Government of the Socialist Republic of Viet Nam

Food and Agriculture Organization of the United Nations

DETAILED PROJECT OUTLINE

Project title	:	Strengthening Capacities to Enhance Coordinated and Integrated Disaster Risk Reduction Actions and Adaptation to Climate Change in Agriculture in the Northern Mountain Regions of Viet Nam
Project code	:	UNJPVIE037UNJ
Governing agency	:	The Ministry of Agriculture and Rural Development (MARD) of the Socialist Republic of Viet Nam
Project focal point	:	Central Committee for Flood and Storm Control (CCFS) within the Ministry of Agriculture and Rural Development (MARD) Standing office of CCFSC (MARD). 2 Ngoc Ha St., Ha Noi, Viet Nam Tel: 844 7335695; Fax: 844 7335701 Website: www.ccfsc.org.vn Food and Agriculture Organization of the United Nations (FAO)
Implementing agencies	:	Provincial Department of Agriculture and Rural Development (DARD) of Phu Tho, Yen Bai and Lao Cai. Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI) Department of Crop Production, MARD, Hanoi
Start and end dates	:	December 2009 – November 2011
Total ODA grant	:	Available ODA Grant (Regular FAO Resources and One UN Plan Fund — US$ 450 000 (One UN Plan) Government Contribution In cash In kind Co-financing
Project sites for implementation	:	Selected Provinces of the Northen Mountain Regions (Phu Tho, Yen Bai, Lao Cai)
Government priority areas addressed	:	Prime Minister's Decision to Approve the Plan for Implementation of National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 – No: 172/2007/QD-TTg dt 16 November 2007. Action Plan Framework for Adaptation and Mitigation of Climate Change of the Agriculture and Rural Development Sector Period 2008 – 2020 (Decision No.2730/QD-BNN-KHCN dated 5th September 2008 by the Minister of Agriculture and Rural Development).

SIGNATURE PAGE

Country Programme Outputs/Expected Results:

- (One Plan 2006-2010; Output 5.2) Institutional systems and processes strengthened to enhance coordinated and integrated DRR actions and adaptation to global climate change, at national and provincial level

Implementing Partner:

Ministry of Agriculture and Rural Development (MARD) / CCFSC

Responsible Party(s):

- Department of Dyke Management and Flood & Storm Control (DDMFSC)/Standing office of the CCFSC
- Department of Crop Production, MARD
- Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI)
- Department of Agriculture and Rural Development (DARD) in Phu Tho, Yen Bai and Lao Cai
- National Hydro-Meteorological Services (NHMS), Ministry of Natural Resources and Environment (MONRE)

Programme Period: Dec 2009 – Nov 2010 **Project Title**: Strengthening Capacities to Enhance Coordinated and Integrated Disaster Risk Reduction Actions and Adaptation to Climate Change in Agriculture in the Northern Mountain Regions of Viet Nam **Project ID**: **Project Duration**: 01.12.2009 – 30/11/2011 **Management Arrangement**:	**Budget:** US$ 450 000 **GMS Fee:** (7% Other) US$ **Total budget**: US$ 450 000 **Allocated resources available**: FAO Regular (in cash) Government (in kind) Others (in cash)

Agreed by:	**Signature**	**Date**	**Name/Title**
Government/MARD (IMPLEMENTING PARTNER)	_____	_____	
FAO:	_____	_____	

