THE CENTRAL COMMITTEE FOR FLOOD AND STORM CONTROL

IMPLEMENTATION PLAN
OF THE NATIONAL STRATEGY FOR NATURAL DISASTER
PREVENTION, RESPONSE, AND MITIGATION TO 2020

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I. THE NECESSITY FOR THE PLAN

Vietnam is located in the tropical monsoon area, one of five storm hubs of the Asia Pacific region, regularly facing with various disasters, especially flood and storm.

During the recent years, disasters have occurred all over the country, causing serious losses to human, properties, and economic and cultural infrastructure and negatively impacting the environment. During the 10 years 1997-2006, disasters caused 7,500 deaths and missing with the total loss being estimated to be equivalent to 1.5% of the GDP. Due to global climate change and since Vietnam is one of the countries worst affected by sea level rise and other factors, disasters have become more and more serious with unexpected occurring cycles.

For decades, the State's investment and the people's efforts have created remarkably consistent infrastructure system for disaster response and mitigation over the regions. The 4,000-km river and sea dyke systems as well as large reservoirs for flood control, water regulating, and power generating have basically been established in major river catchments. Works for water resources and transportation, flood shelters, anti-erosion works, safety harbors, warning and forecasting systems, communication systems, and rescue and relief facilities, etc. have been improved, enhancing our disaster prevention capacity. The Red River Delta is able to survive the 500-year flood frequency, a high safety level in the region. The Mekong River Delta has become more and more pro-active in living with flood, and thus continuously stabilized agricultural production and gained fruitful harvests during the last decades.

Decentralization of disaster prevention, response and mitigation which mobilizes the whole resources in the society following the philosophy “the State and the people working together” in the prevention phase has shown increasing effectiveness. When disaster occurs, the “four-on-the-spot” principle has become the local resource for prompt recovery and life re-stabilization. The spirit of mutual supports and aiding for disaster affected areas has become practices in the community

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Enhanced international cooperation plays an important role in disaster prevention and mitigation. Vietnam has actively been involved in and contributed to international and
regional forums and agreements in natural disaster prevention and mitigation and climate change such as Hyogo Framework for Action, Kyoto Protocol and ASEAN Agreement on Disaster Management and Emergency Response. The international community has supported Vietnam in human resource training, technology transfer, public awareness raising, and modeling, especially with ODA projects in disaster prevention and mitigation and ODAs with no obligation to repay which have brought about practical results.

The National Strategy for Natural Disaster Prevention, Response and Mitigation approved by the Prime Minister in 2007 is a milestone in Vietnam’s disaster prevention, response and mitigation and sustainable development on the basis of traditional experience and achievements as well as the world’s lessons in disaster control for increasingly sustainable development in the context of natural disasters. The National Strategy promulgates tasks, solutions and plans for implementation, based on which the 63 provinces/cities and 12 ministries/sectors developed their strategic action plans.

Thanks to the attention of the Communist Party and the State, and efforts of ministries, sectors, and localities, we have attained achievements in various areas during the 2 years implementing the Strategy, i.e. 2007-2009. The legal framework has been step-by-step consolidated. Responses to natural disaster situations have been professionalized. Public and social awareness have been enhanced. Mutual supports have become practices in the society. Structures for disaster prevention and mitigation have been improved and formed a critical technical foundation, which includes dykes, reservoirs, transportation infrastructure, and flood overcoming residential clusters, etc. Forecasting equipment and facilities have been improved, resources for disaster prevention, response and mitigation well trained, and international cooperation enhanced, creating progressive movements in prevention and response, and especially in recovery of people's life and economic activities. Such achievements have been appreciated and well received as a good lesson for dissemination by the international community.

However, climate change has resulted in more serious natural disasters in Vietnam, creating large-scale socio-economic damages to the entire society. Natural disaster mitigation has always been considered indispensible to sustainable development. The need for mitigation measures against all kinds of natural disaster has been increasing. Scientific and technical advances and international cooperation in the field of natural disaster need to be fostered and disaster management capacities of the State authority need to be professionalized and more responsive. Accordingly, the Government issued a National Strategy for Natural disaster prevention, response and mitigation as a basis for consistent instructions and actions at all levels.

Action plans for the National Strategy of ministries, sectors, provinces and cities have fully taken viewpoints, instructive principles and objectives of the National Strategy for specific application in accordance with local disaster situations. This shows a development in awareness from passive response to proactive prevention, response and mitigation of damages caused by natural disasters.

Non-structural measures have been recognized, together with structural measures,
as decisive forces in improving the adaptation and sustainable development capacities in the context of natural disaster.

**To enhance the implementation of the National Strategy, it is necessary to develop a National Implementation Plan for Natural Disaster Prevention, Response and Mitigation with the following objectives.**

To enhance effectiveness in management and coordination of the implementation of ministerial and provincial action plans for achieving the principles and objectives set out in the Strategy.

To elaborate on the action plans of the Strategy and high-priority tasks, detailing tasks, accountabilities, timeline and resources for each and every task included in the action plan of the Strategy.

To ensure the mainstreaming of disaster prevention, response and mitigation into ministerial and local plans with the involvement of the community to achieve the objectives set out in the Strategy.

To highly prioritize non-structural measures such as enhancement of institutional capacity, scientific and technological policies, and warning and forecasting capacities, and mobilization of the community to take best advantage of resources of the State as well as of domestic and foreign organizations and individuals for disaster prevention, response and mitigation to ensure sustainable development for every region and area in the country.

**II. DETAILS OF THE IMPLEMENTATION PLAN**

**Priorities in the National Action Plan for Natural Disaster Prevention, Response and Mitigation include.**

A. Ensure strict consistency in disaster prevention, response and mitigation institutions from the central to local levels;

B. Assess and keep track of natural disasters directly affecting socio-economic sustainable development for effective socio-economic development planning in disaster-prone areas;

C. Consolidate and improve disaster warning systems at central and local levels;

D. Enhance disaster risk management capacities at all levels and in all sectors;

E. Conduct disaster training for the community, focusing on disaster-prone areas for a safe community;

F. Mitigate disaster risk factors by applying such measures as protective forest planting and sustainable management, for both upstream and coastal forests, and reinforcement and development of disaster prevention and response structures, etc. in disaster-prone areas;

G. Enhance the integration of disaster prevention, response and mitigation into ministerial, sectoral, and local 5-year and 10-year socio-economic development planning.
III. LIST OF PROJECTS AND PROGRAMS
A. NON-STRUCTURAL MEASURES

Non-structural measures have been considered a key resource for success of the National Strategy. Many items are not new but are gathered, linked up and improved in order to ensure comprehensive and relevant implementation plan which is integrated into plans of sectors, ministries and localities to mobilize community participation.

