropical Marine Resources (English *et al.* 1997) was used as a guide for this work. For instance, two locations were selected for lying transects in Kampot Province, one near Prek Ampil and another near Km 12. In each location, three 100 m transects were laid in a direction perpendicular to the coast, with the transect starting about 150 m from the shoreline. Along each transect line, a 1m² quadrat was used at 20 randomly chosen locations, within which seagrass species composition and density was recorded. Hence, 60 samples were collected from each site, enabling the estimation of seagrass species composition and density.

Totally, six species of seagrass have been reported in this area: *Enhalus acoroides*, *Thalassia hemprichii*, *Halophila decipiens*, *Syringodium isoetifolium*, *Cymodocea rotundata*, *Halodule uninervis* (DoF, 2004). It was found that *Enhalus acoroides* and *Cymodocea rotundata*, are the dominant species in those areas.

A number of other ecosystems interact with these seagrass meadows. Small patches of coral reefs are mixed with seagrass beds and other patches of coral reefs are located about 800m from the seagrass edge. Bokor National Park, reported to contain elephants and other terrestrial endangered species within its jungle, is located on the mountain beyond the mangroves and wetlands.

Even there was no scientific study on taxonomy of species at the site; it is assumed that this area is rich in marine biological fauna. This area also provides habitat for economically important, migratory and endangered species; particularly sea turtle, dugong, dolphin and seahorse.

According to Tana (1995), there are three species of marine mammals in Cambodia coastline that are accidentally caught by gill nets and shrimp trawlers in the seagrass beds of Sihanoukville and Kampot bay, i.e. Irrawaddy dolphin (*Orcaella brevirostris*), Spinner dolphin (*Stenella longirostris*) and dugong.

Table 1 Estimated Number of Species for Major Groups of Organisms in Cambodian Marine Waters.

Group	Estimated Number of Species	Reference
Hard Corals	70	Nelson, 1999
Soft Corals	17	Nelson, 1999
Marine Fish	520	Ing, 2003
Echinoderms	21	Ing, 2003
Crustaceans	50	Ing, 2003
Molluscs	250	Ing, 2003
Marine Turtles	5	Ing, 2003
Marine Mammals	12	Ing, 2003
Seaweeds	16	Ing, 2003
Seagrass	9	CZM/MoE, 2002 (No reference)

4. Socio-economic Characteristics and Resource Uses:

As can be seen in Table 2, a population in 1988 was 527,904 in Kampot Province (Ministry of Planning 1999). The average household size in Kampot province is 5.0; and women represented 52.1 % in Kampot.

The average of population density of Cambodia in 1988 was 64 persons per km², while in Kampot province was higher, accounted 108 persons per square km².

Table 2 Population Size and Density in Cambodia and Kampot Province.

Location	Areas (Km ²)	Population	Women (% of total)	Density (/km ²)
Cambodia	181,035	11,426,223	51.8	64
Kampot	4873	527,904	52.1	108

Totally, 31 villages in 9 communes (in 2 districts) are located in close proximity to the demonstration site (Table 3). A socio-economic survey indicated that 42% of local families living in this area are substantive fishers and are directly dependent on seagrass ecosystem along the coastline, which supports an area rich in fisheries resources, for food and revenue.

Table 3 The number of villages located in close proximity to the Demonstration Site.

Province (1)	District (2)	Commune (9)	Village (31)
Kampot	Kampot	Boeng Tuk	Roluos
			Kaeb Thmei
			Totueng Thngai
		Chum Kriel	Trapeang Thum
			Chum Kriel
			Samraong
			Kampong Kandal
		Kaoh Touch	Kilou Dabpir
			Preaek Chek
			Kandal
			Preaek Ampil
		Koun Satv	Koun Sat
			Kampong Nong
			Kampong Tnaot
		Preaek Tnaot	Trapeang Ropov
			Preaek Kraeng
			Preaek Tnaot
			Changhaon
		Trapeang sangkae	Trapeang Sangkae
			Kampong Kes
			Trapeang Thum
	Kampong Bay	Kampong Kandal	Sovann Sakor
			Muoy Ousaphie
		Andoung Khmaer	Tvi Khang tbound
			Ou Touch
			Andoung Khmaer
			Ta Deb
		Traeuy Kaoh	Doun Taok
			Ta Angk
			Boeng Ta Pream
			Srae

Totally, there are 23 schools located in the demonstration site area (primary schools: 17, mixed primary and secondary schools: 3, secondary schools: 2, high school: 1).

The predominant fishing practices are trawling and beach seining. Small-scale fishing gears (gill nets or traps) are also commonly used to collect fish, crab and squid, particularly juvenile crab to be fattened in cages until they reach commercial sizes. Some local fishers use hand push nets in seagrass beds to collect shrimp, small fish, and sea horse. Fishing vessels participating in marine capture fisheries in Kampot province are characteristically small, operated closely to shore, and return to port in a daily basis.

Mariculture is increasing in the area with seaweed farming occurs in and near the seagrass meadows and coral reef areas. Seaweed farming is dominant as many local people involve in the activities. This seaweed farming could seriously damage to seagrass and coral reefs areas as farmers put poles and ropes on seagrass bed and coral reefs. Both central and local governments should clearly define zones for cultivating seaweed. Semi-intensive shrimp farming is also found nearby the areas by few commercial enterprises.

The rest of the population involve in agriculture (rice, vegetable and livestock cultivation), small businesses, and fish processing.

5. Management Regime:

Natural resources, including marine living resources and environment belong to the state; and the Department of Fisheries (DoF); is generally the designated institution responsible for management and conservation marine resources in all marine and coastal water of the Kingdom of Cambodia, including seagrass resources in Kampot province. Marine resources are managed under the basic fisheries law, the Fiat Law for Fisheries Management and Administration, which came into force in March 1987 (Council of Minister, 1987).

Kampot Province has its Fisheries Office, with 34 full time staff, and is operational under the Provincial Department of Agriculture, Forestry and Fisheries (DAFF). The Provincial Fisheries Office also involves in the management of marine resources within its own provincial water with officials responsible for day-to-day management. This Provincial Fisheries Office is functioning under direct supervision of both the DoF and DAFF. There are also fisheries staff at district level under Kampot Provincial Fisheries Office of DAFF, whose direct responsibility is to monitor commercial and subsistence fisheries, and protect marine resources and habitats from illegal and destructive practices.

The government also established environmental institutions to protect and conserve environment and natural resources and to reverse degradation. They are Ministry of Environment (MoE) at national level and Provincial Department of Environment (DoE) at provincial level. Under MoE, there are differently responsible departments and under which offices are the lowest level of national government agency. The provincial DoE is operational under direct supervision of MoE and Kampot Provincial Governor. The responsibilities of DoE include the conservation of natural resources and overseeing environmental protection from pollution and degradation. The DoE's responsibility is also focused on management and conservation of marine natural resources in Marine Protected Areas and National Parks at provincial level.

In occlusion; the DoF of MAFF, Kampot Provincial Fisheries Office of DAFF, DoE and Kampot Provincial Governor; are the key institutions involve directly in managing and protecting marine resources and environment in Kampot province.

Appendix 2 - Stakeholder Involvement Plan

1. Stakeholder identification:

The following stakeholders will be involved in the project and were identified during the period of project development.