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LIST OF ACRONYMS

ADB	Asian Development Bank
AGPS	Seed and Plant Genetic Resources Services
CCA	Climate Change Adaptation
CCFSC	Central Committee for Flood and Storm Control
CLA	Cluster Leadership Approach
DARD	Department of Agriculture and Rural Development
DDMFSC	Department of Dyke Management and Flood and Storm Control
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
GDP	Gross Domestic Product
GEL	Gender Equality
GSO	General Statistics Office of Viet Nam)
HFA	Hyogo Framework for Action
HPAI	Highly Pathogenic Avian Influenza
LoAs	Letter of Agreement
LTU	Lead Technical Unit
M&E	Monitoring and Evaluation
MARD	Ministry of Agriculture and Rural Development
MONRE	Ministry of Natural Resources and Environment
NDMP	Natural Disaster Mitigation Partnership
NGO	Non-Governmental Organization
NHMS	National Hydrometeorological Services
NOMAFSI	Northern Mountainous Agriculture and Forestry Science Institute
NPC	National Project Coordinator
NPD	National Project Director
NRC	Environment, Climate Change and Bioenergy Division
NRCB	Natural Resources, Climate Change and Bioenergy
NTP	National Target Programme
ODA	Overseas Development Assistance
PCG10	Programme Coordination Group for Natural Disaster Management and Response
PMU	Project Management Unit
PSC	Project Steering Committee
SNS	Second draft National Strategy
TCEO	Emergency Operations Service
TCP	Technical Cooperation Programme
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNFCCC	UN Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNISDR	UN International Strategy for Disaster Reduction

1. Project justification

1.1 Situation analysis and assessment

Viet Nam is prone to natural disasters, with typhoons, storms, floods, droughts, mudslides, forest fires and salt-water intrusion presenting recurring risks, especially for children, women, and the elderly. The poorest people in society are the most vulnerable to natural disasters. Every year, the country suffers directly from six to ten storms and tropical depressions causing heavy rains and flooding. In the last ten years more than 15 million people have been severely affected by natural disasters and more than one million people require emergency relief each year. Recent study by the World Bank on macroeconomic impacts of Natural Disasters has clearly indicated that disasters have the potential to cause significant medium-term economic impacts and lead to significant negative effects on Gross Domestic Product (GDP) of the country.[1] In 2006, natural disasters caused an estimated damage and losses totalled nearly 1.2 billion US dollars[2].

Viet Nam is considered as one of the most vulnerable countries to the impacts of climate change and associated phenomenon such as sea level rise, increased frequency of natural disasters like typhoons, floods and droughts.[3] Annual average temperature during the last fifty years (1951 - 2000) in Viet Nam increased by 0.7ºC and was higher than annual average value of the previous decades (from 1931 to 1960)[4]. The recent report from ADB predicts that by the end of the century, rice production will decline dramatically and rising sea levels could submerge tens of thousands of hectares of cropland, forcing thousands of families in coastal areas to relocate. More than 12 million people could be affected by increased water stress[5].

Agriculture is the largest employer (57% of the total labour force) and will continue to play a significant role in employment creation and poverty reduction. The agriculture activities are highly exposed to recurring natural hazards especially in most vulnerable areas including northern mountain region. In recent years, disaster occurred in mountainous areas with increasingly unprecedented severity and scale, devastating small watersheds, causing serious losses in term of human lives, properties and ecological environment. The year 2008 has been one of the worst in terms of impacts of storms and floods. During August 2008 tropical storm Kammuri caused severe damages in North Viet Nam, particularly in Phu Tho, Yen Bai and Lao Cai Provinces. In early November 2008, heavy rain and flooding affected twenty provinces in the region. Floods in mid-November once again resulted in loss of 208 719 ha of rice and 26 130 ha of aquaculture and extensive irrigation infrastructures. The economic losses exceed USD 430 million.

Emergency supply of seeds and other inputs during the rainy season creates a situation of "dependency from external aids" in most cases in the region. This concern needs to be addressed and overcome by empowering institutions and farmers' capacity for disaster preparedness and mitigation and climate change adaptation to build resilience.

[1] The World Bank, 2009. Assessing the Macroeconomic Impacts of Natural Disasters, Policy Research Working Paper 4968, Sustainable Development Network Vice Presidency, Global Facility for Disaster Reduction and Recovery Unit, June 2009

[2] Reliefweb, Viet Nam, latest update.

[3] One Plan (Common Action Plan) 2006 – 2010, between the Government of the Socialist Republic of Viet Nam and UN agencies/organizations, Hanoi – Viet Nam, December 2007

[4] MONRE, 2008. National Target Programme to Respond to Climate Change, Ministry of Natural Resources and Environment (MONRE), Implementing the Governmnt's Resolution No. 60/2007/NQ-CP dated 3rd December 2007.

[5] ADB, 2009. The economics of climate change in Southeast Asia: a regional review, Asian Development Bank, 2009. 226 p.