This is a new approach, in which non-structural measures become a critical factor well resonating with investment efforts of the Government in structural measures. Groups of non-structural measure are presented below:

1. Consolidate the system of legal documents and policies

1.1. Develop Law on Natural disaster Prevention, Response and Mitigation

Objective: To ensure natural disaster prevention, response and mitigation is implemented in a consistent and effective manner from the central to local levels in all sectors, and to enhance the responsibility of authority of all levels, governmental agencies, economic organizations, social organizations and people in natural disaster prevention, response and mitigation and damage recovery.

Implementation details: Basing on the issued laws and by-laws such as Law on Water resources, Law on Dyke Management, the Ordinance on Flood and Storm Control, and the Ordinance on Forest Fire Prevention, etc. develop an only law for natural disaster prevention, response and mitigation to be applied nationwide to enhance responsibility of all levels, governmental agencies, economic organizations, social organizations and people in natural disaster prevention, response and mitigation, damage recovery, people’s life stabilization, economic activity recovery, and ecological damage mitigation.

Implementation plan: The draft law will be completed within 4 years from 2009 to 2012, promulgated and implemented in 2013.

Implementation coordinating agency: The CCFSC and the MARD will take lead and coordinate with other ministries, departments, provinces, and cities all over the country to implement the plan with supports through projects and programs on natural disaster mitigation and climate change of the Government, regional and international organizations and NGOs.

1.2. Review, revise, and supplement other legal documents related to natural disaster risk prevention, response and management.

Objective: Ensure the efficiency in implementing the natural disaster risk prevention, response, and management to meet the requirement for socio-economic development of the whole country.

Major tasks: Supplement and consolidate the legal document system related to natural disaster prevention, response and mitigation:

- Issue new policies to support disaster-prone areas;
- Develop investment and financial regulations for non-structural measure
implementing activities for natural disaster prevention, response and mitigation;

- Develop methodology and criteria for assessment of disaster-caused damages and benefits in terms of socio-economic sustainable development brought about by natural disaster prevention, response and mitigation;
- Develop regulations, standards, criteria, and mechanism for disaster risk assessment which is to be integrated into infrastructural and residential work construction planning in compliance with natural disaster prevention, response and mitigation criteria.

Implementation plan: The review and revision work is to be conducted based on the needs for socio-economic development during 2009-2020.

Implementing agency: the MARD, MOLISA, MPI, MOF, and MOC take lead and coordinate with the localities to implement the tasks correspondingly to their functions and responsibilities.

1.3. Establish self-reliance funds for natural disaster prevention, response and mitigation.

Objective: Mobilize the available resources for natural disaster prevention, response and mitigation, and encourage the involvement and responsibility of the people, organizations, and economic sectors in order to minimize disaster-caused damages, facilitating socio-economic development of the country.

Implementation details:
- Study self-reliance fund models;
- Conduct pilot self-reliance fund;
- Establish self-reliance funds in the whole country.

Implementation plan: From 2009 to 2015, specifically:
- Study self-reliance fund models: 2009-2011;
- Establish self-reliance funds in the whole country: from 2015 onwards

Implementation coordinating agency: The MOF takes lead and coordinates with the MARD and other related ministries and localities for the implementation.

1.4. Disaster risk insurance.

Objective: Mobilize available resources for natural disaster prevention, response and mitigation, and to ensure quick post-disaster recovery for socio-economic and residential activities.

Implementation details:
- Study disaster risk insurance models;
- Conduct pilot disaster risk insurance;
- Establish disaster risk insurances in the whole country;

Implementation plan: From 2009 to 2015, specifically:
- Study disaster risk insurance models: 2009-2011;
- Conduct pilot disaster risk insurance: 2011 - 2014;
- Establish disaster risk insurances in the whole country: from 2015 onwards

Implementation coordinating agency: The MOF takes lead and coordinates with the MARD, MOLISA, and other related ministries and localities for implementation.

2. Consolidate the organization and mechanism.

2.1. Consolidate the organization and management of natural disaster prevention, response and mitigation of all levels.

Objective: To establish sustainable, consistent and relevant organization and management for natural disaster prevention, response and mitigation at all levels to ensure effective guidance and management to meet the requirements for socio-economic development of the country in the context of negative impacts by global climate change.

Implementation details:

- Establish the National Committee for Natural disaster Prevention, Response and Mitigation chaired by the Deputy Prime Minister, to ensure effective inter-sectoral cooperation to assist the Prime Minister in general guiding the natural disaster prevention, response and mitigation and direct guiding the ministerial and local committees for natural disaster prevention, response and mitigation.

- Ministries are responsible for state management of natural disaster prevention, response and mitigation within their areas of expertise.

- Enhance capacities for and consolidate the Standing Office of the CCFSC on a specialized and fully functional basis to assist the CCFSC in implementing the National Action Plan for Natural disaster Prevention, Response and Mitigation.

- Study the cooperation and task assignment between the CCFSC and the CCSR toward a combined organization to improve efficiency in general and of resource mobilization in particular.

- Consolidate the ministerial and sectoral committees for Natural disaster Prevention, response and Mitigation and Search and Rescue which are chaired by ministerial and sectoral leaders, include capable specialized function to support the committees in natural disaster prevention, response and mitigation and search and rescue and in effective coordination with ministries and localities in natural disaster prevention, response and mitigation.

- Consolidate the provincial and municipal committees for natural disaster prevention, response and mitigation chaired by Chairman of provincial / municipal people's committee; consolidate the standing office of the provincial and municipal committees for natural disaster prevention, response and mitigation and search and rescue on a fully functional basis to assist the provincial / municipal committees in the management and implementation of natural disaster prevention, response and mitigation and search and rescue tasks.

- Consolidate the committees for natural disaster prevention, response and
mitigation and search and rescue at district level chaired by the chairman of district / town people's committee and assisted by a specialized team.

- Communal committee for natural disaster prevention, response and mitigation chaired by communal people's committee and assisted by a member of the communal people's committee.
- Develop regulations on the establishment of disaster management assisting organizations.
- Develop training curricula for capacity building for natural disaster management practitioners at all levels. Develop trainer force to train local officials.

Implementation plan: From 2009 to 2020

Implementing agency: The Ministry of Interior Affairs to take lead and coordinate with the MARD and other related ministries and localities to review, study, assess and develop natural disaster management models. Annually, ministries, sectors and localities in the whole country consolidate their management mechanics of natural disaster prevention, response and mitigation based on the governmental administration renovation program.

3. Enhance forecasting and warning capacities

Objective: Ensure accurate disaster forecasts, especially forecasts of storms, floods, earthquakes and tsunamis. Ensure clear, understandable and timely forecasts to be sent to agencies at all levels, social organizations, international organizations, NGOs and people.