Stakeholders	Roles
National Government Agencies: DoF (MAFF), MoE and other relevant ministries	<ul style="list-style-type: none"> – As SEA for Coral Reef and Seagrass sub-components and for Kampot Seagrass Demonstration Site; – Implementing the Demonstration Site; – Co-ordinating among members of MB, MAG, site manager, local authorities, NTWG, RWGs, IMC, RSTC, PSC, and the PCU; – Facilitating joint activities with Viet Nam. – Supervising and guiding the implementation of the project; – Consulting (sub-contracts), national networking; – Participating.
Local Authorities: <i>Kampot Provincial Governor.</i> <i>Provincial-Technical Departments:</i> DAFF, DoE, DoT, DRN, Border Army etc. <i>District Offices:</i> District Governors. Office of Agriculture, Forestry and Fisheries,	<ul style="list-style-type: none"> – Being members of MB and MAG; – Consulting (sub-contracts); – Supporting and participating in management and implement activities; – Supporting in law enforcement, research, and field trip; – Participating in awareness raising, policy and plan development; – Attending training courses, workshops and study tours; – Being target group.
Local Communities: Local fishers, Local communities, Village leaders, Seaweed farmers, Schoolchildren, Buddhism monks, Low income groups who entirely depend on seagrass,	<ul style="list-style-type: none"> – Being the main target group; – Direct involving process of planning and implementing seagrass demonstration site; – Participating in patrolling, zoning and regulating; – Participating in training, study tour and site visit; – Supporting in raising public awareness; – Involving in alternative livelihood initiatives.
Private sector: Commercial Fisheries Owners, Fish Processors, Transporters, Whole Sellers, Seaweed middlemen, Small businessmen. Tourists resort owners (potential),	<ul style="list-style-type: none"> – Potential contributing to the conservation and management; – Attending training courses on sustainable resource uses and tourism development; – Participating in eco-tourism modelling.
NGOs: CZM/DANIDA, JICA, WCS, APHEDA	<ul style="list-style-type: none"> – Providing training courses on alternative jobs; – Participating in awareness and planning and developing strategy for management and conservation of resources; – Providing existing information and data of the site.

2. Information Dissemination and Consultation:

Information will be offered to stakeholders using as many proper means as possible, in order to introduce approaches to the target group. Communication at the management level will be done through the MB consisted of representatives of concerned groups who will make decision and determination in planning and implementing of the project's activities. Frequent communication will be taken place based on stakeholder's meetings and workshops.

The target group will be also informed about events and project activities through direct invitation for participation and distribution of publications. For general public and local communities, information will be provided through personnel interview and focus group discussion; and at the same time feedback of constructive information about project activities received from this group will be valuable for guiding for better implementation in the future.

A six-monthly progress report will be prepared and used as basic information to inform the public about project progress and help emphasize key conservative indication. Public media will be used for broadcasting information about the progress of project activities. Other public awareness materials will be distributed via local authorities during special occasions such as beach cleaning campaign, environmental day, or a traditional festival; which is aiming at seagrass ecosystem and biodiversity conservation.

3. Stakeholder Participation in Planning, Decision-making, and Executing Activities:

Public participation, especially from local communities, is an indispensable contribution to the success of the project, which has characterized previous initiatives on seagrass ecosystem and biodiversity conservation in the demonstration site. The project has to put as much effort as possible in order to encourage various local people to participate for the whole project period, and beyond.

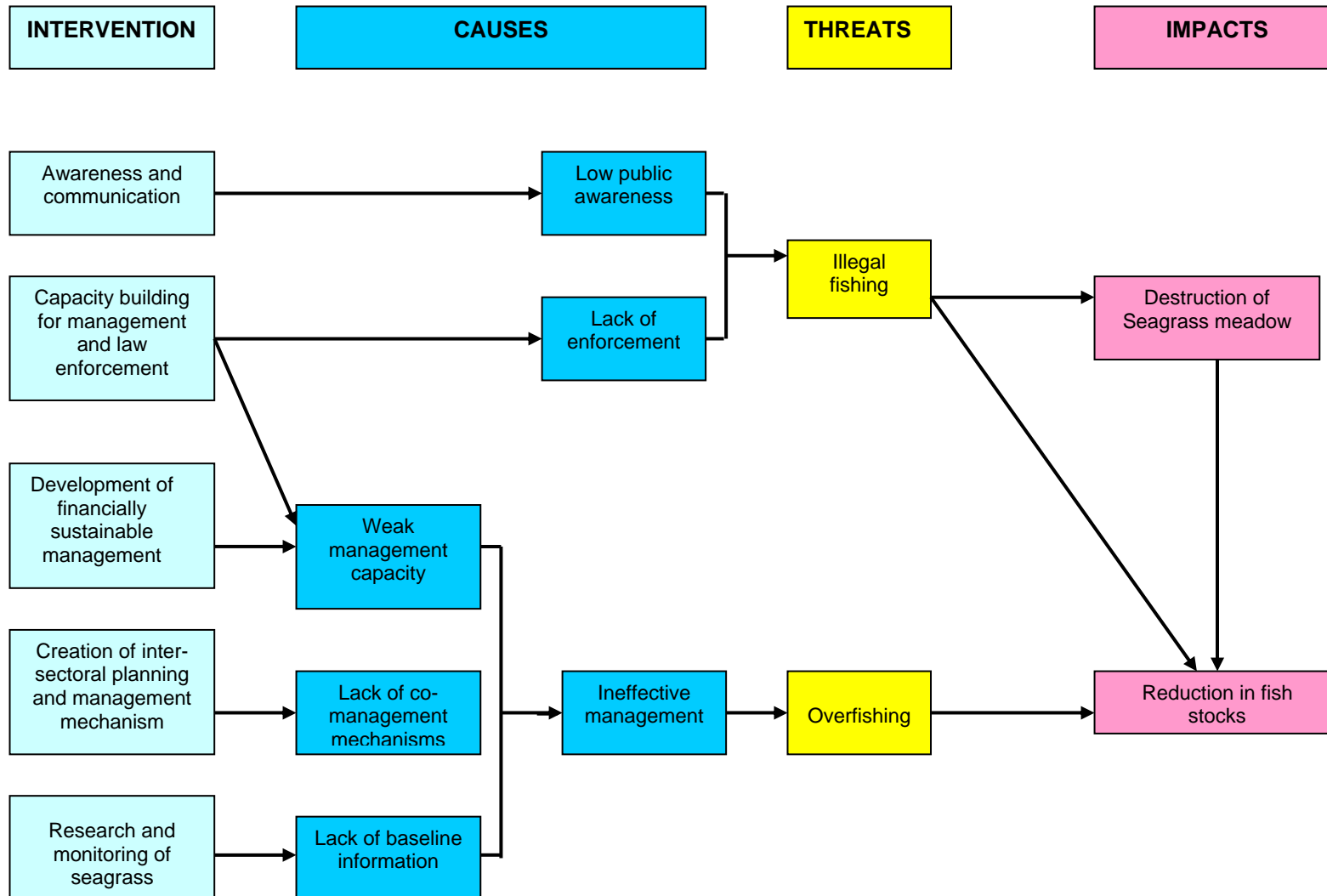
The project will be launched via an "opening ceremony day", to celebrate the seagrass ecosystem and biodiversity conservation work, in order to introduce the project team, the project objectives and planned activities. The ceremony day will be taken place as a big workshop, in which all levels of stakeholders will be invited to participate. At the workshop, a discussion will be carried out to ask participants to identify priorities, opportunities, and particular needs.

During the course of the project stakeholder meeting and consultation will be organized to plan the way forward and make decisions in implementing activities. These results will be used as synergy for integration with other meetings. A clear implementing plan will be resulted from a series of discussion from all relevant stakeholders. The plan will be approved by the MB and implemented by site manager and SEA.