In order to introduce new policies related to Disaster Reduction/Mitigation, the Government of Viet Nam has prepared the National Strategy on Disaster Prevention, Response and Mitigation 2020 and approved in 2007. This broader agenda on disaster management should address multiple hazards and emphasise disaster risk reduction (DRR) over response mechanism. This proactive approach is of vital importance because of vulnerabilities to global climate change impacts. Government has assigned Ministry of Natural Resources and Environment (MONRE) to be in charge in collaboration with other related ministries and sectors to develop National Target Programme (NTP) for coping with global climate change.[6]

In order to enhance the capability and minimize the adverse impacts of climate change in agriculture and rural development sector, the Govermnet has prepared and approved an Action Plan Framework for Adaptation and Mitigation of climate change of the agriculture and rural development sector (2008 – 2020).

The proposed project supports the request made by the Government of Viet Nam to provide technical assistance for implementation of National Strategy on Disaster Control and Mitigation in the Framework of Natural Disaster Mitigation Partnership (NDMP) and other elements under the Action Plan Framework for Adaptation and Mitigation of Climate Change. In addition, the Natural Disaster Coordination Group under One UN Plan identified strengthening of preparedness, early warning, data base management, coordination, communication, training and enhancing resilience for future risks (climate change) as priorities.

Within this context, this project will assist MARD and CCFSC in strengthening technical and institutional capacity building for preparedness and risk mitigation taking into account the consideration that preparedness is based on the analysis of disaster risks, good early warning systems and linked to climate change adaptation and long term development.[7] The target beneficiaries are the most vulnerable people affected by recurrent natural disasters, especially those in the Northern Mountain Regions. As a pilot project, communities in three provinces (Phu Tho, Yen Bai and Lao Cai) within the Northern Mountain Region will be selected as “targeted beneficiary communes”.

Disaster management in Viet Nam has organized around specific hazards. Ministries, departments and agencies have responsibilities for managing natural hazards that are related to their sectoral mandates. Cooperation and coordination is realised through committees, in particular the Central Committee for Flood and Storm Control (CCFSC). These committees have branches at ministerial, provincial, district and commune levels. The CCFSC has traditionally been the main body in disaster management in Viet Nam. The current institutional arrangement has made significant commitments in addressing natural disasters as part of poverty reduction. Viet Nam’s capacity to respond to hydro-meteorological disasters is recognized internationally, but the risk reduction, preparedness and coordination during the pre-disaster stage needs further strengthening. There is need to systematically strengthen capacities in agriculture sector to undertake DRM actions based on a comprehensive understanding of hazards, vulnerabilities and fully anticipation of risk to plan and implement risk reduction measures.

Under ONE UN Plan, FAO, together with other UN Agencies, will provide effective and coordinated support to in case assistance is required by the Government of Viet Nam. Within the ONE UN Plan, FAO has the role to facilitate the Governments lead in prevention, mitigation, disaster preparedness, response and rehabilitation Plan of Action in agriculture considering food security targets. The idea underlined in the ONE UN Plan is to take all the UN Agencies working together under the same umbrella in order to address needs and priorities in a more effective

[6] Resolution No. 60/2007/NQ-CP dated December 3rd 2007 the Government has assigned Ministry of Natural Resources to develop a National Target Programme for coping with global climate change.

[7] FAO Approach to Disaster Risk Management, Preliminary Baseline Assessment, April 2009, Draft

manner and take advantage from mutual lessons learned, information sharing, training and coordination. On this regard, the Programme Coordination Group for Natural Disaster Management and Response (PCG10) are committed to support MARD in emergency preparedness and response through coordination within all UN Agencies involved in those activities. To date, within PCG10, FAO is responsible and leader for Agriculture and Food Security in case of disaster response. Rainy season each year is expecting to bring floods, especially in the northern mountain region of the country. One of the core objective of ONE UN Plan, is to assess priority needs and fill the gaps in order to mitigate future treats through proper risk reduction and preparedness activities relevant to flooding and other potential natural disasters.