Implementation details:
- Enhance toward increased human resource, technologies and automatic equipment for increasingly precise long-term, medium-term and short-term forecasts. Specifically, flood in river catchments, especially in the Red river catchment, should be forecasted precisely 72 hours in advance, similarly to flashflood. Supplement rainfall and water level measuring stations in mountainous areas for forecasting, warning, flashflood and landslide prevention purposes in localities. Improve seism measuring station system for earthquakes and tsunamis reporting and thunderstorm locator system for warning purposes.
- Prepare updates on storm, flood, thunderstorm, drought, saline intrusion, earthquake, and tsunami for forecasting and warning purposes.
- Develop communication system among agencies for timely and effective transfer of disaster forecasting and warning information to residential community for prompt responses and timely decision making by administration levels.
- Establish community warning system, i.e. rainfall measuring devices, danger warning boards, flood depth poles, storm beacons, etc.
- Enhance international and regional cooperation for better information approach, especially on storm, flood, earthquake, and tsunami.
Implementation plan: From 2009 to 2020, specifically:
- Enhance human resources and technologies: 2009 - 2010
- Develop community warning system: 2009 - 2010
- Improve accuracy of storm and flood forecasts 72 hours in advance, medium-term drought and saline intrusion forecasts, earthquake observation, tsunami warnings and thunderstorm positioning: 2011-2015.
- To reach regional advanced level: 2016-2020.

Implementation coordinating agency: the MONRE to take lead and coordinate with provinces and cities for implementation.

4. Public awareness raising program:

4.1. Improve public awareness and community-based disaster risk management:

Objective: Ensure more than 70% of population in the 6,000 disaster-prone communes is informed of natural disaster prevention, response and mitigation knowledge.

Implementation details:
- Establish community disaster management groups selected by the people.
- Develop disaster and vulnerability maps for every community. These maps are developed by the community based on guidance of the community disaster management group. Develop and post guides on basic steps of preparedness, response and recovery at community centers.
- Develop manuals on basic community activity implementation on preparedness, response and recovery for periods before, during and after disaster relevantly to cultural and socio-economic conditions of each community.
- Collect and update information for disaster and vulnerability maps on an annual basis by community members.
- Develop annual plan on disaster risk prevention, response and management combined with the community climate change plan.
- Community members develop community development plan with integration of disaster risk prevention, response and management.
- Organize annual community natural disaster prevention, response and mitigation drills with aiding equipment and devices.
- Develop community disaster forecasting and early warning system with aiding equipment and devices
- Develop community assessment and monitoring system for natural disaster prevention, response and mitigation.
- Community-based disaster management activities are frequently broadcasted on websites, TV, radio, newspaper, band rolls, and fliers, etc.
- Develop training manual kits on community-based natural disaster prevention, response and mitigation. These will include disaster risk management process such as
preparation for planning, planning, and rescue activities during disaster, recovery activities after disaster, etc.

- Organize annual training courses for the community on specific activities relating to CBDRM for specific groups of community members by gender, student groups, and ages, etc.

- Organize performances on community-based natural disaster prevention, response and mitigation on community holidays.

- Develop small-scaled structures for community-based natural disaster prevention, response and mitigation, e.g. flood bypasses, schools, clinics, clean water, etc.

Implementation plan: Include 3 phases, i.e. 2009-2010, 2011-2015 and 2016-2020. (This plan was approved by the Prime Minister in Decision No. 1002/QĐ-TTg dated 13/7/2009).

Implementation coordinating agency: The MARD to coordinate with the MOET for guiding the implementation by cities and provinces.

4.2. Implement mass media communication on disaster.

Objective: Ensure forecasting and warning information is widely and quickly communicated, and natural disaster prevention, response and mitigation knowledge broadly disseminated in schools and community, etc. to raise awareness of people, social organizations, and state and private economic organizations, etc. in natural disaster prevention, response and mitigation.

Implementation details:

- Consolidate communication and information system from the central to local levels.

- Develop curriculum for knowledge dissemination on disaster types and natural disaster prevention, response and mitigation measures, legal regulations on natural disaster prevention, response and mitigation, forecasting, warning on mass media.

- Organize contests on natural disaster prevention, response and mitigation.

- Increase air time during disaster season and conduct non-stop broadcasts during disasters.

- Increase online communication channel on Vietnam Television for the coordination work by the CCFSC.

Implementation plan:
- 2009-2010: Improve program contents.
- 2009-2010: Complete procedures for forecasting and warning information and updates receiving from and provision by functional agencies.
- 2011-2015: Disseminate knowledge and draw attention of more than 70% of the population.
- 2016-2020: Develop sustainable disaster adaptive living practices in the community.
Implementing agency: the Voice of Vietnam, the Vietnam Television and local radio stations to coordinate with the MARD, the CCFSC, and the municipal and provincial committees for flood and storm control.

5. Upstream and protective forests planting and protection program.

Objective: Manage, develop and sustainably and effectively utilize forests, with the involvement of the local people, in order to ensure the protection capacity, preserve biological diversity, and provide environmental services, contributing to the national sustainable development.

Implementation details:
- Conduct overall review of existing forests to establish a management, protection and sustainable usage mechanism for 16.24 million ha of planned forests, increasing forest coverage to 42 - 43% in 2010 and 47% in 2020. Accordingly, develop and enhance the protective forest system, including upstream, coastal and urban forests, of total area of about 5.68 million hectares, and specialized forest system of total area of not more than 2.16 million hectares. These should be considered primary and long-term measures for natural disaster prevention, response and mitigation.
- Develop a specialized management, protection, and development mechanism for protective forests in upstream areas, river catchments, reservoirs, and coastal areas, and mangrove forests in order to sustainably establish these kinds of forest in 2015.
- Invest in infrastructure, devices, and operational expenses for forest management, protection, forest fire prevention and extinguishment, and pest control.
- 100% of regulations on forest protection be communicated to local forest owners and people;
- 100% of forest owners, and communes with forests to establish forest protection forces. 100% of communal forestry officials and protection forces to receive capacity building training;
- 100% of protective and specialized forests are managed by certain owners, i.e. state agencies, individuals, or community organizations, planned for medium-term and long-term protection and development;
- Continue to pilot and expand community forest management and other models, e.g. community-based, joint-stock company, collective, joint venture, partnership, etc.
- Conduct periodical forest census, enhance and update on forest and related socio-economic resources;
- Develop and implement forest management plans and conduct capacity building for forest owners including forestry companies, collectives, communities, foreign-invested enterprises;
- Plant dyke protecting trees and scattering trees in plain areas.

Implementation plan:
- 2009-2010: Achieve 42-43% forest coverage, recover mangrove forests.
- 2011-2015: Basically ensure sustainable establishment of upstream and coastal protective forests and mangrove forests.
- 2016-2020: Achieve 47% forest coverage, establish forestry areas managed by forest owners for ensured sustainable and effective development.

Implementation coordinating agency: The MARD to coordinate cities and provinces for implementation.

6. Natural disaster management capacity building and technological application program.

6.1. Capacity building for disaster management agencies from central to local levels

Objective: Ensure 100% of local authority officials of all levels directly involved in natural disaster prevention, response and mitigation are trained on natural disaster prevention, response and mitigation.

Major tasks:
- Develop relevant and consistent legal documents and guides on management and implementation of CBDRM at all levels and in the community.
- Complete the natural disaster prevention, response and mitigation mechanics in municipal and provincial responsible agencies.
- Develop consistent training systems for CBDRM at all levels.