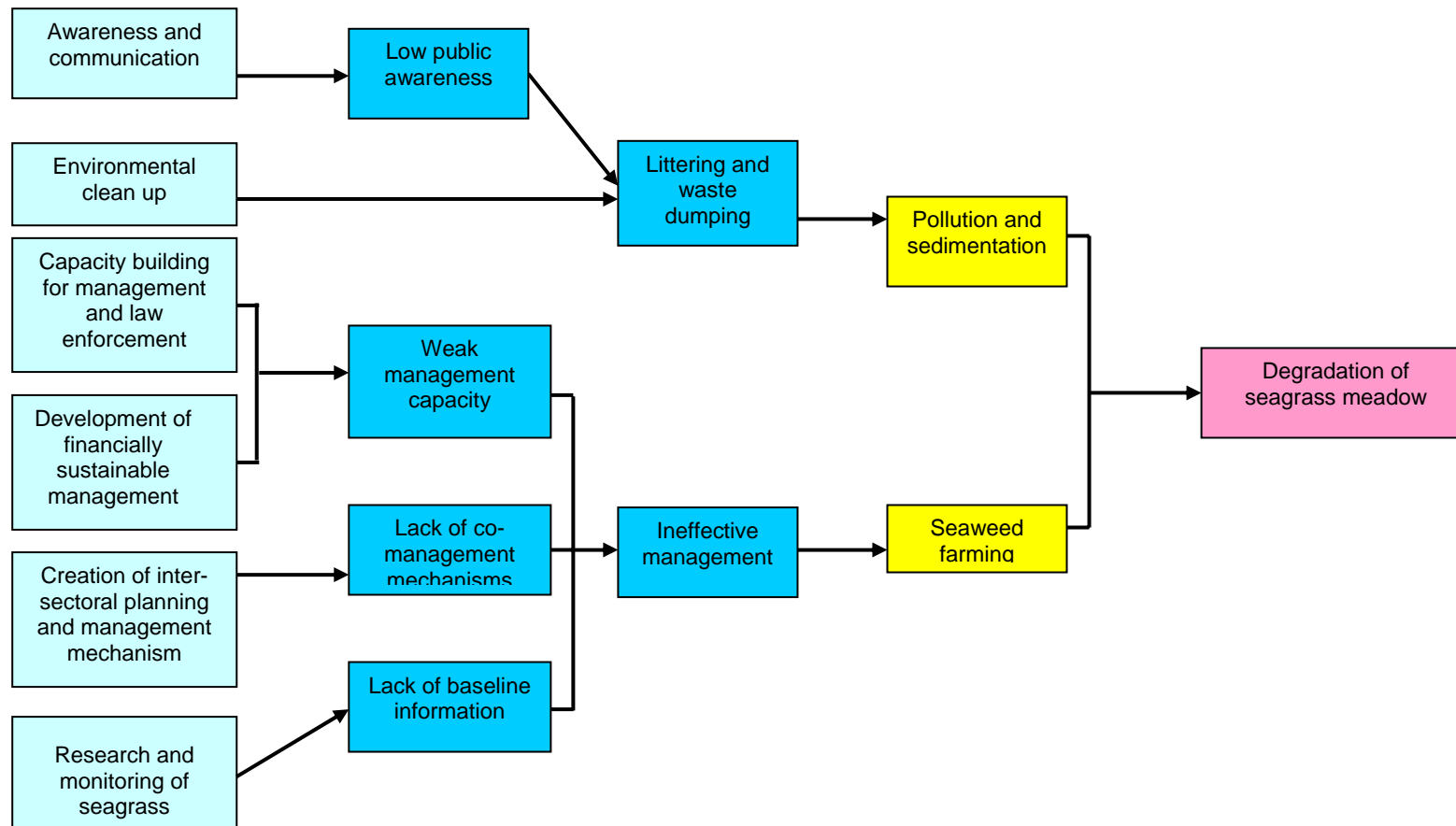
4. Social and Participatory Issues:

- The SEA and Site Manager will need to be aware of gender issues during the implementation of the project. Certain project activities will need to be devised with gender roles in mind and in some cases activities should be specifically targeted towards women. This is likely to be particularly important in work relating to substantive income generation.
- The economic aspects of this project will be most effective if they are targeted on the neediest in the community – particularly those on low income. However, it is usually very difficult to involve the people with low income as they cannot afford to take time out from making a living, or because it is hard to reach them to inform them about an initiative, or simply because they may lack the confidence to join in. To reach those most needy communities, a special effort and commitment from the site manager and SEA will be needed. In this case, village leaders or village elders will be used as a facilitator for communication and coordination with those local community groups, and a special effort will be used to encourage them to joint the project.

Appendix 3 - Causal Chain Analysis of Threats to Seagrass in Prek Ampil, Kampot Province (1)



Causal Chain Analysis of Threats to Seagrass in Prek Ampil, Kampot Province (2)



Appendix 4 - Monitoring and Evaluation Plan

1. Collecting and Reporting Data on Performance Indicators:

The monitoring and evaluation of the project will require a set of key indicators of success. Monitoring and evaluation programmes will be conducted by certain assigned consultants. Participatory evaluation at selected sites and questionnaire surveys will provide key information for monitoring and evaluation activities. Methods and frequency of data collection will be determined by the assigned evaluator to follow the donor requirements. The important indicators are as follows:

- Improved management capacity of Kampot province with the development of management plan, expansion of GIS database and more information on biodiversity and resource use of seagrass ecosystem.
- Established appropriate coordinating mechanism for management of coastal resources in Kampot Province and developed information exchange and management integration with Viet Nam colleagues.
- Established seagrass monitoring methodology.
- Annual monitoring of seagrass demonstration site.
- Increased awareness on importance of coastal ecosystems and balance of development and conservation.
- Trained 20 people to do monitoring of seagrass.
- Reduction of litter on beaches.
- Reduction in illegal fishing in seagrass areas.
- Clear zoning of areas within demonstration site.
- Present and potential future use, value net income and costs identified.
- Alternative uses and potential conflicts identified.
- Established financial management mechanisms to initiate financial sustainability.
- Improved benefit for local communities with more resources in near-shore water for public fishing.

2. Schedule of Monitoring and Evaluation:

Monitoring/Evaluation	2006				2007				2008	
	1	2	3	4	1	2	3	4	1	2
Ecological monitoring										
Mid-term review										
Evaluation the Progress by management board										
Evaluation in the end of project										

Formally independent evaluation of the project will be carried out at the mid point of the project, twelve months after the start of the project, and at the end of the project, three months before the termination date. Both reviews will be led by an external evaluator with experience in environmental conservation and community development. Each study will take the form of a joint evaluation by project staff and the evaluator into the management and environmental aspects of the project and an independent review of community gains and stakeholder participation by the evaluator. Evaluation of the progress of the project will be regularly carried out by the management board. Long-term ecological and socio-economic monitoring programme will be also performed by the Department of Fisheries.

3. Description of How Monitoring and Evaluation Activities will Involve Participants and Stakeholders:

Monitoring and evaluation will be an integral part of the stakeholder participation element of the project. For each project activity and event, participants will carry out a simple evaluation activity, wherever possible to meet their own evaluation criteria. Stakeholders will be asked to give their perceptions of the project as part of the formal independent evaluation activities.

4. Resources that will be allocated to Monitoring and Evaluation:

Budgetary provision of US\$6,000 has been allocated to the mid-term and terminal evaluations to cover consultancy fees and expenses for external evaluators.

5. Using Monitoring and Evaluation Results for Management

A six monthly monitoring progress report will be presented to the project management board by the Site Manager, who will highlight key issues for discussion at management board meetings. As far as possible, reporting to the management board will be integrated with reporting to the UNEP/GEF/PCU as well. The Management Advisory Group will also receive quarterly updates on key issue.

Appendix 4 - Estimated Budget (US\$)

Table 1 Estimated Budget by Components and Activities.

ACTIVITY		GEF					Co-Funding					TOTAL			
		1000	2000	3000	4000	5000	1000	2000	3000	4000	5000	GEF	in-cash	In-kind	Total
1.1	National Actions														
1.1.1	Recruitment of a site manager and an administrative assistant	21,000										21,000			21,000
1.1.2	Purchase office equipment and furniture				8,740	1,000				15,000		9,740	0	15,000	24,740
1.1.3	Organisation of quarter meetings for MAG (10 meetings, 6 people)			2,860		200	150		5,870			3,060	420	5,600	9,080
1.1.4	Organisation of regular meetings for MB twice a year (for agreement, decision making) (5 meetings)			1,680		100	75		7,135			1,780	210	7,000	8,990
1.1.5	Project monitoring (by MB) and evaluation (by an independent institution), auditing					9,000						9,000	0	0	9,000
1.2	Bilateral Actions														
1.2.1	Joint meeting of MAGs once a year (for cooperative framework, technical issues, indicator, monitoring methodology) (1 time in Kampot, 2 times in Phu Quoc)			6,790			15		5,945			6,790	80	5,880	12,750
1.2.2	Joint meeting of MBs once a year (for agreement, decision making) (1 time in Kampot, 2 times in Phu Quoc)			16,990			15		15,745			16,990	80	15,680	32,750
2.1	Map baseline and satellite image														
2.1.1	SEA START RC to prepare a draft base map from satellite image		2,000									2,000	0	0	2,000
2.2	Field Surveys														
2.2.1	Field survey for percentage cover, species composition, depth	3,350		0	2,700		4,245		405			6,050	450	4,200	10,700
2.2.2	Mapping and identification of recognised zones based on above field data											0	0	0	0
2.3	Use Surveys (for GIS database and Financial Sustainability)														
2.3.1	Survey on socio-economics and uses/financial sustainability	3,791	0				5,910		567			3,791	597	5,880	10,268
2.3.2	Analyses present and potential uses, values, net incomes and costs	300	0									300			300
2.3.3	Analysis of potential use conflicts and future management needs cost	300	0									300			300
2.3.4	Prepare data for GIS database (mapping and identifying zones)											0			0

Table 1 cont. Estimated Budget by Components and Activities.

