

Regional strategic framework

Rehabilitation of fisheries and aquaculture in tsunami affected countries in Asia





Consortium to Restore Shattered Livelihoods in Tsunami-Devastated
Nations (CONSRN)

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fisheries and aquaculture in tsunami affected
countries in Asia**

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PREFACE

The regional strategic framework presented here has been developed in support of recovery and rehabilitation efforts following the earthquake and subsequent tsunami waves that originated off the west coast of northern Sumatra on the 26 December 2004 and that caused extensive damage to coastal communities in the region.

Estimates of the human cost are just under 300 000 killed (or still missing) with a negative impact on the livelihoods of around five million people. The total cost of recovery for the affected areas could be over \$ 11.5 billion USD. Importantly, the majority of those affected in the coastal communities had livelihoods based on agriculture, aquaculture and fisheries, or were employed in associated enterprises.

In response to the disaster, a consortium (CONSRN) of key regional agencies was formed with the objective of supporting coordination and harmonization of rehabilitation efforts in fisheries and aquaculture. In particular, it was agreed that activities were to focus on collating and disseminating information, carrying out assessments and supporting partners and governments to build a common vision for post-tsunami rehabilitation of the sector. A regional workshop on “Rehabilitation of Fisheries and Aquaculture in Coastal Communities of tsunami affected countries in Asia” (28th February-1st March 2005, Bangkok, Thailand) was held with the objective of defining and agreeing a joint vision, strategies and a set of guiding principles.

The framework presented here consists of a vision for the rehabilitation of the fishery and aquaculture sectors which reflects an “ideal state” towards which all strategies and activities contribute and which avoids the mistakes of the past.

Six strategic elements in support of this vision are described. These include support to: improving policy and institutions; providing appropriate physical assets; restoring the environment (while ensuring equitable access); providing appropriate financial support; improving capacity in support of community livelihoods, responsible coastal resource management and the rebuilding of social assets. The framework outline the rationale for these strategic elements and describes potential activities and outputs in support of them. A series of agreed “guiding principles” are outlined which are intended to guide the rehabilitation and development activities described in the framework.

The framework outlines the basis for action by the consortium and partners. In order to support further action, a provisional implementation strategy for activities in its support has also been developed. The key elements of this include: collaboration in conducting needs assessments, development of agreed rehabilitation plans, working together to mobilize resources for rehabilitation and implementation of these plans through projects and programmes either independently as members or jointly as a consortium.

While this regional strategic framework has been developed from the output of a consortium workshop it is intended to support not just the work of the partners but also to guide and inform other agencies involved in the broader tsunami rehabilitation and development work.



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THE PURPOSE OF THE REGIONAL STRATEGIC FRAMEWORK

Background

The massive earthquake and subsequent tsunami waves that originated off the west coast of northern Sumatra on the 26th December 2004 caused extensive damage to coastal communities, principally in the southern Bay of Bengal. The areas impacted most heavily included, in addition to northwestern Sumatra, the coasts of Sri Lanka, southern India, the Maldives, Andaman and Nicobar Islands, northern Malaysia, southern Thailand and southern Myanmar as well as Somalia, Tanzania and Kenya.

Latest estimates¹ put the human cost of the tsunami at just under 300 000 people killed (or still missing) with a negative impact on the livelihoods of around five million people. The cost of recovery for the affected areas could be over \$ 11.5 billion USD². The majority of those affected had agriculture-fisheries based livelihoods or were employed in associated enterprises. The degree of damage to lives and property varied within and between countries and communities with some suffering complete loss of villages, homes, fishing and aquaculture infrastructure (including port and post-harvest facilities), fishing vessels and gear, aquaculture facilities (including ponds, cages, hatcheries and brood stock), markets, as well as other livelihoods assets.

Natural disasters require the urgent provision of basic humanitarian assistance through relief. This phase is followed by a period of rehabilitation, which in the case of tsunami affected countries, may take five years or more. During this period, efforts will be geared to the sustainable development of the communities and various economic sectors including agriculture, fisheries and aquaculture, and tourism. As relief moves to rehabilitation and later development, there is a much greater need for coordination of efforts to ensure optimal use of resources and targeting of support.

The consortium to restore shattered livelihoods in tsunami-devastated nations (CONSRN)

To promote better coordination, a consortium approach has been adopted by a group of key regional agencies with a mandate to support livelihoods of coastal communities involved in fisheries and aquaculture.

¹ FAO: Response to the earthquake and tsunami disaster. 15th March 2005

² ADB Review, Rebuilding lives after the tsunami. April 2005

Key CONSRN partners:

- Bay of Bengal Programme – Inter-Governmental Organisation (BOBP-IGO)
- Food and Agriculture Organization of the United Nations through its Regional Office for Asia and the Pacific (FAO RAP) and Asia Pacific Fisheries Commission (APFIC)
- Network of Aquaculture Centres in Asia-Pacific (NACA)
- Southeast Asian Fisheries Development Centers (SEAFDEC)
- The WorldFish Center (WorldFish)

Other partners will be involved in many aspects of work of the consortium, including planning assistance, mobilization of resources and implementation of activities and include interested NGOs such as the Asian Disaster Preparedness Center (ADPC), Sustainable Development Foundation (SDF) and the International Collective in Support of Fishworkers (ICSF).