Develop training kits on policies and mechanism and on implementation activities for CBDRM at all levels and in the community, including training materials for trainers and documents for trainees.
- Conduct training on policies, mechanism, implementation steps of CBDRM for trainers, agencies, local officials and those directly involved in CBDRM at all levels
- Regard capacity building training for local authorities and professional trainers on CBDRM as a critical activity in annual natural disaster prevention, response and mitigation plans and programs at all levels.
- Equip governmental agencies at all levels with aiding equipment for flood and storm control and professional trainers with teaching kits on CBDRM.

Renovate, improve or construct offices for municipal and provincial flood and storm control agencies.


Implementation coordinating agency: The MARD and the MOET to coordinate cities and provinces for implementation.

6.2. Conduct capacity building for search and rescue forces.

Objective: Ensure coordination and quick response capacities for central, regional, sectoral and local search and rescue forces.

Implementation details:
- Enhance search and rescue equipment according to the approved proposal in the Decision No. 46/2006/QĐ-TTg.
- Improve coordination and quick response capacities of central, regional, sectoral and local search and rescue forces

Implementation plan:
- 2011 - 2015: Build capacities for the human resources and provide equipment to meet strict requirement for professionalism.
- 2016 - 2020: Achieve advanced level in the region.

Implementation coordinating agency: The NCSR to take lead and coordinate with the MARD and other relevant ministries and localities for implementation.

6.3. Review and supplement construction standards relevantly to local disaster situation.

Objective: Ensure safety for construction works against disaster.

Implementation details:
- Supplement regulations in planning, design and implementation of works of urban architecture, transportation, water resources, hydro power and other infrastructure.
- Design standards for such works as hospital, schools, and clinics should ensure safety against disaster.
- Apply earthquake prevention regulations to earthquake high risk areas, especially to critical constructional works.
- Develop methodology and criteria for disaster risk assessments in investment projects.

Implementation plan:
- 2009 - 2010: Review and revise construction design regulations and standards.
- 2009 - 2010: Study and develop disaster risk assessment methodology and criteria.
- 2016 - 2020: Complete and update.

Implementation coordinating agency: the MOC to coordinate other ministries, cities and provinces for implementation.

6.4. Apply technological advances and new materials in natural disaster prevention, response and mitigation

Objective: Create new material technology breakthroughs in constructing natural disaster prevention and response works. In 2020, 90% of state- and ministerial level researches in new material technologies and 80% of institutional policy projects are taken into application.
Implementation details: Continue the organization of scientific researches and transfer systems and strongly apply the socialization mechanism and utilization of research units in universities and research institutes to improve effectiveness of the systems. Invest in capacity building for scientific research and transfer agencies, supporting researchers working in disaster-prone areas. Research on policies to link scientists with entrepreneurs and people. Research projects should come from practical demands. Accordingly, focus should be placed on the following activities:

- Implement the Scientific paper No. KC08/06-10 on disaster prevention and response, environmental protection and natural resource utilization.
- Assess the impacts by global climate change on natural disaster situations in Vietnam.
- Absorb advanced technological applications on natural disaster prevention, response and mitigation in the world. Run pilot disaster-caused damage estimation models.
- Broadly apply and disseminate mathematic models and applications in flood forecasting, warning and identification in river catchments.
- Apply new material technologies to improve safety and durability of dykes, reservoirs, dams, sluices, anti-erosion works and residential structures.

Implementation plan:
- 2009-2010: Some research results are applied.
- 2016-2020:
  - Ensure high level of safety.
  - Ensure advanced search and rescue capacities.

Implementation coordinating agency: The Ministry of Information and Communication to coordinate related ministries and localities for implementation.

6.6. Improve disaster response capacities, especially for vulnerable groups such as the children, the elderly and the invalids.

Objective: Ensure safety against disaster for vulnerable groups such as the children, the elderly and the invalids.

Implementation details:

**Response phase:**
- Ensure safety for children, the elderly, and the invalids in disaster-prone areas.
- Each household holds at least 10-day food and basic necessities reserve.
- Preventive health care is put in place for prompt responses when disaster occurs.
- Keep track of reserves by businesses and economic organizations.
- Search and rescue forces conduct timely responses, effectively playing on-the-spot pioneering role.

**Recovery phase:**
- Quickly assess damages caused by disaster.
- Arrange for urgent aids, stabilizing people’s life.
- Clean the environment and prevent diseases.
- Implement measures to recover manufacturing activities.
- Resolve transportation problems.
- Encourage businesses to invest in rehabilitation after disaster.

Implementation plan:
- 2009-2010: 100% of communes in disaster-prone areas complete detailed plans.
- 2011-2015: Community practices are well established.
- 2016-2020: Local disaster response and recovery capacities are improved.

Implementation coordinating agency: the MOLISA, the MARD, and the MOH to coordinate localities for implementation.

6.7. Establish volunteering forces for disaster prevention, response and mitigation

Objective: Effectively improve natural disaster prevention, response and mitigation activities in disaster-prone communities in order to mitigate damages to people’s lives and properties.

Implementation details:
- Establish local volunteering forces for rescue and recovery when disaster occurs.
- Establish community dyke management and dyke maintenance forces in communes located along the dykes.
- Establish local Red Cross teams for health care and environment protection.
- Develop plans and conduct drills to mobilize local businesses to participate in rescue activities and resolving emergencies.

Implementation plan:
- 2009 - 2010: Establishment and planning for operations.
- 2011-2015: Operation streamlined and equipment provided
- 2016-2020: Operation stabilized.

Implementation coordinating agency: The Youth Union and the MARD to coordinate provincial and municipal Youth Unions for implementation.

7. Review, revise and develop plans

This is a critical task in the implementation of the action plan for natural disaster prevention, response and mitigation. Review a variety of plans relating to natural disaster prevention, response and mitigation in order to establish an overall, comprehensive and scientific assessment to define relevant measures based on which the integration into local and sectoral plans and projects is conducted, and priorities in synchronous, phase- and focus- based implementation of natural disaster prevention, response and mitigation plan
are identified. Plans should be focused on:

7.1. Creating maps of zones prone to flashflood, river bank and coastal erosion, storm, sea water surge, earthquake, tsunami, thunderstorm, flood, and evaluating drought and flood risks.

Objective: To form a basis for directing natural disaster prevention, response and mitigation measures, reviewing natural disaster prevention, response and mitigation plans, mitigating damages in disaster-prone areas, stabilizing people’s life, and facilitating socio-economic development.

Major tasks: Create an overview of disasters such as flashflood, river bank erosion, coastal erosion, storm, sea level rise, earthquake, tsunami, flood, and drought, etc. Locate prone areas in digital and paper maps. Differentiate high, medium, and low risk areas for each of the disaster types.

Implementation plan: Mapping for flashflood, river bank erosion, coastal erosion, storm, sea level rise, earthquake, tsunami, flood, and drought is conducted from now to 2012.