ACTIVITY		GEF					Co-Funding					TOTAL			
		1000	2000	3000	4000	5000	1000	2000	3000	4000	5000	GEF	in-cash	In-kind	Total
2.4	GIS Database														
2.4.1	GIS database Development (by GIS expert)	1,000	0									1,000			1,000
3.1	Development of Management Plan														
3.1.1	Draft management plan (zones, regulation, strategy, monitoring methodology on biological resource and use, establishment of financial mechanisms for sustainability, etc.)	2,000	3,000									5,000			5,000
3.1.2	Review the management plan (by stakeholders in meetings at village level)			1,320					4,200			1,320	0	4,200	5,520
3.1.3	Review the management plan (by MAG and MB in meetings)											0			0
3.1.4	Sign the management plan by the governor											0			0
3.1.5	Translation of the Management Plan					560						560			560
3.1.6	Publication of the Management Plan in Khmer (100 copies)					1,000						1,000			1,000
4.1	Surveillance														
4.1.1	Demarcation of zones (buoy setting)	370	0	0	24,000	3,200	2,395		65			27,570	80	2,380	30,030
4.1.2	Small patrol boat purchasing				1,500							1,500			1,500
4.1.3	Regular patrolling with involvement of local community		5,460									5,460			5,460
4.2	Biological and Use Monitoring														
4.2.1	Development of methodology for monitoring		2,000									2,000			2,000
4.2.2	Regular monitoring activity with involvement of local community	845	0	536		320	4,495		54			1,701	69	4,480	6,250
5.1	Awareness														
5.1.1	Development and publication of posters on seagrass biodiversity and sustainable use					2,000						2,000			2,000
5.1.2	Development and publication of leaflets on seagrass biodiversity and sustainable use (5000 copies)					2,500						2,500			2,500
5.1.3	Production of short Video films on seagrass and use (6 of 15-minute movies)					2,555						2,555			2,555
5.1.4	Broadcasting on Public Television (9 times for 15 minutes each)					600						600			600
5.1.5	Seminar on seagrass biodiversity and sustainable use for policy makers at provincial and district levels (20 participants)	68		360			1,842		42			428	64	1,820	2,312

Table 1 cont. Estimated Budget by Components and Activities.

ACTIVITY		GEF					Co-Funding					TOTAL			
		1000	2000	3000	4000	5000	1000	2000	3000	4000	5000	GEF	in-cash	In-kind	Total
5.1.6	Workshops at village level about significant seagrass resources (15 workshops by site manager)			1,950			21,000					1,950	0	21,000	22,950
5.1.7	Study tour of village and community leaders for visiting Phu Quoc demonstration site (5 days)			4,389			616		4,675			4,389	1,441	3,850	9,680
5.1.8	Study tour of MB and MAG to visit the most successful seagrass demonstration site (7 days)			9,705			1,135		9,100			9,705	3,235	7,000	19,940
5.2	Training														
5.2.1	Training on project management and administration for site manager and 5 members of MAG, MB (including financing)	1,215	3,000				3,555					4,215	405	3,150	7,770
5.2.2	Training on English and report writing for site manager and 5 members of MAG, MB	1,215	3,000	0			3,555					4,215	405	3,150	7,770
5.2.3	Training on seagrass monitoring for 20 most relevant people (monitors, site manager, and local community)		0	2,678					9,490			2,678	110	9,380	12,168
	TOTAL	35,454	18,460	49,258	36,940	23,035	49,003	0	63,293	15,000	0	163,147	7,646	119,650	290,443

Table 2 Budget Allocation by Object of Expenditure.

Object of Expenditure	1 st 2006				2 nd 2006				1 st 2007				2nd 2007				1st 2008				Grand Total			
	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total
		In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind	
1000.Project Personal Component																								
1100 Project Personnel																								
1101 Recruitment of a site manager (1.1.1)	3,600			3,600	3,600			3,600	3,600			3,600	3,600			3,600	3,600			3,600	18,000	0	0	18,000
1199 Total	3,600	0	0	3,600	3,600	0	0	3,600	3,600	0	0	3,600	3,600	0	0	3,600	3,600	0	0	3,600	18,000	0	0	18,000
1200 Consultant																								
1201 Consultant for Field survey for percentage cover, species (2.2.1)	3,350	45	4,200	7,595					0			0				0				0	3,350	45	4,200	7,595
1202 Survey on socio-economics and uses (2.3.1)	3,791	30	5,880	9,701					0			0				0				0	3,791	30	5,880	9,701
1203 Analyses present and potential uses, values, net incomes, costs (2.3.2)				0	300			300				0				0				0	300	0	0	300
1204 Analyses present and potential uses, values, net incomes and costs (2.3.3)				0	300		0	300				0				0				0	300	0	0	300
1205 GIS database Development (by GIS expert) (2.4.1)				0	1,000			1,000				0				0				0	1,000	0	0	1,000
1206 Consultant for Draft management plan (3.1.1)				0				0	2,000			2,000				0				0	2,000	0	0	2,000
1207 Demarcation of zones (buoy setting) (4.1.1)				0				0				0	370	15	2,380	2,765				0	370	15	2,380	2,765
1208 Regular monitoring activity (4.2.2)				0				0	845	15	4,480	5,340				0				0	845	15	4,480	5,340
1209 Workshops at village level (5.1.6)				0			21,000	21,000				0				0				0	0	0	21,000	21,000
1299 Total	7,141	75	10,080	17,296	1,600	0	21,000	22,600	2,845	15	4,480	7,340	370	15	2,380	2,765	0	0	0	0	11,956	105	37,940	50,001
1300 Administration support																								
1301 Administrative Assistant (1.1.1)	600			600	600			600	600			600	600			600	600			600	3,000	0	0	3,000
1399 Total	600	0	0	600	600	0	0	600	600	0	0	600	600	0	0	600	600	0	0	600	3,000	0	0	3,000
1600 Travel on official business																								
1601 Travel for Organisation of quarter meetings for MAG (1.1.3)		30		30		30		30		30		30		30		30		30		30		150	0	150
1602 Travel for Organisation of regular meetings for MB twice a year (1.1.4)		15		15		15		15		15		15		15		15		15		15	0	75	0	75
1603 Travel for Joint meeting of MAGs once a year (1.2.1)				0		15		15				0				0				0	0	15	0	15
1604 Travel for joint meeting of MBs once a year (1.2.2)	0			0		15		15				0	0			0				0	0	15	0	15
1605 Travel for Seminar on seagrass biodiversity and sustainable use (5.1.5)				0	68	22	1,820	1,910	0		0	0	0		0	0				0	68	22	1,820	1,910
1606 International travel for Study tour of village and community leaders (5.1.7)				0				0		616	0	616				0				0	0	616	0	616
1607 International travel for Study tour of MB and MAG (5.1.8)				0				0	0		0	0		1,135		1,135				0	0	1,135	0	1,135
1608 Training on project management and administration (5.2.1)	1,215	405	3,150	4,770				0				0				0				0	1,215	405	3,150	4,770
1609 Training on English and report writing (5.2.2)	1,215	405	3,150	4,770				0				0				0				0	1,215	405	3,150	4,770
1699 Total	2,430	855	6,300	9,585	68	97	1,820	1,985	0	661	0	661	0	1,180	0	1,180	0	45	0	45	2,498	2,838	8,120	13,456
1999 Component Total	13,771	930	16,380	31,081	5,868	97	22,820	28,785	7,045	676	4,480	12,201	4,570	1,195	2,380	8,145	4,200	45	0	4,245	35,454	2,943	46,060	84,457
2000.Sub-Contract Component																								
2200 Sub-Contract Component																								
2201 SEA START RC to prepare a draft base map (2.1.1)	2,000			2,000				0	0	0	0	0				0				0	2,000	0	0	2,000
2202 Draft management plan (3.1.1)				0	0	0	0	0	3,000			3,000				0				0	3,000	0	0	3,000
2203 Regular patrolling with involvement of local community (4.1.3)				0	0	0	0	0				0	2,730	0	0	2,730	2,730			2,730	5,460	0	0	5,460
2204 Development of methodology for monitoring (4.2.1)	2,000			2,000	0	0		0		0		0	0	0		0				0	2,000	0	0	2,000
2205 Training on project management and administration (5.2.1)	3,000			3,000	0	0	0	0				0				0				0	3,000	0	0	3,000
2206 Training on English and report writing (5.2.2)	3,000			3,000	0			0				0				0				0	3,000	0	0	3,000
2299 Total	10,000	0	0	10,000	0	0	0	0	3,000	0	0	3,000	2,730	0	0	2,730	2,730	0	0	2,730	18,460	0	0	18,460
2999 Component Total	10,000	0	0	10,000	0	0	0	0	3,000	0	0	3,000	2,730	0	0	2,730	2,730	0	0	2,730	18,460	0	0	18,460

Table 2 cont. Budget Allocation by Object of Expenditure.