CONSRN objectives

The Consortium will provide a forum for the sharing of information and views and development of strategies. Key objectives of the consortium include providing a mechanism to harmonize the activities of the core partners in terms of:

- collating and disseminating up-to-date information on the impact of the tsunami;
- carrying out credible assessments of damage and needs and identify resources for rehabilitation;
- developing and sharing with all concerned agencies appropriate guidelines for the planning and implementation of livelihoods, community and sector rehabilitation programmes;
- coordinating immediate short-term aid efforts to rehabilitate affected coastal communities;
- building a common vision, objectives and strategy for medium- to long-term rehabilitation of coastal communities; and
- coordinating on-the-ground activities to meet the common vision.

Development of the regional strategic framework

To facilitate a cooperative and multidisciplinary approach, CONSRN has developed this Regional Strategic Framework. The benefits of adopting such a framework are that it helps focus the work of the partners through a common vision and strategies whilst at the same time facilitating decision-making through a set of agreed guiding principles. This allows more efficient use of resources and provides an effective mechanism for sharing valuable lessons and results within the partners and other agencies.

CONSRN has adopted a participatory approach during the development of the vision, strategies and guiding principles. Wide consultation was sought from partner agencies and interested parties. The key elements of this Regional Strategic Framework were elaborated at a regional workshop involving representatives of the governments from the tsunami affected countries, consortium members, NGOs and donor agencies³. It is therefore hoped that this framework will be of use to other agencies involved in the tsunami recovery work.

³ CONSRN Regional Workshop on Rehabilitation of Fisheries and Aquaculture in Coastal Communities of tsunami affected countries in Asia (Bangkok 28th Feb.-1st Mar. 2005). FAO RAP Publication 2005/06

THE REGIONAL STRATEGIC FRAMEWORK

The vision

The shared vision for the future of fisheries and aquaculture in affected communities was developed and agreed by the tsunami affected countries, NGOs and CONSRN partners.

This vision represents an “ideal state” towards which all strategies and activities would contribute. The vision stresses the importance of “getting rehabilitation and development right”. The goal of CONSRN is rehabilitated sectors that avoid past mistakes and are a substantial improvement over the pre-tsunami situation.

The Vision

While recognizing the sovereign rights of each affected country and the cultural context of coastal communities, the shared vision for fisheries and aquaculture is a sector that:

1. contributes to poverty alleviation, sustainable livelihoods and food security at household, local and national levels;
2. is based on sound regulation, good governance and functional management institutions that ensure equitable development and safety within the different parts of the sector;
3. uses appropriate technologies with due recognition of the environmentally sustainable limits to harvesting natural resources and aquaculture production;
4. is part of a holistic view of the coastal ecosystems and is managed according to the principles of integrated coastal zone management, including the wider aspects of land, tenure and relocation of communities; and
5. has a well integrated supply chain from harvest to consumer that supports labour intensive post-harvest activities (which are mainly carried out by women), equitable trade and marketing that ensure safe food for all.

Guiding principles for activities

A set of key guiding principles (Appendix A) have been agreed by the CONSRN partners. The aim of these principles is to provide the “ground rules” for the development and implementation of regional and country level rehabilitation activities of CONSRN and its partners, although they can also serve as a guide for the actions of others. The principles include for example:

- putting people first in rehabilitation through adoption of a livelihood based approach;

- rehabilitation that is consistent with international and regional agreements and guidelines;
- a fishery and aquaculture sector that is well managed and based on adoption of internationally recognized best practices, sustainability, protection of the environment through participatory coastal management approaches, the use of appropriate technologies and the rehabilitation of markets and whole production/marketing chains;
- a fishing capacity that is commensurate with the productivity of the fishery resource, controlled through the allocation of user/access rights to fish;
- an aquaculture capacity that is based on environmentally sound management and allocation of access to natural resources; and
- a rehabilitation process that is based on internationally recognized norms of good development practice ensuring accountability, transparency and that detailed impact assessments form the basis of activity.

STRATEGIC ELEMENTS IN SUPPORT OF THE REGIONAL FRAMEWORK FOR FISHERIES AND AQUACULTURE

In order to support the achievement of the rehabilitation vision, six key strategic elements have been developed and will form the basis for CONSRN partner activities.

Strategic elements in support of the vision

1. improve policy, institutions and processes
2. provide appropriate physical assets
3. restore the natural environment
4. provide appropriate financial mechanisms
5. build human capacity to improve community livelihoods and responsible coastal resource management
6. rebuild and enhance social assets, resources and networks upon which people in affected fishing and aquaculture communities draw in pursuit of their livelihood strategies and psychosocial well-being

Strategic element 1. Improve policy, institutions and processes

Objective: *To develop a responsive and well regulated policy and institutional environment for fisheries and aquaculture at national and local level, which involves communities and recognizes the importance of local level needs in planning, monitoring and regulation*

Rationale

Without good governance that builds on supporting institutions and policies, recovery may be hindered by a return to some of the undesirable pre-tsunami situations. For sustainable recovery of the affected coastal areas, the policy-related issues that existed before the tsunami need to be addressed through review and reform. For the fisheries and aquaculture sectors this included problems such as over capacity in fisheries, unsustainable aquaculture practices, poor safety at sea, inadequate food safety and unsustainable environmental impact.

Successful implementation of policy and enforcement of new legislation also require strong local and national institutions that are able to perform their required functions with the full support of local communities.

A major challenge will be ensuring that policy reform is based on the participation of stakeholders in the decision-making process. In this respect the use of an integrated coastal management approach will ensure decisions are based on existing livelihoods and national context, the best available science and the full participation of affected communities/stakeholders.