Implementation coordinating agency: The MONRE, the MARD, Vietnam Academy of Science and Technology to coordinate related localities and consultancy organizations for implementation.

7.2. Reviewing and revising flood preparedness plans in Mekong River Delta.

Objective: Mitigate disaster-caused damages, stabilize people’s life, and facilitate socio-economic development, creating a basis for developing investment programs and reviewing plans for sustainable development.

Major tasks: Develop overall and summary reports on flood prevention and response planning in Mekong river delta. There should also be reports on Hydrology, Hydraulics, Hydraulic constructions, Economics and Environment. Develop flood maps for individual provinces. Develop maps of current situation and planning of flood prevention structures for individual provinces.

Implementation plan: Decision No.144/1999/QĐ-TTg dated 21/06/1999 by the Prime Minister approved flood water control and usage plan for the Mekong River Delta for the period to 2010 was made in consistence with the Decision No. 99/TTg dated 09/02/1996 on long-term orientation and 5-year plan 1996-2000 on water resources, transportation and new rural area development in Mekong River Delta. Besides, the Prime Minister issued Decision No. 173/2001/QĐ-TTg dated 06/11/2001 on socio-economic development in Mekong River Delta during 2001-2005 and Decision No. 84/2006/QĐ-TTg dated 19/04/2006 approving the revisions of water resource planning for Mekong River Delta during 2006-2010 and direction to 2020. To implement the Prime Minister’s instructions, the MARD has coordinated the review of “Overall water resource plans for Mekong River Delta in the context of climate change and sea level rise” correspondingly to the need for water resource exploitation and usage due to impacts in upstream Mekong River and of climate
change and sea level rise to submit to the Prime Minister in 2010. Therefore, the review and revision of flood prevention and response plans for Mekong River Delta will be implemented during 2010 to 2013 to comply with the decisions to approve water resource planning in Mekong River Delta by the Prime Minister.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy agencies for implementation.

7.3. **Reviewing and revising flood preparedness plans in the Central region from Thanh Hoa to Binh Thuan.**

Objective: Mitigate disaster-caused damages, stabilize people's life, and facilitate socio-economic development, creating a basis for developing investment programs and reviewing plans for sustainable development.

Major tasks: Develop overall and summary reports on flood prevention and response planning in Mekong river delta. There should also be reports on Hydrology, Hydraulics, Hydraulic constructions, Economics and Environment. Develop flood maps for individual provinces. Develop maps of current situation and planning of flood prevention structures for individual provinces.

Implementation plan: The review and revision of flood preparedness plans for the rivers in the central region from Thanh Hoa to Binh Thuan are implemented from 2009 to 2012.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy agencies for implementation.

7.4. **Reviewing and revising flood preparedness plans in the South Eastern area.**

Objective: Mitigate disaster-caused damages, stabilize people's life, and facilitate socio-economic development, creating a basis for developing investment programs and reviewing plans for sustainable development.

Major tasks: Develop overall and summary reports on flood prevention and response planning in Mekong river delta. There should also be reports on Hydrology, Hydraulics, Hydraulic constructions, Economics and Environment. Develop flood maps for individual provinces. Develop maps of current situation and planning of flood prevention structures for individual provinces.

Implementation plan: The review and revision of flood preparedness plans for the rivers in the South Eastern region are implemented from 2011 to 2013.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy agencies for implementation.

7.5. **Reviewing and revising river and sea dyke system plans.**

Objective: Identify scope and grade of river and sea dykes. Identify design level of river and sea dykes with consideration of sea level rise. Identify basic information of the dykes such as dyke route, technical parameters and dyke reinforcement measures. These are to form a basis for the localities to construct, reinforce, and manage dykes for flood and
storm control and development of other dyke-related plans.

Major tasks: Develop overall and summary reports on river and sea dyke system plans. There should also be reports on Hydrology, Hydraulics, Hydraulic constructions, Economics and Environment. Develop maps of current situation and planning of river and sea dyke systems in the whole country.

Implementation plan: The review and revision of river and sea dyke system plans are implemented from 2009 to 2010.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy agencies for implementation.

7.6. Reviewing, revising and implementing relocation plans in disaster-prone areas.

Objective: Review and revise relocation plan for 150,000 households and improve poverty ratio in relocated areas down to 15%. Priorities for relocation are especially given to people in disaster-prone areas, highly disadvantaged areas, and border areas, on islands, nomadic living people, and people living in critical and highly critical protective forest areas and strictly protected specialized forest areas, etc.

Major tasks: By 2015, all of 135,537 households living in high risk areas are relocated to safe areas to ensure stabilized life and economic activities, of which:

- In the Northern mid-land and mountainous areas: 7,632 households in provinces frequently facing flashfloods, mud flows and landslides.
- In Red River Delta: 8,159 households in areas prone to river bank and coastal erosion.
- In Northern Central coastal region: 3,891 households in areas prone to flashfloods, river bank erosions, and floods.
- In Southern Central coastal region: 15,391 households in areas prone to river bank and coastal erosions.
- In the Highlands: 4,589 households in areas prone to floods.
- In the South Eastern region: 2,190 households in areas prone to flood along Dong Nai and Sai Gon rivers.
- In Mekong River Delta: 93,685 households in deeply flooded areas.

Implementation plan: From now to 2010, investigate and review the number of households seriously affected by disaster. 30,000 households are expected to be relocated by 2010.

Implementation coordinating agency: The MARD, the Ministry of Construction to coordinate with related localities and consultancy organizations for implementation.

7.7. Reviewing and complementing plans of land use in association with disaster preparedness

Objective: Review, identify and revise land use purposes of individual land lots
correspondingly to natural disaster conditions without worsening disaster risks of the localities. This is to create a basis for land use management and socio-economic development.

Major tasks: Develop overall and summary reports on land use planning. Develop maps of current situation and planning of land use in the whole country.

Implementation plan: The review and revision of land use plans in association with disaster preparedness are implemented on annual and 5-year bases from 2009 to 2020.

Implementation coordinating agency: The MONRE to coordinate related localities for implementation.

7.8. Forest management and sustainable development program

Objective: Establish national forest territory for sustainable and effective management, development and usage of forests, contributing to sustainable development of the country.

Major tasks:
- Establish national forest territory for 3 types of forest, develop maps and plant osite marking posts. Sustainably and effectively manage the whole economic forest areas including 3.63 million hectares of natural forests and 4.15 million hectares of planted forests which comprise of industrial material forests, non-wood forestry product forests and others;
- All of forests and forestry land are assigned to or leased to certain owners / lessees by 2010;
- Conduct periodical forest counts, update database on forest resources and related socio-economic resources.

Implementation plan: The program is expected to fully complete by 2015. Some components of the program have already been approved and implemented such as the 5-million hectares forest planting project. The other components will be approved and implemented as scheduled.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy organizations for implementation.