Object of Expenditure	1 st 2006				2 nd 2006				1 st 2007				2nd 2007				1st 2008				Grand Total			
	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total
		In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind	
3000. Training Component																								
3200 Group Training																								
3201 Activities (2.2.1), (2.3.1)		972		972				0				0				0				0	0	972	0	972
3202 Regular monitoring activity (4.2.2)				0				0	268	27		295				0	268	27		295	536	54	0	590
3203 Seminar on seagrass biodiversity and sustainable use (5.1.5)				0	360	42		402				0				0				0	360	42	0	402
3204 Workshops at village level (5.1.6)				0	1,950			1,950				0				0				0	1,950	0	0	1,950
3205 Study tour of village and community leaders (5.1.7)				0	4,389	825	3,850	9,064				0				0				0	4,389	825	3,850	9,064
3206 Study tour of MB and MAG (5.1.8)				0				0				0	9,705	2,100	7,000	18,805				0	9,705	2,100	7,000	18,805
3207 Training on seagrass monitoring for 20 most relevant people (5.2.3)	2,678	110	9,380	12,168				0				0				0				0	2,678	110	9,380	12,168
3299 Total	2,678	1,082	9,380	13,140	6,699	867	3,850	11,416	268	27	0	295	9,705	2,100	7,000	18,805	268	27	0	295	19,618	4,103	20,230	43,951
3300 Meeting/Conference																								
3301 Organisation of quarter meetings for MAG (1.1.3)	572	54	1,120	1,746	572	54	1,120	1,746	572	54	1,120	1,746	572	54	1,120	1,746	572	54	1,120	1,746	2,860	270	5,600	8,730
3302 Organisation of regular meetings for MB twice a year (1.1.4)	336	27	1,400	1,763	336	27	1,400	1,763	336	27	1,400	1,763	336	27	1,400	1,763	336	27	1,400	1,763	1,680	135	7,000	8,815
3303 Joint meeting of MAGs once a year (1.2.1)				0	2,263	65	1,960	4,288	2,263		1,960	4,223				0	2,264		1,960	4,224	6,790	65	5,880	12,735
3304 Joint meeting of MBs once a year (1.2.2)				0	5,663	65	5,226	10,954	5,663		5,226	10,889				0	5,664		5,228	10,892	16,990	65	15,680	32,735
3305 Review the management plan (3.1.2)				0				0	1,320		4,200	5,520				0				0	1,320	0	4,200	5,520
3306 Demarcation of zones (buoy setting) (4.1.1)				0				0	0			0		65		65				0	0	65	0	65
3399 Total	908	81	2,520	3,509	8,834	211	9,706	18,751	10,154	81	13,906	24,141	908	146	2,520	3,574	8,836	81	9,708	18,625	29,640	600	38,360	68,600
3999 Component Total	3,586	1,163	11,900	16,649	15,533	1,078	13,556	30,167	10,422	108	13,906	24,436	10,613	2,246	9,520	22,379	9,104	108	9,708	18,920	49,258	4,703	58,590	112,551
4000. Equipment Component																								
4100 Expendable Equipment																								
4101 Stationary for maintenance of the project office (1.1.2)	300			300	300			300	300			300	300			300	300			300	1,500	0	0	1,500
4199 Total	300			300	300			300	300			300	300			300	300			300	1,500	0	0	1,500
4200 Non Expendable Equipment																								
4201 Computer, printer, and photocopier (1.1.2)	6,940			6,940				0				0				0				0	6,940	0	0	6,940
4299 Total	6,940	0	0	6,940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,940	0	0	6,940
4300 Premises																								
4301 Purchase office equipment and furniture (1.1.2)	300		3,000	3,300			3,000	3,000			3,000	3,000			3,000	3,000			3,000	3,000	300	0	15,000	15,300
4302 Boat and equipment hiring for field survey (2.2.1)	2,700			2,700				0				0				0				0	2,700	0	0	2,700
4303 Demarcation of zones (buoy setting) (4.1.1)				0				0				0	24,000			24,000				0	24,000	0	0	24,000
4304 Small patrol boat purchasing (4.1.2)				0				0				0	1,500			1,500				0	1,500	0	0	1,500
4399 Total	3,000	0	3,000	6,000	0	0	3,000	3,000	0	0	3,000	3,000	25,500	0	3,000	28,500	0	0	3,000	3,000	28,500	0	15,000	43,500
4999 Component Total	10,240	0	3,000	13,240	300	0	3,000	3,300	300	0	3,000	3,300	25,800	0	3,000	28,800	300	0	3,000	3,300	36,940	0	15,000	51,940
5000. Miscellaneous component																								
5200 Reporting Costs																								
5201 Project monitoring and evaluation, auditing (1.1.5)				0	3,500			3,500				0	3,500			3,500	2,000			2,000	9,000	0	0	9,000
5202 Translation of the Management Plan (3.1.5)				0				0				0	560			560				0	560	0	0	560
5203 Publication of the Management Plan in Khmer (3.1.6)	0			0				0				0	1,000			1,000				0	1,000	0	0	1,000
5204 Development and publication of posters (5.1.1)	2,000			2,000				0				0				0				0	2,000	0	0	2,000
5205 Development and publication of leaflets (5.1.2)	2,500			2,500				0				0				0				0	2,500	0	0	2,500
5206 Production of short Video films (5.1.3)				0				0	2,555			2,555								0	2,555	0	0	2,555
5207 Broadcasting on Public Television (5.1.4)	0			0				0	200			200	200			200	200			200	600	0	0	600
5299 Total	4,500	0	0	4,500	3,500	0	0	3,500	2,755	0	0	2,755	5,260	0	0	5,260	2,200	0	0	2,200	18,215	0	0	18,215

Table 2 cont. Budget Allocation by Object of Expenditure.

Object of Expenditure		1 st 2006				2 nd 2006				1 st 2007				2nd 2007				1st 2008				Grand Total			
		GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total	GEF	Co-funding		Total
			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind			In cash	In kind					
5300	Sundry																								
5301	Purchase office equipment and furniture (1.1.2)	200			200	200			200	200			200	200			200	200			200	1,000	0	0	1,000
5302	Activities (1.1.3), (1.1.4)	60			60	60			60	60			60	60			60	60			60	300	0	0	300
5303	Activity (4.1.1)				0				0				3,200				3,200				0	3,200	0	0	3,200
5304	Activity (4.2.2)				0				0	160			160	160			160				0	320	0	0	320
5399	Total	260	0	0	260	260	0	0	260	420	0	0	420	3,620	0	0	3,620	260	0	0	260	4,820	0	0	4,820
5999	Component Total	4,760	0	0	4,760	3,760	0	0	3,760	3,175	0	0	3,175	8,880	0	0	8,880	2,460	0	0	2,460	23,035	0	0	23,035
9999	Project Total	42,357	2,093	31,280	75,730	25,461	1,175	39,376	66,012	23,942	784	21,386	46,112	52,593	3,441	14,900	70,934	18,794	153	12,708	31,655	163,147	7,646	119,650	290,443
	Balance																				163,147	7,646	119,650	290,443	

Table 3 Detailed Budget with Description.