Activities in support of the strategic element

Three areas of support to this strategic element have been identified and include the setting of clear policy objectives, strengthening fisheries and aquaculture management institutions and the promotion of integrated coastal management and the ecosystem approach as processes for facilitating discussions between stakeholders.

1) Set clear policy objectives

This will involve a strategic review and reform of fisheries and aquaculture policy in relation to pre-post tsunami development and related national plans and strategies for rehabilitation. The objective is to ensure tsunami related policy reforms in fisheries and aquaculture are based on a strong understanding of national and local issues and needs and are planned within a realistic timeframe. Key outputs from this activity could include:

- specific policy for tsunami rehabilitation (related to fisheries and aquaculture) at national and local level which is led by affected countries and has participation of stakeholders; and
- clear policy objectives with a vision for fisheries and aquaculture which acknowledge the trade-offs between competing objectives (economic, social and environmental), link to regional and international agreements and have an emphasis on integrated coastal management of aquaculture and fisheries resources.

2) Strengthen fisheries and aquaculture management institutions

The strengthening of national and local fisheries and aquaculture management institutions will require a strategic review of their functions, capacity and existing resources. This review will identify areas where rehabilitation is required along with plans for local and national level development of these institutions. The objective will be to ensure that these institutions are capable of implementing fisheries and aquaculture management policy effectively. Key outputs for this activity could include:

- development of strategic plans for the institutional reform of fisheries and aquaculture management institutions at local and national level including the provision of physical and financial resources and capacity building; and
- development of networking mechanisms to allow effective sharing of information within and between sectors and countries.

3) Promote integrated coastal management and ecosystems approaches as processes for facilitating discussions between stakeholders

The promotion of an integrated coastal management approach to ensure systematic involvement of stakeholders in planning and decision-making will require changes to policy and provision of support to the implementing institutions and communities. The objective is to ensure that decisions are based on the best available scientific advice and participation of communities and stakeholders. Key outputs for this activity could include:

- coastal zone management and ecosystems approaches incorporated into national and local policy; and
- capacity building of personnel from communities and implementing institutions at local and national level including the provision of physical and financial resources.

Strategic element 2. Provide appropriate physical assets

Objective: *To ensure that appropriate physical assets are provided to the tsunami victims in a timely, equitable way to replace what they have lost while ensuring sustainable use of natural resources in the future*

Rationale

It is recognized that in the aftermath of the tsunami (both in the initial recovery and the longer term livelihood rehabilitation stages) the provision of strategic physical assets to those affected is a priority. The types of physical assets required for longer term recovery of livelihoods will vary according to communities. These assets will either be public goods (training institutes, landing and processing centres, ice plants) or private goods (inputs for production, tools, fishing vessels, nets and gear).

Many agencies are already delivering these assets. However, if they are to be useful to those affected then they must be provided in a well planned, coordinated, accountable way and with care and attention to the real needs of the communities and any problems that existed before the tsunami.

Of specific importance to the fisheries and aquaculture sector is ensuring that provision of vessels, gear and other resources to rebuild does not lead to future problems through the development of fishing over capacity, or the unplanned over development of aquaculture. For the fishery, this means a capacity that is commensurate with the productivity of the fishery resource and which has regulated allocation of user/access rights to fish and with a balance between small-scale artisanal fisher folk fishing inshore water and the larger-scale “industrial” vessels restricted to off-shore areas. In addition, policy should have a “pro-poor” focus that gives preference to beach-based labour intensive fishing and is based on non-destructive fishing gear and practices.

Activities in support of the strategic element

Four key areas of support to this strategic element have been identified and include the completion of systematic damage and comprehensive needs assessments, controlling the provision of assets, ensuring local compatibility of the assets provided and sound monitoring and evaluation.

1) Carry out systematic damage and comprehensive needs assessments

This will require completion of systematic damage and comprehensive needs assessments with the development of locally agreed implementation plans. These plans should be based on the best available technical advice and ensure the assets to be provided are appropriate, and within the scope of national and local priorities for fisheries and aquaculture. It is also essential that these assessments and plans integrate recovery with development and ensure appropriate physical assets can be provided in a timely, accountable and transparent way. Key outputs from this activity could include:

- timely completion of systematic damage and comprehensive needs assessments of affected communities, including identification of stakeholders, their needs, and the development of agreed plans and prioritization of inputs; and
- supply of key physical assets to communities in an accountable and transparent manner, including those which support diversification of livelihoods strategies (in addition to fisheries and aquaculture).

2) *Control the provision of physical assets to avoid over capacity and ensure controlled development of aquaculture*

In order to achieve this, the replacement of lost resources must be carefully monitored and controlled. Though it is important to recognize the trade-off between the need for rapid inputs to restore livelihoods in affected communities versus good governance and sustainable fisheries management (in relation to fishing capacity and environmental protection). This will require coordinated action by donors, enforcement of legislation and development of appropriate policy to ensure appropriate fishing capacity and well planned development of aquaculture facilities. Key outputs from this activity could include:

- implementation of information sharing mechanisms (between donors, governments, NGOs and communities) for monitoring and coordination of delivery of inputs to fisheries and aquaculture; and
- development of locally agreed plans which ensure delivery of resources is in compliance with national and local priorities.