7.9. Reviewing and revising plans for managing water resources of rivers and water resource systems

Objective: Well manage water resources of river catchments and water resource systems to ensure relevant and economical usage, effectively facilitating socio-economic development without negatively affecting long-term development demands.

Major tasks: Supplement water resource planning for river catchments, regions and water resource structure systems; Complete legal documents, consolidate the water resource management and river catchment planning management unit; Conduct basic investigations; Continue the supplementation and periodical reviews and revisions of the plans; Frequently enhance management capacities.
Implementation plan: Phase 1 (2009 - 2015): supplement water resource planning for river catchments, regions and water resource structure system; Phase 2 (2016 - 2020): Conduct basic investigations; continue the supplementation and periodical reviews and revisions of the plans; frequently enhance management capacities.

Implementation coordinating agency: The MARD to coordinate related localities for implementation.

7.10. Reviewing plans for developing water resource in the context of global climate change adaptation.

Objective: Protect residential clusters for socio-economic development in the context of global climate change.

Major tasks: Conduct studies on global climate change impacts on rural development. Also study on water resource solutions to ensure safety of residential clusters and the general development of agriculture, forestry, and fishery in climate change affected areas following the scenarios for periods of 2020, 2030, 2050, and 2100.

Implementation plan: 2008 - 2015: Conduct studies on impact of global climate change on rural development; 2016 - 2020: Conduct studies on water resource solutions to ensure safety of residential clusters and the general development of agriculture, forestry, fishery in climate change affected areas following the scenarios for periods of 2020, 2030, 2050, and 2100.

Implementation coordinating agency: The MARD to coordinate related localities and consultancy organizations for implementation.

7.11. Reviewing and revising building plans in disaster prone areas.

Objective: Review and revise building plans in disaster prone areas to ensure infrastructural works and structures are resistant to local disaster conditions without worsening the disaster situation of the neighboring areas. This is to create a basis for the management of infrastructure construction and development.

Major tasks: Develop overall and summary reports on construction planning for individual disaster-prone areas in the whole country.

Implementation plan: The review and revision of construction plans in disaster-prone areas are implemented on annual and 5-year bases from 2009 to 2020.

Implementation coordinating agency: The MOC to coordinate related localities for implementation.

8. International cooperation

Programs on international economy integration aim to widen the relationship among regions and nations all over the world. All the activities will focus on disseminating international regulations, practices, and new procedures of international cooperation activities in order to call for ODAs and FDIs to the field of natural disaster prevention, response and mitigation.

Actively cooperate with other nations all over the world as well as international
organizations, non-governmental organizations in efforts to mitigate disaster-caused damages. Share information, practical experience, and lessons learnt about the new knowledge on natural disaster risk management. Proactively participate in regional and international workshops on natural disaster prevention, response and mitigation.

Review, adjust, supplement, and develop policies for mobilizing, receiving and using foreign investment effectively and in compliance with Vietnamese laws to promote and attract foreign investment as well as implement projects / programs related to natural disaster risk management effectively as scheduled.

B. STRUCTURAL MEASURES

Natural disaster prevention, response and mitigation structural measures have basically identified and balanced in the socio-economic development plan 2006-2010 and sectoral, provincial and municipal plans or integrated in related projects, and will continue to be identified during the preparation process of the 5-year plan 2011-2015 and vision to 2020. Therefore, this implementation plan would mainly review and identify priorities to ensure effectiveness and sustainability.

1.1. Construct safety harbors for fishing ships / boats.

Objective: Establish a system of safety harbors for fishing ships / boats by taking full advantage of favorable space. The safety harbors should be located near fishing fields at sea areas where the storm frequency is high and relevant to the customs of fishermen in order to ensure the safety for fishermen and fishing boats/ships and minimize the damage and losses due to storms. The harbors can also supply services to fishing boats where possible in order to enhance the efficiency.

Main criteria: Based on natural features, fishermen customs and habits, the safety harbor system can be classified as follows:

The safety harbor at regional level should meet the following conditions:
- Located near critical fishing fields where many fishing boats/ships of different provinces operate and ensure fastest escapes from storms for boats / ships.
- Sea territory with high frequency of typhoon.
- Enjoy favorable natural conditions to ensure safety from storms for fishing boats / ships.
- Capable of anchoring from 800 to 1,000 fishing ships / boats, including ships with the capacity of 1,000 CV and foreign fishing boats / ships.

The safety harbor at provincial and municipal level should meet the following conditions:
- Located near local traditional fishing fields and ensure fastest escapes from storms for boats / ships.
- Enjoy favorable natural conditions to ensure safety from storms for fishing boats / ships.
- Be able to shelter local fishing boats / ships.
Major tasks and Implementation plan: The planning should be developed to meet the following targets: By 2010, there will be 75 safety harbors including 13 regional safety harbors, and 62 provincial safety harbors. By 2020, there will be 98 safety harbors including 13 regional safety harbors, and 85 provincial safety harbors. The planning for sea areas should be as follows:

- The Gulf of Tonkin: there are 28 safety harbors including 25 coastal harbors and 3 island harbors.
- The Central sea area: there are 39 safety harbors including 34 coastal safety harbors and 5 island safety harbors.
- The South Eastern sea area: there are 19 safety harbors including 17 coastal safety harbors and 2 island safety harbors.
- The South Western sea area: there are 12 safety harbors including 7 coastal safety harbors and 5 island safety harbors.

Implementation coordinating agency: The MARD to coordinate coastal localities for implementation.

1.1. Program on upgrading the dyke systems of the Red River and Thai Binh River systems and other river systems in the Northern Central region.

Objective: Enhance the stability to be proactive in prevent flood for the Red River and Thai Binh River dyke systems and other river dyke systems in the Northern Central region. The river dyke systems should be developed as multi-purposes including dyke investigation and rescue; rural transport development, social welfare services and environmental improvement.

Major tasks: Improve dyke safety; increase cross section of dyke; review, detect, and provide treatment to latent faults inside the dykes; reinforce the dyke foundation and body; improve, upgrade and build new sluices underneath dyke to replace the old ones; concrete the dyke surface and corridor along dyke foot; build revetments to prevent erosion; continue to plant wave-resistant trees and Vetiver grass to prevent erosion; promote scientific activities to improve the dyke system and invest in infrastructure as well as supply equipment for specialized staff responsible for dyke management.

Implementation plan: At present, the program has been developed and submitted to the Government for implementation. The funding resources of the program include the State budget, ODAs, business investments and loans without obligation to repay from international donors.

Implementation coordinating agency: The MARD to coordinate provinces and cities with dykes from Ha Tinh up north for implementation.

1.3. Construction of embankment system to control flood and prevent river erosion in the Mekong River Delta.

Objective: Ensure safety for people livelihood and production in flood areas of Mekong River Delta to facilitate economic activities.
Major tasks: Continue to upgrade, strengthen, and complete the construction of embankment systems, and residential clusters for river erosion prevention in the Mekong River Delta.