1.2 Relevant government strategies, plans and programmes[8]

The Government of Viet Nam has developed a number of laws and policies related to DRM. Strengthening disaster risk management remains a priority of the Government's development agenda. In the past, Viet Nam has given priority to laws and policies relating to disaster mitigation and management and has instituted a structure for water-related disaster management: the Central Committee for Flood and Storm Control (CCFSC) and its subordinate provincial and local committees. The CCFSC is a cross-ministerial agency established in 1990 to strengthen institutional coordination especially in the area of emergency response and long-term reconstruction and recovery.

A number of documents have set out strategic directions and priorities for Viet Nam and targets some aspects related to Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA). The documents include:

- The National Strategy for Disaster Prevention, Response and Mitigation to 2020
- The National Target Programme on Climate Change
- Action Plan Framework for Adaptation and Mitigation of Climate Change of the Agriculture and Rural Development Sector (2008 -2020)
- Law on Forestry and the Strategy on Forestry Development
- Law and Strategy on Environmental Protection
- The ODA Master Plan for 2006/2010 that gives priority to "reduce losses and damages caused by natural disasters".

Furthermore, the Government of Viet Nam has ratified a number of International Treaties and Agreements that relate to DRR and climate change adaptation including (i) the UN Framework Convention on Climate Change (UNFCCC); (ii) the UN Convention on Combat desertification; (iii) the ASEAN Agreement on Haze pollution prevention and control.

To address the DRR challenges, including development of comprehensive DRR policies, Viet Nam has actively engaged with important international frameworks on DRR including UN International Strategy for Disaster Reduction (UN ISDR), which aims at building disaster resilient communities by promoting increased awareness on the importance of DRR as an integral component of sustainable development. Viet Nam is also committed to the Hyogo Framework for Action (HFA) which has five priority areas that were agreed in the World Conference on Disaster Risk Reduction (Kobe, 2005).

The Ministry of Agriculture and Rural Development (MARD) is actively participating and providing necessary support to the work of the Programme Coordination Group for Natural Disaster Management and Response (PCG10) which is committed in implementing and coordinating national action as outlined in the "*National Strategy for Natural Disaster*

[8] Including guidelines, policies, strategies, programmes, projects and activities.

Prevention, Response and Mitigation to 2020" prepared by MARD in late 2007[9] and for advocating the implementation of global preparedness and response systems such as the *Cluster Leadership Approach* (CLA). A Cluster Leadership Approach (CLA) applicability study has been conducted by UN PCG10 in July 2008 and has been shared and agreed between the governments. The CLA has helped to identify priority activities and needs in the most affected areas of Viet Nam. The Government of Viet Nam is also part of the Disaster Management Working Group and the National Forum for Disaster Management and Mitigation.

1.3 Lessons learned from previous cooperation

FAO has been assisting the Ministry of Agriculture and Rural Development (MARD) and most of the previous cooeprations are related to disaster emergency response interventions. Two projects need to be mentioned on this regard: TCP/VIE/3101 on *"Capacity building for improvement of seed source quality and rice production for food security in the highland and mountainous regions in Viet Nam"* and the TCP/VIE/3202 on *"Emergency supply of rice seeds to flood victims in northern mountainous provinces of Phu Tho, Yen Bai and Lao Cai"*. A "*Medium-term program for sustainable increase of rice yield and production in the remote and mountainous regions of Viet Nam*" has been produced and it provides a comprehensive overview of the agriculture and food security conditions of the area.

From the cooperation and technical assistance in the past, a number of lessons have been learned in Viet Nam and priorities have been set in the field of disaster management, they are:

- to strengthen needs assessment mechanism during preparedness phase in order to link Disaster Response and Mitigation in a development process;
- to enhance the capacity of farmers and support services to reduce agricultural losses from future natural hazards;
- to build capacity for the transfer of adaptation technologies and for coordination, policy analysis and exchange of information and learning to integrate DRR perspective in poverty reduction projects;
- to support vulnerability analysis and risk mapping especially related to the new and emerging climate change challenges; and
- to reduce dependence of farmers on external seed suppliers, improving capacity of local institutions and improving systems for planning of seed production and use.