3) *Supply physical assets that are compatible with the needs of the affected people*

In order to ensure that physical assets are compatible with the needs of the recipients and suitable for local environmental conditions, a systematic approach to the involvement of communities in needs assessments, planning and procurement is required. The objective is to reduce risk and vulnerability to households receiving these assets and maximize the benefits of inputs. Some outputs of this activity could be:

- guidelines for the involvement of stakeholders in damage and needs assessments, local level planning and prioritization of assets to be provided. In particular these should be based on existing best practice and ensure infrastructure is designed and located in such a way as to reduce vulnerability from future disasters (to include local and household infrastructure such as wells); and
- rehabilitation of on-shore infrastructure according to local needs and priorities (such as dredging and repair of harbours, and repair/construction of ice plants, hatcheries, market stalls, fish containers, and shelters for traders).

4) *Monitor and evaluate the process of procurement, distribution of physical assets and their impact*

Monitoring and evaluation systems will have to be developed and put in place as early as possible. These systems must ensure transparency and accountability in the procurement and provision of assets and provide feedback on whether the assets are leading to over capacity in fishing or unplanned over development of aquaculture. Some key outputs of this activity could include:

- training and capacity building for staff involved in assessments, monitoring and evaluation; and
- use of standardized systems and procedures for monitoring, reporting and evaluating the supply of physical assets, involving both NGOs and government, including development of monitoring and evaluation indicators.

Strategic element 3. Restore the natural environment

Objective: *To restore the natural environment while ensuring coastal communities impacted by the tsunami continue to have equitable access to inputs and the sustainably managed natural resources on which their livelihoods are based*

Rationale

Access to restored and sustainably managed natural resources is essential for the rehabilitation of tsunami affected communities. Rehabilitation of these resources, while at the same time ensuring equitable access and sustainable management for the future, will be a critical component in the recovery of people's livelihoods. In the post tsunami situation it is also important to ensure that those who have been displaced or lost their personal property are not additionally disadvantaged through losing access to common resources.

However, recognition must be made of the trade off between national policy objectives (for example relating to reducing future risk to natural disaster or environmental sustainability) and the local needs of communities.

In the short-medium term, the focus of rehabilitation will be on allowing key natural environments, such as coral reefs, mangroves and fishery resources, time to recover from the impact of the tsunami. In the longer term, development of community based management plans involving all stakeholders can ensure sustainable long term management of these resources.

Activities in support of the strategic element

Four key areas of support to this strategic element have been identified and include stakeholder analysis, consultation during planning for relocation, rehabilitation of key habitats and ensuring inputs for aquaculture come from sustainably managed natural resources.

1) Complete thorough and inclusive stakeholder analysis to ensure the views of all groups in the community are considered

Completion of a stakeholder analysis will require extensive fieldwork with the affected communities and is important to ensure sustainability of the rehabilitation work through their ownership and inclusion. Identification of all groups and individuals within the communities is necessary along with their interests, vulnerability and risk. Key outputs from this type of activity could be:

- capacity building of facilitators (from government and NGO) in participatory approaches, stakeholder analysis, and conflict resolution; and
- completion of stakeholder analysis prior to making major decisions at all stages of implementation, regarding key issues such as resettlement and infrastructure placement.

2) *Carry out consultation to ensure consensus is reached with communities (in a transparent way) before considering relocation to safer areas*

Reaching consensus during involuntary and voluntary relocation of households is important to ensure the process does not have a negative impact on the livelihoods of the poor and marginalized sections of the community. The use of transparent participatory processes and awareness raising of issues within communities can help ensure this objective. It is important to remember that in addition to the basic infrastructure required during relocation, extensive capacity building and support may be also needed to provide alternative livelihoods. In particular, for coastal communities it is important to ensure that small scale fishers can retain access to exploiting natural resources or be provided with alternative livelihood opportunities. Key outputs from this activity could include:

- capacity building of facilitators (from government and NGO) in preparation of resettlement plans and participatory planning approaches; and
- implementation of resettlement plans including support for alternative livelihoods.

3) *Rehabilitate important habitats and ecosystems (such as coral reefs, mangroves and fish stocks) through participatory management and planning approaches*

Rehabilitation of important natural habitats and resources can be achieved through close cooperation between donors, communities and concerned government agencies. Full rehabilitation of these habitats is a long-term process. The involvement of communities and stakeholders in the planning and management of these habitats can be critical in their rehabilitation. In this respect integrated coastal management can be a useful tool in ensuring community participation. Key outputs from this activity could include:

- completion of comprehensive environmental damage assessments of key tsunami affected coastal habitats along with long-term rehabilitation and management plans; and
- completion of rehabilitation plans for affected natural resources (such as fish stocks).

4) *Ensure seed and broodstock for aquaculture are from sustainably managed sources*

Achievement of this will require changes in the way the small scale aquaculture industry source seed and broodstock. Many smaller scale producers still rely on the collection of larvae or seed from the wild, which can have negative impacts on the environment. These producers (who were most affected by the tsunami) have had their supplies of fry and broodstock disrupted. A key activity in rehabilitating aquaculture production is to ensure that the rehabilitated small scale hatcheries, nurseries and seed collecting activities are restored with sustainable management as a key principle. Key outputs from this activity could include:

- completion of broad stakeholder consultation in the small-scale aquaculture industry to identify constraints to the sourcing of seed and broodstock from sustainably managed sources and development of national and community based management plans to address the key issues; and
- new policy for regulation of the aquaculture industry. In particular, policies that address the issues of certification and the development of incentives for environmentally friendly sourcing of seed and production.