Sub-components/Activities		GEF	Co - Funding		Total
Budget (US\$)			In-cash	In-kind	
1.1	National Actions	44,580	630	27,600	72,810
1.1.1	Recruitment of a site manager				
	Demonstration site manager (1 person, \$600/month, 30 months)	18,000			18,000
	Administrative assistant to the site manager (30 person months, \$100/month)	3,000			3,000
1.1.2	Purchase office equipment and furniture				
	Project Office rental in Kampot (US\$500/month, 30 months)	0	0	15,000	15,000
	Communication Equipment (internet, phone, fax, postage) (1set)	1,500	0	0	1,500
	Computer (2 sets)	2,000	0	0	2,000
	Photocopy (1 set)	3,100	0	0	3,100
	Printer (1 set)	340	0	0	340
	Tables and chairs (2 sets)	300	0	0	300
	Stationery	1,500	0	0	1,500
	Miscellaneous	1,000	0	0	1,000
1.1.3	Organisation of quarterly meetings for MAG (10 meetings, 8 people)				
	Travel of people from Phnom Penh for official business (10 times x 2 pers)	450	150	0	600
	Accommodation for people from Phnom Penh for domestic meeting (10 times x 2 days x 2 pers)	810	270	1,400	2,480
	Food for Local Participants (6 pers. x 1 day x 10 times)	300	0	4,200	4,500
	Meeting room arrangement (10 times)	400	0	0	400
	Meeting material (folders, paper, pens) (10 meetings)	300	0	0	300
	Equipment for presentations (10 times)	600	0	0	600
	Miscellaneous (10 meetings)	200	0	0	200
1.1.4	Organisation of regular meetings for MB twice a year (for agreement, decision making) (5 meetings)				
	Travel of people from Phnom Penh for official business (5 times x 2 pers)	225	75	0	300
	Accommodation of people from Phnom Penh for meeting (5 timesx2 days x 2 pers)	405	135	1,400	1,940
	Food for Local Participants (16 persx1dayx 5 times)	400	0	5,600	6,000
	Meeting room arrangement (5 times)	200	0	0	200
	Equipment for presentations (5 meetings)	300	0	0	300
	Meeting material (folders, paper, pens) (5 meetings)	150	0	0	150
	Miscellaneous (5 meetings)	100	0	0	100
1.1.5	Project monitoring (by MB) and evaluation (by an independent institution), auditing				
	Project Monitoring (to be done by MB in their regular meetings)	0	0	0	0
	Project Evaluation (by an independent institution) (3 times)	6,000	0	0	6,000
	Auditing (3 times)	3,000	0	0	3,000
1.2	Bilateral Actions	23,780	160	21,560	45,500
1.2.1	Joint meeting of MAGs once a year (for cooperative framework, technical issues, indicator, monitoring methodology) (1 time in Kampot, 2 times in Phu Quoc)				
	International travel for meetings in Phu Quoc (2 times x 6 pers.)	2,400	0	0	2,400
	Accommodation for international meeting in Phu Quoc (2 times x 5 days x 6 pers.)	3,600	0	4,200	7,800
	Travel of people from Phnom Penh for provincial meeting in Kampot (1 time x 2 pers.)	45	15	0	60
	Accommodation of people from Phnom Penh for provincial meeting in Kampot (1 time x 5 days x 2 pers.)	205	65	0	270
	Food for Local Participants for provincial meetings (1 time x 6 pers. x 4 days)	120	0	1,680	1,800
	Meeting room arrangement (4 days of 1 meeting in Kampot)	200	0	0	200
	Meeting material (folders, paper, pens) (1 meeting in Kampot)	60	0	0	60
	Equipment for presentations (1 meeting in Kampot)	60	0	0	60
	Miscellaneous (1 meeting in Kampot)	100	0	0	100

Table 3 cont. Detailed Budget with Description.

Sub-components/Activities		GEF	Co - Funding		Total
Budget (US\$)			In-cash	In-kind	
1.2.2	Joint meeting of MBs once a year (for agreement, decision making) (1 time in Kampot, 2 times in Phu Quoc)				
	International travel for meetings in Phu Quoc (2 times x 16 pers.)	6,400	0	0	6,400
	Accommodation for international meeting in Phu Quoc (2 times x 5 days x 16 pers.)	9,600	0	11,200	20,800
	Travel of people from Phnom Penh for provincial meeting in Kampot (1 time x 2 pers.)	45	15	0	60
	Accommodation of people from Phnom Penh for provincial meeting in Kampot (1 time x 5 days x 2 pers.)	205	65	0	270
	Food for Local Participants for provincial meeting (1 time x 16 pers. x 4 days)	320	0	4,480	4,800
	Meeting room arrangement (4 days of 1 meeting in Kampot)	200	0	0	200
	Meeting material (folders, paper, pens) (1 meeting in Kampot)	60	0	0	60
	Equipment for presentations (1 meeting in Kampot)	60	0	0	60
	Miscellaneous (1 meeting in Kampot)	100	0	0	100
2.1	Map baseline and satellite image	2,000	0	0	2,000
2.1.1	SEA START RC to prepare a draft base map from satellite image				
	Draft base map by SEA START RC	2,000	2,000	2,000	2,000
2.2	Field Surveys	6,050	450	4,200	10,700
2.2.1	Field survey for percentage cover, species composition, depth by a technical institution				
	Designing and supervising field survey, report writing (Consultant fee)	2,000	0	0	2,000
	Travel of six experts from TI in Phnom Penh (1time x 6 pers.)	135	45	0	180
	Accommodation for six experts from TI in Phnom Penh (1 time x 10 days x 6 pers.)	1,215	405	4,200	5,820
	Boat hiring (3 small boats x 10 days)	1,200	0	0	1,200
	Equipment hiring (3 sets of diving gear/day for 10 days)	1,500	0	0	1,500
2.2.2	Mapping and identification of recognised zones based on above field data				
	To be done by the Site Manager	0	0	0	0
2.3	Use Surveys (for GIS database and Financial Sustainability)	4,391	597	5,880	10,868
2.3.1	Survey on socio-economics and uses/financial sustainability				
	Designing tool and supervising field survey, report writing (Consultant fee)	2,000	0	0	2,000
	Travel of 4 experts from TI in Phnom Penh (1 time x 4 pers.)	90	30	0	120
	Accommodation for 4 experts (4 pers x 21 days)	1,701	567	5,880	8,148
2.3.2	Analyses present and potential uses, values, net incomes and costs				
	Analysing present and potential uses, values, net incomes and costs by an expert (2 person days)	300	0	0	300
2.3.3	Analysis of potential use conflicts and future management needs cost				
	Analysing use conflicts and management needs costs by an expert (2 person days)	300	0	0	300
2.3.4	Prepare data for GIS database (mapping and identifying zones)				
	To be done by the Site Manager	0	0	0	0
2.4	GIS Database	1,000	0	0	1,000
2.4.1	GIS database Development (by GIS expert)				
	All data are put together into GIS database by an GIS technical institution (10 person days)	1,000	0	0	1,000
3.1	Development of Management Plan	7,880	0	4,200	12,080
3.1.1	Draft management plan (zones, regulation, strategy, monitoring methodology on biological resource and use, establishment of financial mechanisms for sustainability, etc.)				
	Review existing data and information, regulation of the site (20 person days for consultant fee)	2,000	0	0	2,000
	Draft the Management Plan by a Technical Institution (30 person days for consultant fee)	3,000	0	0	3,000
3.1.2	Review the management plan in 4 stakeholders meetings: (3 meetings for village level, 1 for higher level & private sector)				
	Lunch for local participants (60 people x 1 day x 4 meetings)	1,200	0	4,200	5,400
	Stationeries (4 meetings)	120	0	0	120
	Results from discussion will be incorporated by the Site Manager	0	0	0	0
3.1.3	Review the management plan (by MAG and MB in meetings)				
	The draft plan will be reviewed by MAG and MB in their regular meetings	0	0	0	0
3.1.4	Sign the management plan by the governor				
	The final draft of management will be signed by the Kampot Governor	0	0	0	0

Table 3 cont. Detailed Budget with Description.