Based on the lessons learned from the previous cooperation, the following are general considerations and underlying principles for coordinated and integrated DRR actions and adaptation to climate change:

- Being aware of the importance of implementing activities during preparedness and early warning phase as precondition for disaster mitigation and response;
- Assess needs and priorities at local level and undertake DRR and climate change adaptation actions;
- Strongly commit technical assistance to enhance the institutional and technical capacity to enhance disaster risk reduction actions with long term adaptation and Agricultural Development process;
- Strengthen information sharing and coordination of disaster related impact and livelihood baseline data from local to national level.

[9] "National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020", Natural Disaster Mitigation Partnership, MARD 16 November 2007.

Following the lessons learned and based on the priorities of ONE UN and in-line with government's priorities, the project proposal will focus on three main areas taking into consideration the project duration and resource availability:

- strengthen preparedness, early warning, weather and climate services and good database management;
- to strengthen resilience of the vulnerable communities and farmers to future natural hazards and climate change threatening food security; and
- improve capacity of national and province level agencies and organizations and support services for preparedness and risk reduction and climate change adaptation through better coordination, communication and training.

1.4 Development cooperation with other donors in related sector(s)

The One UN Plan enables increased programmatic coherence between UN organizations and Government agencies. The DRR and climate change adaptation activities will be implemented in close collaboration with the government and Donor and NGO partners. FAO is actively promoting the National Disaster Mitigation Partnership (NDMP) through joint efforts with MARD and donors. Moreover, FAO has also been instrumental in other coordination mechanisms, such as the Disaster Management Working Group (DMWG). Partnership with several non-government organizations (NGOs), UNDP, UNICEF and national agencies are expected in this project.

1.5 FAO's comparative advantage

FAO provides technical support to enhance institutional capacities, and offers policy advice on *Disaster Risk Reduction* (DRR) and Climate Change Adaptation. The integrated DRM approach at FAO encompasses the different phases of the DRM framework.[10]. FAO has a comparative advantage in working on DRM in food and agriculture, as agriculture (including forestry, fishery and livestock) makes a significant contribution to the livelihood activities and national economy. For this reason, FAO has been addressing food and agricultural emergencies since the early 1970s, through early warning systems and agricultural relief operations. FAO has the technical and operational capacity to help streamline disaster risk reduction and climate change adaptation into national agricultural and food security policies through its FAO Representations, working in close collaboration with Government counterparts, UN Country Team and partners.[11]

FAO has comparative advantages to support work and programme in DRR and Climate Change Adaptation:

- FAO has a decisive role to play in disaster risk reduction and climate change adaptation in the agricultural sectors (including livestock, forestry and fisheries), as its areas of expertise include policy formulation, institutional strengthening, early warning systems, good agricultural practices;
- FAO technical and operational expertise encompass both DRR and climate change adaptation issues and provide a solid basis to ensure effective transition from emergency operations to rehabilitation to development over the longer term;

[10] FAO (2008) *Disaster Risk Management Systems Analysis. A guide book*. This Guide provides a set of tools to assess existing structures and capacities of national, district and local institutions with responsibilities for Disaster Risk Management (DRM) in order to improve the effectiveness of DRM systems and the integration of DRM concerns into development planning, with particular reference to disaster-prone areas and vulnerable sectors and population groups.

[11] FAO Approach to Disaster Risk Management, Preliminary Baseline Assessment, April 2009.

- FAO has the technical and operational capacity to contribute to streamlining disaster risk reduction into national agricultural and food security policies through its field offices, working in close collaboration with ministries and the UN Country Teams;
- FAO is closely working in cooperation with all UN Agencies involved in the PCG10; and

Nevertheless, FAO and its technical departments have a very strong and long standing experience in the areas of Disaster Risk Reduction and linking with Climate Change Adaptation through the projects in several countries in Asia (Bangladesh, China, the Philippines and Viet Nam).