Strategic element 4. Provide appropriate financial mechanisms

Objective: *To ensure that appropriate financial mechanisms are in place for those affected by the tsunami*

Rationale

The restoration of key financial mechanisms in tsunami-affected areas is of critical importance to rapid recovery. Those affected by the tsunami not only need money in the short term to purchase food and basic goods and services, but will need loans to rebuild damaged homes and to invest in business small scale enterprises (and a wide variety of other reasons). An essential part of the restoration of financial mechanisms is therefore taking a holistic approach to loan provision. In addition, in rehabilitating financial mechanisms recognition must be made of the fact that many of those affected were from the poorer sections of the community and may not have had access to formal financial services in the past.

Care must be taken to ensure risk is assessed well and that all aspects of a particular production chains are functioning. For example, advancing loans to fishers for boats and gear is counterproductive if damage to processing infrastructure means they are unable to sell their catch.

Priority areas that have been identified for fisheries include finance to reinvest in boats and gear in order to start fishing (along with investment in processing and handling facilities). Aquaculture operators require loans for pond reconstruction, farm equipment and production inputs.

The tsunami damaged the physical infrastructure of financial organizations and also resulted in the death or displacement of key people such as staff from the bank, credit institutions and NGOs and also local money lenders. Rehabilitation of financial services therefore requires investment not only in infrastructure but also capacity building and posting of key personnel.

Activities in support of the strategic element

Five key areas of support to this strategic element have been identified and include assessment of existing financial service providers, controlling loans to avoid unsustainable practices and support to rapid rehabilitation of financial services to individuals and supply/processing chains.

1) Assess existing financial mechanisms (both formal and informal)

Completion of an assessment of existing/pre-tsunami financial services for the fisheries and aquaculture sectors in the tsunami affected areas will require extensive consultation with affected communities. This analysis will allow rehabilitation of services to be based on a socially acceptable framework. Involvement of communities allows issues relating to finance pre-tsunami to be addressed and better/more effective mechanisms to be developed. The objective is to ensure that rehabilitation of financial mechanisms is based on a sound understanding of the socio-economic and cultural context. Key outputs from this activity could include:

- pre-tsunami situation assessment of financial mechanisms in tsunami affected areas which will include existing key mechanisms and sources of lending, what has been lost and what the pre-tsunami weaknesses were; and
- development of a cross sectoral financial service rehabilitation plan.

2) *Control loans to prevent inappropriate investment in aquaculture and replacement of fishing gear/vessels*

Unregulated provision of loans for repair and replacement of vessels has the potential to impact the livelihoods of fishers negatively through building up fishing over capacity and damage the environment. For aquaculture too, inappropriate investment could lead to unsustainable production practices. Screening and enforcement procedures need to be developed and implemented at community level and with the relevant regulatory authorities to ensure that fishing capacity is kept to sustainable levels and aquaculture production is well planned and sustainable. Key outputs from this activity could include:

- guidelines for lending agencies with respect to local fishing capacity and aquaculture. Collaborate with the Asia-Pacific Rural and Agricultural Credit Association (APRACA) through providing technical inputs to their assessments and (through APRACA collaboration) to the Banks for their lending guidelines; and
- formal communication channels between lending agencies, communities and regulatory authorities with regular review of required fishing capacity.

3) *Support the establishment of an enabling environment for financial institutions and systems to ensure their rapid return to normal operation*

The needs of financial institutions will vary according to local conditions. While national and regional organizations (such as banks) may have adequate resources to carry out rehabilitation internally, smaller institutions such as NGOs and savings groups may find this harder due to a lack of capital, insurance or death/injury of members/borrowers. In the short term, specific support may be required in order to ensure the rapid establishment of these local financial service providers. In the longer term, policy relating to finance institutions may need to be reviewed in order to ensure that financial losses from future natural disasters are limited (such as the use of insurance schemes). Key outputs of this activity could include:

- support capacity building for local financial institution staff in dealing with and preparing for natural disasters and provision of short term loans and advisory support to small local financial institutions; and
- new policy relating to finance institutions and risk from natural disasters.

4) *Support development of financial systems which ensure all players in the supply chain have access to appropriate finance (but with a focus on small scale non-commercial lending)*

The tsunami impacted many steps in the production and supply/processing chains for fish and aquaculture products (such as ice making plants, processing units, input producers and markets). Providing loans to one sector in the chain may be risky unless there are functioning markets for the produce. The aim is to ensure rapid re-establishment of the availability of finance to production and marketing chains for aquaculture and fisheries products. In order to achieve this, financial institutions must be encouraged to consider these production/processing chains when assessing risk. Key outputs from this activity could include:

- support financial institutions to identify (with stakeholders) key local production/processing chains in fisheries and aquaculture and bottlenecks related to lack of finance (with a focus on small scale producers); and
- appropriate financial support to priority points in chains to ensure rapid re-establishment of markets.

Strategic element 5. Build human capacity to improve community livelihoods and responsible coastal resource management

Objective: *To ensure through the adoption of a participatory approach and capacity building, that the coastal systems of tsunami affected countries are managed in a sustainable way to the benefit of all in the communities. Specific objectives should include:*

- *to improve and diversify the livelihoods of coastal resource users;*
- *to improve the efficiency of rehabilitation investments through ensuring the conservation of natural barriers, which can act as protection;*
- *to achieve sustainable management of the natural resources on which community livelihoods depend;*
- *to ensure conflicts between user groups are resolved; and*
- *to ensure the needs of the poor, marginalized groups and small scale fishers and fish farmers are included.*

Rationale

Key to the recovery of tsunami affected coastal areas is the building of human capacity to ensure diversified livelihood strategies and sustainable management of the coastal resources. The hardest impacted communities already suffered from a limited range of livelihood strategies which made them vulnerable to changes caused by human and natural activity. Providing these communities with additional livelihood options through capacity building can reduce their vulnerability.