Implementation plan: Phase 1 (2008 - 2015): complete the construction of 10 structures. Phase 2: complete the construction of 12 works of embankment system to control flood and prevent river erosion; develop residential clusters as approved by the Government for Phase 2.

Implementation coordinating agency: The MARD and the MOC to coordinate localities in the Mekong River Delta for implementation.

1.4. Program on sea dyke development from Quang Ninh to Quang Nam

Objective:
- Ensure safety for all sea dyke systems following the design standards through continuing to upgrade and reinforce sea dykes and river mouth dykes which have not been improved;
- Increase the safety levels for sea dykes; reduce dyke breaks when wind strength is over the design level, mitigating damages in terms of people's lives and properties and investment risks, promoting coastal economic development;
- Establish coastal traffic route to promote transportation, tourism, and economic development. Ensure the smooth traffic in all the sea dyke routes, contributing to the national security and national defense even in flood and storm season;
- Better control flood and saline intrusion following the planning of agriculture, fishery, salt production for sustainable economic development in coastal areas and coastal water covered areas;
- Regarding social issues: Improved sea dyke systems and better controlled flood and saline intrusion will facilitate full exploitation of coastal land resources, manufacturing and plant restructuring, investment attraction, job creation, income improvement for poverty reduction.

Major tasks and Implementation plan: From now to 2020, complete the construction of critical dyke sections; Reinforce to prevent the degradation of sea dyke in order to bring into play the achieved results of projects PAM 5325 and 4617 and other projects on protecting focused residential clusters and important economic zones. Make sure that all these structures are capable to cope with storms of level 9 combined with tide frequency of 5%. For important dyke systems that directly protect focused residential clusters, ensure that the dykes can cope with storm and wind force of level 12 and tide frequency of 5%.

Implementation coordinating agency: The MARD to take lead and coordinate relevant agencies, coastal provinces and cities from Quang Ninh to Quang Nam for implementation.

1.4. Program on sea dyke development from Quang Ngai to Kien Giang.

Objective: Based on the achieved results continue to reinforce and upgrade the sea
dyke system to ensure safety for people's life, socio-economic development, and environmental protection in the context of sea level rise.

In the short run, complete the sea dyke systems to prevent the adverse impacts from the sea in the context of existing parameters of natural disaster for people protection and sustainable coastal economic development, contributing to the development of relevant infrastructure for socio-economic development, national defense, and environmental improvement for coastal areas.

Major tasks:
- Reinforce and prevent the degradation and breach of sea dykes that have been recovered. Repair and strengthen the structures underneath dykes in order to bring into play the achieved results of previous projects;
- Construct new sections of sea dyke and river mouth dyke as well as structures underneath dyke in order to complete the sea dyke systems;
- Connect sea dyke and river mouth dyke systems to national traffic systems in order to promote multi-sectoral and multi-purpose development and to ensure public security for the area;
- Conduct relocations and clearances, and build wave resistant walls and sea dykes to protect residential clusters and urban centers in coastal areas from impacts of wind and storm and sea level rise;
- Plant protective forests in front of and behind dykes to prevent big waves, sand movement, desertification and improve the eco system.

Implementation plan: Phase 1 (2009–2012): mainly focus on tree planting and dyke embankment to complete the dyke systems; Phase 2 (2013–2020): mainly focus on reinforcing dyke surfaces and slopes and completing the dykes, revetments, and sluices underneath the dykes.

Implementation coordinating agency: The MARD to take lead and coordinate with coastal cities and provinces from Quang Ngai to Kien Giang for implementation.

1.6. Ensure safety for water reservoirs.

Objective: Ensure safety for reservoirs by synchronously applying structural measures and management solutions to sustainably and efficiently utilize the reservoirs.

Major tasks: Focus on repairing and upgrading critical structures of reservoirs to ensure the sustainability and safety for the structure on a cost-effective manner; Equip necessary management facilities and devices including management roads, management houses, communication systems, measuring devices to facilitate the reservoir management; Provide training for technical staff and operating workers to equip them with basic knowledge on reservoir management procedures, equipment operations, structure problem solving, etc; Develop and promulgate regulations on safe reservoir management procedures such as river exploitation planning management, reservoir construction consulting, implementation and supervising management, reservoir critical structures
exploitation and maintenance, reservoir and inter-reservoir operation to ensure safety for the reservoirs and contribute to flood control for the downstream areas.

Implementation plan: By 2010, about 30% of reservoirs with capacity of 200,000 m³ or more, i.e. 295 reservoirs, will be upgraded to meet the designed flood frequency. From 2011 to 2020, the improvement of 556 reservoirs will be completed.

Implementation coordinating agency: The MARD and the Ministry of Industry and Commerce (MIC) to take lead and coordinate with provinces and cities having significant reservoirs and reservoir managing agencies for implementation.

1.7. Program on construction of multi-purpose water reservoirs for regulating flows and controlling flood.

Objective: Upgrade existing large-scaled reservoirs; construct new multi-purpose ones for water supply, flood prevention, electricity generation, and downstream environmental preservation to meet the increasing demand for water due to residential and economic development correspondingly to climate change.

Major tasks: Focus on upgrading the existing reservoirs to meet the socio-economic development requirements in the new context, and ensure safety in flood season. Construct new multi-purpose reservoirs in the order of priorities to ensure the water supply, electricity generation, flood prevention for each development period, i.e. to 2010, to 2020, and after 2020.

Implementation plan: To 2015, complete the reservoirs in the upstream areas of Da and Lo rivers and river systems in the Central region and Highlands such as Cua Dat, Ta Trach, Nuoc Trong, and Dinh Binh. Invest into constructing new reservoirs in Ban Mong and Ban Lai. During 2016 - 2020, continue to complete the structures started in the previous period and continue to start new constructions for which investment procedures have been completed.

Implementation coordinating agency: The MARD and the MIC to take lead and coordinate with related agencies, cities and provinces for implementation.

1.8. Program on repairing and constructing water resource structures for sustainable development in natural disaster prone areas

Objective: Increase the stability, minimize damages and losses, use water economically, and improve effectiveness in water supply and drainage to meet demands for drinking water and manufacturing water of people in natural disaster prone areas. This program should be in line with the programs on hunger alleviation and poverty reduction, stabilization of residential clusters, public security, politics, and national defense.

Major tasks: Assess the current conditions and the management of the structures; Conduct studies and invest in implementing technical measures to repair, upgrade and modernize the structures; build management capacities for the system.

Implementation plan: By 2015, assess the current conditions of the existing structures, study enhancement and modernization solutions; invest to upgrade, construct, and modernize the important systems (which account for 65% of the total systems). Bring
into play 90% of designed capacity of the structures.

Implementation coordinating agency: The MARD to take lead and coordinate with related cities and provinces for implementation.

The detailed list, timing, and budget for implementation for the individual programs and projects are included in the attached annex.

1.9. Program on inundation prevention for big cities.

Objective: Conduct studies and make recommendations to solve the inundation situation of big cities.