1.6 Problem statement and issues to be addressed by the project

As stated in the justification paragraph, the disasters that hit 50 localities nationwide in 2007 have damaged 113 000 hectares of rice and 1 300 irrigation works, causing total property losses of USD 725 million (1% of GDP). Consequently, the livelihoods of 723 900 families, or a total population of 3.0 million in flood-hit areas, were affected. The year 2008 has been one of the worst in terms of storms and floods. During August 2008 tropical storm Kammuri caused severe damages in North Viet Nam, particularly in Phu Tho, Yen Bai and Lao Cai Provinces. In early November 2008, further heavy rain and flooding affected twenty provinces in North Viet Nam. Floods in mid-November 2008 resulted in 82 deaths, damage of 208 719 ha of rice fields and 26 130 ha of aquaculture, as well as extensive irrigation infrastructures. The economic losses for the country exceed USD 430 million.

This project is designed to establish a practical DRR action and Climate Change Adaptation in selected three pilot provinces which have a high exposure of agriculture to natural hazards. The project address four critical problems and gaps identified:

In response to the flooding in 2008, the Government of Viet Nam through MARD requested rehabilitation assistance from FAO to support poor and flood-affected households in Phu Tho, Yen Bai and Lao Cai Provinces to restart their rice cultivation. The region was hit by a series of natural disasters including Cyclone Kammuri in August 2008 and followed by Cyclone Hagupit in September 2008. Though emergency support can not be completely avoided, in order to mitigate future threats, effective planning, preparedness and technical/institutional support are needed to minimise the adverse impacts of natural disasters and adapt to the impacts of climate change.

To enhance coordinated and integrated DRR actions and adaptation to climate change, institutional and technical capacity of the professional bureaus of MARD at the national level and provincial and district level DARD staff is necessary that they can address risks in a proactive way from an agricultural perspective, including the emerging challenges of adaptation to climate change. Such institution building is expected to catalyze a process to better positioning the MARD in the implementation of the National Strategy for Natural Disaster Prevention, Response and Mitigation and new climate change action plan. Building institutional and technical capacity within MARD related to climate change impacts, vulnerability and adaptation will also provide a comparative advantage to better represent the agriculture sector in National Target Programme on climate change.

Together with technical capacity building, measures to enhance institutional support services is required to enhance coordinated and integrated DRR actions and adaptation to climate change at local level. From the previous assistance two major aspects have been recognized for improvement: (i) improving provincial, district and community level seed production, storage and maintenance and (ii) make available usable early warning products including weather/climate forecast products for agricultural applications. Such an improvement would help to expand the scope for saving lives and better safeguarding of peoples' livelihoods.

Well coordinated DRR actions and climate change adaptation need to start addressing existing vulnerabilities and risks in agriculture. Availability of location specific data on disaster impacts and spatial information on vulnerability and risks provides a basis to understand the areas of concern to make better informed decisions in disaster preparedness and response and long term measures relevant to climate change adaptation. The ongoing efforts by UNICEF on Vietinfo database need to be strengthened incorporating indicators relevant to agriculture sector together with other available indicators for the northern mountain region.

The Disaster Risk Reduction and Climate Change Adaptation action converges at local level. To operationalize the community level actions, it is essential to introduce and demonstrate through a guided learning by doing process at district and community levels, a set of locally adapted, innovative and gender-sensitive technologies for climate change adaptation in agriculture; this will further enhance: i) local awareness about disaster preparedness and adaptation to climate change; ii) the resilience of local communities against the impacts of current climatic extremes, which are expected to further increase in intensity and frequency in the context of climate change; iii) livelihood assets, on-farm employment and household food security; and iv) active participation of the most vulnerable men and women. Successfully tested good practice examples will provide the basis for further replication in similar agro-ecological regions in the country.

The project needs to play a catalytic role in ensuring close interaction and coordination between line agencies at provincial and district levels. The Government of Viet Nam, through MARD has prioritized all the above problems for immediate attention and subsequent consultation during the formulation mission has confirmed that the Government agencies are fully committed to implement the project.

1.7 Direct beneficiary

MARD/CCFSC staff: The Ministry of Agriculture and Rural Development (MARD), Central Committee for Flood and Storm Control (CCFSC) and MARD's professional Bureau staff at the National level, Government staff from Department of Agriculture and Rural Development (DARD) at the provincial and district level in three provinces (**Phu Tho, Yen Bai, Lao Cai)** will benefit from enhanced technical capacity on disaster risk reduction, climate change adaptation, early warning/forecast products, preparedness, data base management and coordination of activities during various phases of DRM. The project will strongly work with the local staff in order to support and facilitate process in risk reduction and preparedness.