Though dependent on the coastal zones, these communities have historically been given little say in their management. The threats to the coastal environment generally came about because of poor coastal area management and planning, a lack of awareness of issues (and capacity to deal with them) and a lack of involvement of communities. This has resulted in a steady decline in the quality of coastal habitats in many countries and the over exploitation of natural resources resulting in a reduction in productivity (fisheries) and the ability to protect from environmental disasters (such as cyclones and floods).

In order for the post-tsunami rehabilitation process to be effective and sustainable in the long term, it is important to ensure that communities and supporting agencies (both government and NGOs) are informed and empowered to ensure a broad range of alternative livelihood options are available for fishing communities and effective management of the coastal zone.

Activities in support of the strategic element

The key area of support to this strategic element involves building human capacity for all stakeholders, but especially for coastal communities.

1) Build human capacity building for livelihoods and sustainable management of natural resources

Human capacity building is required in order to ensure that diversified livelihood strategies are available to people from affected communities and that they understand and have the ability and resources to take part in participatory planning and management. Of particular importance to integrated coastal management and participatory planning is ensuring that stakeholders are

aware of and understand the key issues in order that they can take informed decisions. Specific requirements will be context and site specific. Key outputs from this activity could include:

- identification of needs within communities and the design and implementation of capacity building/training programmes which focus on key alternative livelihoods options and natural resource management; and
- awareness raising campaigns in relation to coastal management issues.

2) Support institutions to provide human capacity building

In order to deliver human capacity building effectively to communities and raise awareness of natural resource management, local and national institutions may also require support and capacity building. The objective is to ensure that these agencies have the ability and resources to carry out the required capacity building and support to communities. Key outputs for this activity could include:

- completion of a review of local institutions that provide human capacity building and identification of needs; and
- capacity building and support to affected local institutions including training, financial and technical support.

Strategic element 6. Rebuild and enhance the social assets resources and networks in affected fishing and aquaculture communities

Objective: *To ensure the development of communities and community organizations which are empowered to take part effectively in post-tsunami planning and rehabilitation activities*

Rationale

In many areas, the tsunami destroyed not only physical infrastructure but communities and community organizations as well. Communities affected in this way need substantial support before they are able to participate in assessment and participatory planning activities. These communities need to know how to re-organize and commence the work of rehabilitation. Empowerment through community group action is an important element in ensuring effective rebuilding. The psychological trauma too can be overcome through community action.

In terms of participation in the rehabilitation process a key goal for fisheries and aquaculture would be re-establishment of community groups. If these groups were not present pre-tsunami then their establishment can help develop the community spirit and enable participation in local planning.

Activities in support of the strategic element

Three key areas of support to this strategic element have been identified and include empowering of communities, rebuilding and strengthening of community fisheries and aquaculture organizations and the promotion of stakeholder consultation.

1) Empower communities

Participatory approaches to planning, conflict resolution and participatory monitoring and evaluation can all be used to ensure communities are empowered and involved in decision-

making and negotiations. Importantly, public and political support to the process of finding solutions to resolvable problems is required. Key outputs for this activity could include:

- stakeholder analysis of key communities and development of community plans, identification of resolvable problems and the setting of achievable management objectives; and
- adoption of participatory monitoring and evaluation processes by rehabilitation implementing agencies.

2) Rebuild and strengthen community organizations

In order to rebuild or strengthen community groups (such as fisher groups, cooperatives, women's support groups), it is necessary to determine which organizations were present prior to the tsunami and what their roles were. Many of these organizations may have been lost with the tsunami. If this is the case, they should be re-established to ensure participation of all stakeholders. The objective is to enable community participation in rehabilitation activities through the strengthened or new community based organizations, networks and communication procedures. Key outputs related to this activity could be:

- complete an assessment of the pre- and post-tsunami status of community fishers and aquaculture organizations and their networks, with a focus on those that support small scale producers; and
- re-establish (or establish if they do not exist) community based organizations for fisheries and aquaculture and develop networks for communication between agencies.

3) Promote consultation with and participation of stakeholders

In order to ensure participation of stakeholders and to rebuild community cohesion it is important to involve them in the consultation process from the start. Empowerment of stakeholders through the adoption of appropriate participatory approaches can be effective in ensuring ownership and effectiveness of rehabilitation processes. A variety of participatory approaches exist depending on objectives. Key outputs of this activity could be:

- incorporation of participatory approaches in rehabilitation planning and implementation; and
- decentralization of decision-making and control to communities and community organizations.

IMPLEMENTATION OF THE REGIONAL STRATEGIC FRAMEWORK

This regional strategic framework outlines the basis for action by CONSRN partners towards rehabilitation of fisheries and aquaculture in tsunami affected countries and communities. The framework will also be useful in providing direction and coordination to other organizations (such as government departments, NGOs, multilateral agencies and donors) involved in tsunami rehabilitation. Many other agencies are or will be working in the tsunami affected areas and it is therefore important that any activities are carried out in full collaboration with development partners and governments.