Sub-components/Activities		GEF	Co – Funding		Total
Budget (US\$)			In-cash	In-kind	
3.1.5	Translation of the Management Plan				
	Translation the adopted Management Plan (about 70 pages)	560	0	0	560
3.1.6	Publication of the Management Plan in Khmer (100 copies)				
	The adopted Management Plan will be published in Khmer (100 copies)	1,000	0	0	1,000
4.1	Surveillance	34,530	80	2,380	36,990
4.1.1	Demarcation of zones (buoy setting)				
	Travel of people from Phnom Penh (1 time x 2 pers.)	45	15		60
	Accommodation of people from Phnom Penh (1 time x 5 days x 2 pers.)	205	65	700	970
	Buoys and ropes for setting core and community use zones for 3 pairs of zones (3 x2 x 8 buoys)	24,000	0	0	24,000
	Food for local participants (6 pers.x4days)	120	0	1,680	1,800
	Boat renting (2 boatsx4 days)	3,200	0	0	3,200
4.1.2	Small patrol boat purchasing				
	A small boat (fibber glass with two small petrol engines)	1,500			1,500
4.1.3	Regular patrolling with involvement of local community				
	Petrol (300 litres/month x 12 months)	3,060	0	0	3,060
	Allowance for enforcement staff (2pers. X 12 months)	2,400	0	0	2,400
4.2	Biological and Use Monitoring	3,701	69	4,480	8,250
4.2.1	Development of methodology for monitoring				
	Drafted by monitoring method by a TI	2,000	0	0	2,000
	Jointly reviewed by MAGs (part of joint MAGs meetings)	0	0	0	0
4.2.2	Regular monitoring activity with involvement of local community				
	Practical guiding fee for two experts for 1 st time of monitoring	800	0	0	800
	Travel of two experts from Phnom Penh (2 people x 1time)	45	15	0	60
	Accommodation for two experts (2 people x 5days)	216	54	0	270
	Boat hiring (1 small boats x 4 days x 2 times)	320	0	0	320
	Food for local participants (2 times x 4 days x 8 people)	320	0	4,480	4,800
5.1	Awareness	24,127	4,740	33,670	62,537
5.1.1	Development and publication of posters on seagrass biodiversity and sustainable use				
	Publication of poster (500 copies)	2,000	0	0	2,000
5.1.2	Development and publication of leaflets on seagrass biodiversity and sustainable use (5000 copies)				
	Publication of 5,000 seagrass leaflets	2,500	0	0	2,500
5.1.3	Production of short Video films on seagrass and use (12 times for 15 minutes each)				
	Video production (camera hiring, director, etc..)	1,200	0	0	1,200
	Making (editing) Video film (6 scenes)	1,200	0	0	1,200
	Distribution to 31 villages in 9 communes	155	0	0	155
5.1.4	Broadcasting on Public Television (12 times for 15 minutes each)				
	TV broadcasting (12 times x15 minutes)	600	0	0	600
5.1.5	Seminar on seagrass biodiversity and sustainable use for policy makers at provincial and district levels (20 participants)				
	Travel of people from Phnom Penh for official business (1 time x 3 pers.)	68	22	0	90
	Accommodation of people from Phnom Penh (1 times x 2 days x 3 pers.)	120	42	420	582
	Food for Local Participants (20 pers. X 1dayx1 time)	100	0	1,400	1,500
	Seminar room arrangements	50	0	0	50
	Equipment for presentations (1 seminar)	60	0	0	60
	Stationeries	30	0	0	30
5.1.6	Workshops at village level about significant seagrass resources (5 workshops by site manager)				
	Lunch for local participants (60 peoplex1dayx5 workshops)	1,500	0	21,000	22,500
	Equipment for presentations (5 workshops)	300	0	0	300
	Stationeries (5 workshops)	150	0	0	150
5.1.7	Study tour of village and community leaders for visiting Phu Quoc demonstration site (5 days)				
	International Travel to Phu Quoc (10 Village leaders+1 Interpreter)	1,650	550	0	2,200
	Accommodation in Phu Quoc (11 pers. X 5days)	2,475	825	3,850	7,150
	Travelling of village leaders from hometown to P. Penh airport (11pers.)	264	66	0	330
5.1.8	Study tour of MB and MAG to visit the most successful seagrass demonstration site (7 days)				
	International Travel (20 members)	3,000	1,000	0	4,000
	Accommodation in demonstration site area (20 pers. X 5days)	6,300	2,100	7,000	15,400
	Local travel of provincial members from their hometown to P. Penh airport (18 pers.)	405	135	0	540

Table 3 cont. Detailed Budget with Description.

Sub-components/Activities		GEF	Co – Funding		Total
Budget (US\$)			In-cash	In-kind	
5.2	Training	11,108	920	15,680	27,708
5.2.1	Training on project management and administration for site manager and 5 members of MAG and MB (including financing)				
	A training course on project management and administration for the Site Manager and 5 members of MAG and MB by a TI	3,000	0	0	3,000
	Travelling of 6 training to Phnom Penh (3 times/month for 3 months)	1,215	405	3,150	4,770
5.2.2	Training on English and report writing for site manager and 5 members of MAG and MB				
	A training course on English and Report Writing for the Site Manager and 5 members of MAG and MB by a TI	3,000	0	0	3,000
	Travelling of 6 trainees to Phnom Penh (3 times/month for 3 month)	1,215	405	3,150	4,770
5.2.3	Training on seagrass monitoring for 20 most relevant people (monitors, site manager, and local community)				
	Invited regional expert on seagrass monitoring (airfare x1 per. x 1 time)	300	0	0	300
	Training fee (US\$100x6days)	600	0	0	600
	Travel of people from Phnom Penh for official business (1 times x 2 pers.)	45	15	0	60
	Accommodation of people from Phnom Penh (1 time x 7 days x 2 pers.)	283	95	980	1,358
	Food for Local Participants (20 pers. x 6days)	600	0	8,400	9,000
	Training room	120	0	0	120
	Boat and equipment hiring (US\$80/day x 6 days)	480	0	0	480
	Materials and equipment for the workshop	250	0	0	250
	TOTAL	163,147	7,646	119,650	290,443

Appendix 5 - Management Bodies for Prek Ampil Demonstration Site, Kampot

To implement the proposed demonstration site successfully, a management board, whose members are mostly from the National Coastal Steering Committee; was established to supervise and guide the execution. Technically, a management advisory group whose members from scientifically technical institutions; was also established in order to provide guidance in terms of scientific and environmentally friendly sound of management of the demonstration site. Both MB and MAG were established Kampot Governor at the same time. The below message is the unofficially translated Provincial Declaration on the establishment of MB and MAG.

Kingdom of Cambodia Nation Religion King

Kampot Governor House
No.197 DK

Date: 10 June 2004

Day Ka (Provincial Declaration)

On Establishment of Management Board and Management Advisory Group for Prek Ampil Demonstration Site, Kampot Province

=====

- Having seen the Royal Decree on the appointment of Provincial Governor and Municipal Mayor signed by King Norodom Sihanouk on 18th August 2001, No. 0801/276;
- Having seen the Decision No. 63 Sar Chor on 11th October 2001 on "The Establishment of National Coastal Steering Committee";
- Having seen the declaration on "Rights and Provincial/Municipal Administrative Structure" signed by the Minister of Interior on 15th February 1994, No. 031 Pror. Kor.;
- According to the spirit of the meeting on establishment of Management Board and Management Advisory Group with Kampot Provincial Governor and his colleagues on 27th May 2004 at Kampot Provincial Hall;
- Based on an official letter No. 663 on 04th June 2004 on "The Establishment of Management Board and Management Advisory Group" issued by the Ministry of Environment.