Major tasks: Propose tide control solutions to reduce the tidal levels in the channels surrounding the city; enhancing the discharging capacity of the sewage systems and gradually mitigating the inundation situation and improving the environment for Ho Chi Minh city. Review existing plans and construct additional flood discharging structures for Hanoi and other cities.

Implementation plan: For Ho Chi Minh City, in the short run, propose tide control solutions to reduce the tidal levels in the channels surrounding the city; enhancing the discharging capacity of the sewage systems and gradually mitigating the inundation situation and improving the environment for these areas. In the long run: control flood and tide in order to solve the inundation problems due to sea level rise in the future. Make plan for the sewage routes for the urban and suburban areas. Consider combining the drainage and environmental treatment purposes.

For Hanoi, develop drainage pumping systems such as pumping stations in Yen Nghia and Lien Mac. Dredge and expand drainage channel systems.

Continue to study and supplement drainage planning for Can Tho, Hai Phong, Da Nang to mitigate inundation due to big rains and high tides.

Implementation coordinating agency: The MARD, and related provincial people’s committees

1.10. Program on sustainable forest management and development.

Objective: Manage, develop, and utilize the forest resources sustainably and efficiently to basically satisfy domestic and exporting needs for forest products, contributing to the national economic growth, social stabilization, especially in mountainous areas and ethnic minority areas as well as ensuring protective forest maintenance, biological diversity preservation and environmental services supply to contribute to the national stability.

Major tasks:

- Enrich 0.5 million hectares of exhausted forests, contributing to improving the quality of natural forests;

- By 2010, plant 1.0 million hectares of new forests, including 0.75 million hectares of economic forests, and 0.25 million hectares of protective and specialized forests). Plant 1.5 million hectares of forest in the following phase. Replant 0.3 million hectares of exploited forests annually;
- Plant 200 millions of scattering trees every year, equivalent to 100,000 hectares of forest for local needs for timber and firewood;
- At least 30% of economic forest areas are certified for sustainable forest management to 2020.

Implementation plan: To be implemented to 2020.

Implementation coordinating agency: The MARD to take lead and coordinate with related agencies and localities for implementation.

IV. FINANCIAL SOURCES FOR THE IMPLEMENTATION OF THE NATIONAL STRATEGY FOR NATURAL DISASTER PREVENTION, RESPONSE AND MITIGATION

1. Although the funding for natural disaster prevention, response and mitigation is highly prioritized, it should still be within the state budget and mobilization capacity from social resources. Therefore, it is required that the synchronous, phase-based and focus-based implementation be observed, with the appreciation of both urgent and long-term needs. The State ensures necessary resources and, at the same time, mobilizes community and social contributions in natural disaster prevention, response and mitigation.

2. Natural disaster prevention, response and mitigation structures have basically been identified and balanced in socio-economic development plans, sectoral, provincial and municipal plans or integrated in related projects included in the 2006-2010 plan and will be identified during the preparation process for the 5-year plans 2011-2015 of sectors, cities and provinces. At the same time, structures of urgent needs and disaster consequence recoveries are added by the Government on a timely basis.

In fact, the State has allocated the State budget, ODAs, and Governmental bonds to direct invest in or integrate in projects. Such investments will be continued and improved in the next coming plans.

3. With regards to non-structural measures, the State budget provides entire funding for the enhancement of communication systems to ensure fishery safety, broadly and deeply disseminate knowledge on natural disaster prevention, response and mitigation for the community, consolidate the organization for natural disaster prevention, response and mitigation, and plant protective and mangrove forests. At the same time, encourage scientific and technological application in natural disaster prevention, response and mitigation, review plans, and consolidate institutional organization. In order to disburse funds for the non-structural measures, the MARD is assigned to coordinate with the MOF and the MPI to develop investment mechanism for non-structural measures to ensure that budget will be available to encourage the public involvement, effectively and synchronously bringing into play the structural measures and improving the effectiveness of natural disaster prevention, response and mitigation efforts.

4. Budget reserve is maintained for disaster consequence recovery requirements. The national reserve will be used for natural disaster prevention, response and mitigation requirements when needed.

5. Preferentially allocate ODA resources to natural disaster prevention and response
purposes. Take advantage of international supports in technology transfers, community awareness raising, and human resource training for natural disaster prevention, response and mitigation.

6. Mobilize social investments in natural disaster prevention, response and mitigation through disaster relief funds, charity funds, and self-reliance funds for natural disaster prevention, response and mitigation. There should be a mechanism to encourage people to invest in house reinforcement to ensure safety against floods and storms.

7. ORGANIZATION FOR IMPLEMENTATION

1. The MARD and the CCFSC.

Are agencies responsible for state management in natural disaster prevention, response and mitigation, and coordinating the implementation of the natural disaster prevention, response and mitigation plan to 2020, specifically:

- Monitoring, checking and promoting the implementation of ministerial, sectoral and local plans,

- Acting as national focal point for international cooperation to mobilize resources for natural disaster prevention, response and mitigation.

- Consolidating and assessing the implementation of the annual and 5-year sectoral and local plans and submit to the Prime Minister for adjustments.

- Directly steering programs and projects under scope of responsibilities of the Ministry.

2. The MPI and the MOF.

Take lead and coordinate with the MARD and the CCFSC to balance and allocate annual funding in accordance with the Law on State Budget and other aids. Priorities should be given to non-structural measures to mobilize public involvement, improving the effectiveness of natural disaster prevention, response and mitigation efforts.

3. Other ministries.

In accordance with the assigned responsibilities in the Implementation plan, instruct localities and agencies to implement programs and projects within their scope of responsibilities. Consolidate and report the results to the CCFSC.

4. Provincial and municipal people's committees.

Based on the programs and projects, develop specific projects with identified implementation priorities.

It is necessary to complete the assigned tasks in the plan including reinforcement and construction of natural disaster prevention, response and mitigation structures in the localities, community awareness raising, organization of forces involved in natural disaster prevention, response and mitigation, prepare people protection plans, steering the integration of natural disaster prevention, response and mitigation into local annual and 5-year socio-economic development plans, and periodically report the implementation results to the MARD and the CCFSC.
V. ASSESSMENT

The implementation of the National Strategy for Natural disaster Prevention, Response and Mitigation should be closely linked to the sectoral socio-economic development plans. Therefore, M&E should be conducted based on the issued M&E Framework for the implementation of the development plans.

The Implementation M&E Framework has identified the overall objectives, specific objectives and projects / programs. An M&E indicator set has also been defined. The Framework has also specified responsibilities of management agencies and implementing agencies based on the individual indicators.

Monitoring and Evaluation scope based on the 5-year plans.

- Program / project implementation is assessed based on 5-year plans. The 5-year plans are developed to include the entire action plans and component projects. Accordingly, the M&E system should include.

- Program / project M&E components developed and operated by ministries, sectors and localities to assess the programs / projects in terms of implementation results and financial performance.

- The various levels under the programs will also establish M&E systems to monitor and evaluate the program / project implementation results.