Implementation of activities in support of the strategic elements described in this framework will require close collaboration, design and planning, mobilization of resources, monitoring and evaluation and effective networking and communication. In order to achieve this, five key areas of activity and cooperation have been identified for CONSRN and its partners. These include:

- collaboration in conducting and communicating results from combined comprehensive damage and needs assessments;
- development of agreed rehabilitation plans and a rehabilitation programme that involve core partners and other related agencies;
- working collectively to mobilize additional resources as appropriate;
- implementation of the agreed rehabilitation plans, monitoring, evaluating and reporting on progress and effective networking and communication of findings; and
- development of a CONSRN flagship project that involves all partners in the consortium.

Collaboration in conducting and communicating results from combined comprehensive damage and needs assessments

Prior to designing and implementing any programmes aimed at rehabilitation of fisheries and aquaculture, comprehensive impact and needs assessments are required. As a first step in this process a review of existing damages and needs assessments will be required to minimize overlap and duplication of work. Key elements of these assessments could include:

- environmental damage, for example that relating to changes in resource base (fisheries and other species), nursery areas for fisheries, coastal zone habitats, coral and mangrove areas;
- economic losses, including losses to aquaculture and fisheries physical assets and infrastructure (including processing, input suppliers and service industries);

- social impact, including the impact of the tsunami on fishing communities, fishers organizations, their capacity to organize and the psychological impacts on fishers and their families;
- financial losses, including impact on existing financial structures at local level;
- changes to livelihoods assets, strategies and vulnerability of the different groups within communities; and
- policy and institutional impact, in particular the impacts on government and non-government agencies (both formal and informal institutions) and their ability to support communities.

Development of agreed rehabilitation plans that involve core partners and other related agencies

In parallel with the impact and needs assessments, planning for rehabilitation will have to be carried out. This should be agreed at local level and ensure that the rehabilitation does not result in fishing over capacity or unsustainable development of aquaculture. The types of plans that can be developed during the needs assessment include:

- environmental rehabilitation, in particular long term planning to ensure sustainable use of the natural resource base of fisheries and aquaculture and the coastal zone;
- economic rehabilitation, including medium to long term planning for rehabilitation of public (infrastructure) and private (boats and gear) goods. In particular replacing the loss to aquaculture and fisheries physical assets and infrastructure (including processing, input suppliers and service industries);
- social rehabilitation, including plans for the strengthening of community organizations and cohesion (through group action). Specific attention should be paid to vulnerable groups such as the poor, women and marginalized sectors of the community and their involvement in coastal zone management;
- financial rehabilitation, including how appropriate financial services for all sectors of the community can be re-established;
- livelihoods rehabilitation, including how livelihoods assets of the households within the diverse communities can be rehabilitated to ensure a reduction in vulnerability and the basis for sustainable development; and
- policy and institutional rehabilitation, including how policy and institutions can be strengthened at local and national level (and both formal and informal) to fully support rehabilitation of the tsunami impacted areas.

During this phase, close cooperation with partners and stakeholders is necessary to ensure that overlap and potential waste of resources is avoided and that programmes are well targeted and appropriate. CONSRN partners are ideally placed to support this function having the local, national, regional, and international networks and technical expertise required. Key stages in the development of programmes could include:

- networking and sharing of information (in particular related to the results of damage and needs assessments), including support to regional and national technical consultations and coordination of planning meetings, development of a CONSRN partner communication strategy and web sites;

- facilitation between agencies and direct support through technical assistance to planning for rehabilitation, including the development of action plans; and
- commissioning of specific reviews as required and according to the needs of countries.

Working collectively to mobilize additional resources as appropriate

During the development of the rehabilitation plans it is essential to identify resources (financial, human and physical) for implementation. Close coordination is required between CONSRN and other partners to ensure that sources of appropriate resources are identified and involved in planning at an early stage. CONSRN can play a critical role through its networks to ensure that needs (expressed as projects and programmes) are coordinated and matched with donors. Key stages in the identification and mobilization of resources could include:

- preparation of high quality concept notes for potential programmes and projects for submission to donor meetings;
- direct communication of project concepts to donor agencies through status reports, technical meetings;
- establishing and communicating project development criteria required by different donors; and
- regular internal communication of project proposal status and topics within CONSRN partners.

Implementation of the agreed rehabilitation plans, monitoring, evaluating and reporting on progress and effective networking and communication of findings

Once project proposals have been approved, implementation can proceed in a timely and accountable fashion. CONSRN is a voluntary activity of the agencies involved and as such has no formal secretariat. Each partner may raise funds to augment its own internal resources (in any way it sees fit within its institutional policy) and bring these resources on to the “Consortium table” should that agency deem this appropriate. In a case where two or more partners agree to jointly implement a project, the collaborators in that project will decide on how the project is funded, the source of funds, and their respective contribution to the project cost. In the last instance, the partners may agree to cost in-kind contributions and count these as a contribution to the project. Implementation of agreed CONSRN projects or programmes will be through the consortium partners and follow the agreed guidelines for rehabilitation and development. In addition to these guidelines emphasis will be put on:

- coordinated monitoring, evaluation and reporting progress, including specific thematic and impact evaluations, and
- effective networking and communication through: sharing the most up to date information, reporting on results, disseminating the findings of evaluations, assessments and programme activities.