Decision

Article1 The establishment of Management Board (MB) for Prek Ampil Demonstration Site, which members are as follows:

No.	Name	Role in the Government	Role in the Management Board
1	H.E. Put Chandararith	The Governor of Kampot Province	Leader
2	Mr. Khim Sokha	Director, Department of Agriculture Forestry and Fisheries of Kampot Province	Vice Leader (permanent)
3	Mr. Khem Bun Heng	Director, Department of Environment of Kampot Province	Vice Leader
4	Mr. Pang Bunn Rath	Director, Department of Land Management of Kampot Province	Vice Leader
5	Mr. Nem Sinoan	Director, Department of Tourism of Kampot Province	Member
6	Mr. Seng Chhourng	Director, Department of Rural Development of Kampot Province	Member
7	Miss Tit Setha	Director, Department of Women affair of Kampot Province	Member

8	Mr. Seng Lay	Director, Department of Planning of Kampot Province	Member
9	Mr. Lim Sambo	Director, Department of Public and Transport of Kampot Province	Member
10	Mr. Keo Sitha	Secretarial Chief of Kampot	Member
11	Mr. Te Chin Narith	Deputy Director, Department of Mine and industry	Member
12	Mr. Chan Vanna	Director, Department of Water and Meteorology of Kampot Province	Member
13	Mr. In Chiva	Police superintendent of Kampot	Member
14	Mr. Soun Sathara	Vice chief of military police of Kampot	Member
15	Mr. Din Phon	Vice chief of Navy of Kampot	Member
16	Mr. Khuy Sean	Chief of Kampot District	Member

Article 2 The Project Management Board (MB) has roles and responsibilities as the following:

1. Participate in establishment of management plan and strategy for project implementation;
2. Organize discussion meetings and reports to national technical group on output and the process of project implementation in every 6 months;
3. Advise on policy and project management plan to Management Advisory Group and Site Manager;
4. Coordinate and provide solutions regarding the implementation of the demonstration site to Management Advisory Group and Site Manager;
5. Communicate and cooperate with Vietnamese MB in Phu Quoc, Kien Chiang Province in order to exchange experiences and jointly implement and manage the demonstration site ;
6. This MB has duties and responsibilities to participate (or nominate representatives to participate) in joint meetings with Vietnamese MB in Phu Quoc, Kien Chiang Province once a year.

Article 3 Establishment of Management Advisory Group (MAG) for Prek Ampil Demonstration Site and its members are listed in the following:

No.	Name	Role in the Government	Role in the Management Advisory Group
1	Mr. Khim Sokha	Director, Department of Agriculture Forestry and Fisheries of Kampot Province	Leader
2	Mr. Khim Bun Heng	Director, Department of Environment of Kampot Province	Vice Leader
3	Mr. Ouk Vibol ⁴	Coral Reef and Seagrass Focal Point	Permanent member
4	Mr. Prum Sitha ⁵	Seagrass technical expert	Member
5	Mr. Thai Sa Morn	Deputy Chief, Fisheries Office of Kampot Province	Member
6	Mr. Som Phakdey	Vice Chief of National protection and conservation office	Member

⁴ Replaced Mr. Kim Sour.

⁵ Replaced Mr. Suy Sereyath.

Article 4 The Management Advisory Group for Prek Ampil Demonstration Site has roles and responsibilities as the following:

1. Coordinate and discuss with MB regarding the establishment of management plan and strategy for project implementation;
2. Advise and guide the Site Manager regarding the implementation of the demonstration site;
3. Monitor the process of project implementation;
4. Participate in regular meetings, and report to MB on outputs and the progress of project implementation in every 3 months;
5. Participate in establishment of management plan for seagrass resources management and conservation;
6. MAG has duties and responsibilities to participate (or nominate representatives to participate) in joint meetings with Vietnamese MAG in Phu Quoc, Kien Chiang Province once a year⁶.

Article 5 The Management Board for Prek Ampil Demonstration Site has the right to use the official stamp from Provincial Governor.

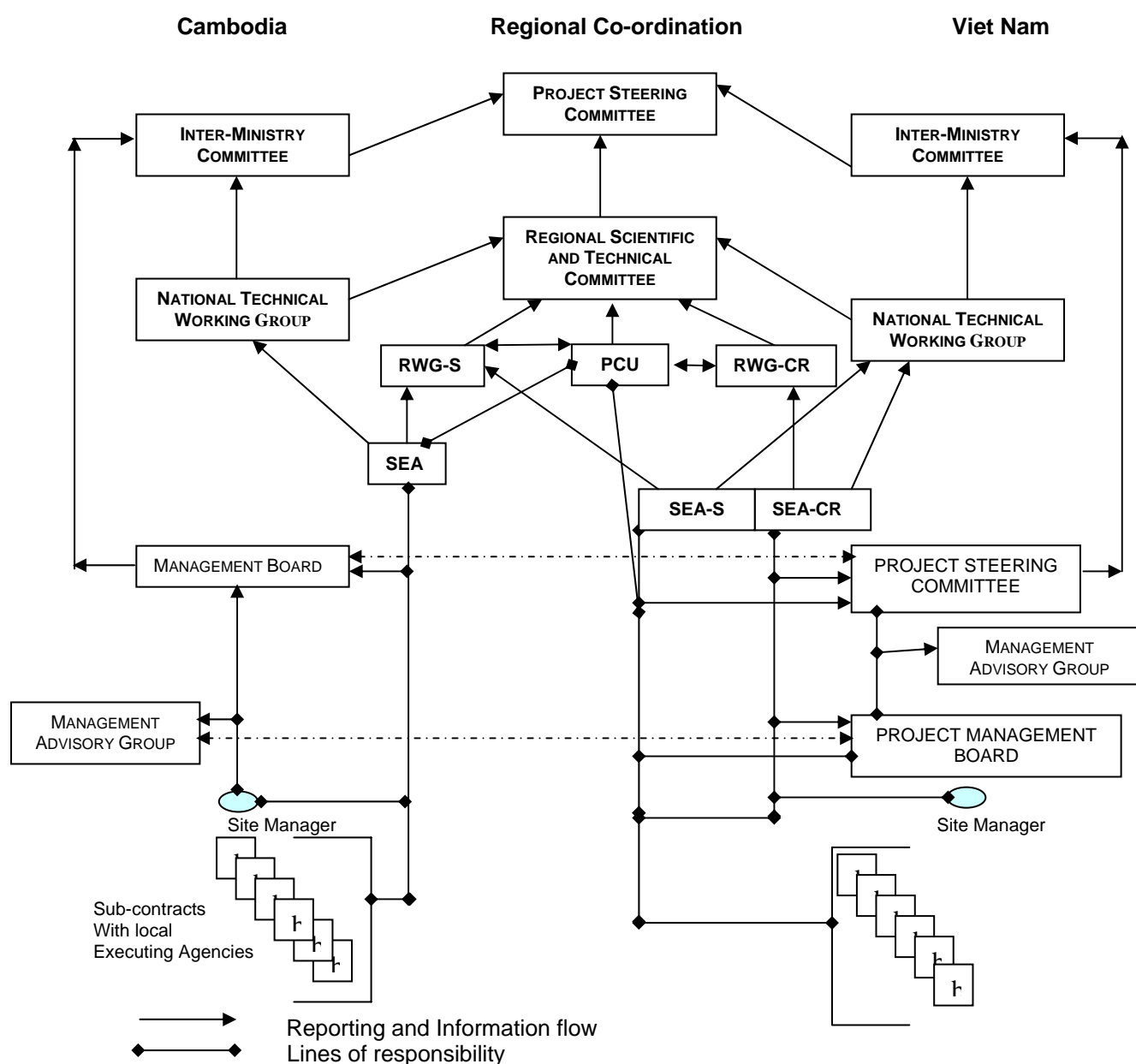
Article 6 Kampot Provincial Cabinet, Provincial General Secretary, Provincial line agencies, Kampot District Governor, Kampong Bay District Governor, and individuals listed in articles 1 and 3; shall effectively execute this Day Ka (Declaration) since it is signed.

Kampot Provincial Governor

H.E. PUT CHANDARARITH

⁶ It used to be designed for joint meeting between both MAGs twice a year.

Chart of Management Framework



Notes for Cambodia side:

Management Board meets nationally every 6 months – Policy and Planning,
 Management Advisory Group meets at least every quarter – Operations,
 Cambodian and Viet Nam Management Boards meet jointly once per year,
 Cambodian and Viet Nam Management Advisory Groups meeting jointly once per year,
 PCU to facilitate joint meetings between the countries, NTFP from each country to participate,
 Management Board is to be chaired at the level of Governor/Vice-Governor – Chair/Vice-Chair of the Provincial People's Committee.