A wide range of activities in support of tsunami rehabilitation are either underway or planned by individual members. These vary from the provision of extensive relief to mobilizing resources and developing proposals for long term rehabilitation. These individual actions will be implemented by the partners but coordinated and communicated to the consortium.

Development of a CONSRN flagship project that involves all partners in the consortium

In addition to the actions described above, CONSRN has agreed to the concept of a joint flagship programme to be designed and implemented by all partners during the coming months. This programme will give coherence and complementarity to what may otherwise be overlapping activities. It will be developed by CONSRN partners and be based on the draft proposal developed by SEAFDEC. This proposal contains elements to address key issues such as:

- avoidance of over capacity in the provision of inputs during fishery rehabilitation;
- the promotion of responsible fishing techniques during fishery rehabilitation; and
- the promotion of sustainable aquaculture practices during rehabilitation of coastal aquaculture.

Guiding principles for rehabilitation and development

Putting people first in rehabilitation

A livelihood approach is recommended which ensures that natural systems have an enhanced ability to provide a broad and sustainable range of livelihood strategies, accessible to all members of these communities (including women, children and marginalized groups). This approach should also take into account the diversity of additional and existing livelihood strategies available to people in coastal communities, such as farming, fish processing, gardening, marketing etc. Key features are:

- reduction of vulnerability and potential risk for coastal communities from future natural disasters (through for example, efficient and consistent design and placing of infrastructure and protection of the coastal zone environment);
- partnership and national ownership through extensive stakeholder consultation and public participation regarding fishers and fish farmers' objectives, which ensures respect for traditional uses, access and rights;
- action based on a practice of co-management that involves all stakeholders in policy formulation and decision-making, based on adequate representation of the stakeholders and the best scientific information available;
- an emphasis on flexible and adaptive methods that respond to the complexity and differences in rehabilitation work in different areas; and
- respect to the human rights of all participants, especially with respect to labour standards, equity of distribution of benefits, access to land. Provision of assistance and rehabilitation based on humanitarian needs rather than legal status.

Rehabilitation that is consistent with international and regional agreements and guidelines

Any rehabilitation activity should positively contribute to the following agreements and guidelines:

- the goals on poverty alleviation and food security contained in the Millennium Declaration;
- the ASEAN Resolution and Plan of Action adopted by the Millennium Conference and BIMSTEC declaration;
- the principles of sustainable development of fisheries and aquaculture that are set out in the FAO Code of Conduct for Responsible Fisheries (CCRF), NACA Principles for Sustainable Aquaculture, SEAFDEC Regional Guidelines for Responsible Fisheries in Southeast Asia; and
- the recently agreed UNEP principles for tsunami reconstruction.

In particular, action will follow a multi-sectoral approach which ensures that the natural resource base of the coastal zone is sustained. This includes:

- integrated coastal zone management and an ecosystems approach that recognizes the multiple use nature of the limited natural resources base and involved planning for the fair allocates of resource across users; and

- provision of support for institutional and policy reforms that address fishing over capacity, unsustainable fishing practices and unsustainable aquaculture.

Key principles for the subsectors

The goal of rehabilitation is to achieve the following key features for the fisheries and aquaculture sectors.

For fishery a sector that:

- is based on a fishing capacity that is commensurate with the productivity of the fishery resource, controlled through the allocation of user/access rights to fish;
- is based on balance of small-scale artisanal fisher folk fishing inshore water with larger-scale “industrial” vessels restricted to off-shore areas supported by a “pro-poor” policy that gives preference to beach-based labour intensive fishing;
- is based on non-destructive fishing gear and practices;
- provides adequate safety at sea provisions and practices;
- is based on healthy ecosystems that have been rehabilitated through participatory practices that involves the people that depend on them;
- is based on good governance with strong institutional support from both government and NGOs; and
- is supported by high quality on-shore infrastructure that ensures food safety and value-adding potential in post-harvest processing and sale of fish products.

For aquaculture a sector that:

- is based on environmentally sound management practices that does not pollute, damage habitats or cause long-term irreversible harm, including use of feed that is taken from sustainable sources and seeds that are raised in environmentally sound hatcheries or taken from sustainable fisheries;
- adopts technologies and farm management practices that are appropriate to rural people with limited resources that minimize the impacts of aquaculture on other users of the coastal environment; and
- adopts an array of appropriate technologies and farm management practices, including those suitable to people with limited resources, which minimize impacts and which support: democratic self-determined farmer organizations; marketing, processing manufacturing of inputs and outputs; fair trade and markets; international and regional partnerships; and wide-scale communication, facilitation of dialogue and sharing of experiences.

In addition, both fisheries and aquaculture sectors should be supported by markets that:

- minimize losses and wastage, including during transportation;
- are based on fish handling at sea to ensure high quality of landed fish, and supported by high quality on-shore infrastructure to ensure maximization of fish quality and value-added potential in the post-harvest processing and sale of fish products; and
- are based on the provision of high quality and safe food for human consumption.

The rehabilitation processes

The implementation activities will follow a process approach and shall include the following elements:

- detailed impact/damage assessments and needs analyses to be the basis of all rehabilitation activities;
- assessments of the institutional capacity of different organizations at all levels (and economic sectors) to deliver effectively, and the organizational ability of recipients to receive and utilize any inputs;
- action will be taken with a clear indication of measurable outcomes;
- emphasis on accountability and transparency;
- effective communication with actions supporting coordinated partnership between government, NGOs, international agencies and bilateral donors; and
- findings and outcomes communicated clearly to development partners throughout the process.

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