Farmer Groups and vulnerable communities: The project activities at the local level will target Farmer Groups and will reinforce the importance of involving vulnerable poor farmers, ethnic groups, as identified by community members themselves using local criteria of poverty and food security status. Criteria for the selection of beneficiaries will also include the participation of Farmers Group to ongoing government food security programmes in order to ensure the longer term sustainability of the interventions. This project will work with the government to identify the most vulnerable districts and communes for targeting project activities.

The target beneficiaries will be selected in participatory meetings with district and commune level officials, agriculture office, community members, and structured surveys. Every effort will be made to find beneficiaries that are the most vulnerable for participation in the project activities related to on the ground implementation. Communities in general will be considered as a "second" level of beneficiaries as they will receive positive impacts from adaptation and risk reduction measures implemented by the proposed project in each of the selected districts (6 districts in total) and provinces (three provinces).

2. Project overview

2.1 Summary statement (project results, outcomes and activity)

The project directly addresses One Plan Outcome 5.2 "Institutional systems and processes strengthened to enhance coordinated and integrated DRR actions and adaptation to global climate change at national and provincial level" and it is aligned to the "National Strategy for Disaster Prevention, Response and Mitigation 2020" and Action Plan Framework for Adaptation and Mitigation of Climate Change of the Agriculture and Rural Development Sector (2008 – 2020).

The overall objective of the project is to strengthen the institutional systems and processes for disaster risk reduction and preparedness in order to reduce vulnerability to climate extremes and strengthen resilience to climate change impacts.

The project will achieve the following project outcomes and outputs:

Outcome 1: Strengthened institutional, technical and policy frameworks and coordination for disaster risk reduction and climate change adaptation in agriculture at national, provincial and local level (in the northern mountain regions)

Output 1.1: Institutional and technical capacity of relevant provincial and local (district and commune) institutions strengthened to enhance coordinated and integrated DRR actions and to reduce vulnerability to climate change

Activity 1.1.1: Assess the institutional needs and analyze the technical gaps and key issues in agriculture disaster risk reduction and climate change adaptation at provincial level. The activity will be undertaken through consultations, review of documents, past institutional responses and detailed institutional assessment at national, provincial and local level. The needs and gaps in disaster risk reduction, early warning, preparedness and response and climate change adaptation will be analyzed. The results of the analysis will feed into the project activities on strengthening strategies and action plans at the national level and institutional and technical capacities at national, provincial and local levels.

Activity 1.1.2: Training workshops for key staff within MARD's Professional Bureaus relevant to agriculture at national level (eg. crop production, plan protection, animal husbandry, forestry, forest protection, cooperatives and rural development) in close collaboration with standing office for Central Committee for Flood and Storm Control (CCFSC), Disaster Management Center (DMC) and Standing Office of Steering Committee for Climate Change Mitigation and Adaptation. The activity will focus mainly the agriculture and food security relevant aspects of the National Strategy for Natural Disaster Prevention, Response and Mitigation 2020 and Action Plan Framework for Adaptation and Mitigation of Climate Change (2008 – 2020). Synergies will be drawn from UNDP's project on "Strengthening institutional capacity for Disaster Risk Management in Viet Nam, including Climate Change related disasters" which strengthens formulation of national policies, regulations, action plans and investment plans on risk reduction (output 1) and sstrengthen institutional structures and capacity for disaster preparedness and response in Viet Nam; especially develop DRM centres (Output 2). This activity targets technical issues of Agriculture Professional Bureaus with out overlapping with the policy and strategy development targeted under the UNDP's project. This would contribute to integrate food security and agriculture perspectives into policies and action plans targeted under UNDP's project.

Activity 1.1.3 – Provincial level training on Disaster Risk Management and Climate Change Adaptation: Based on the needs and gap analysis at the provincial level, conduct one 3 days training to the provincial level staff on technical issues of Community-Based Disaster Risk Management (CBDRM), Climate Change Adaptation, weather/climate forecast application with a focus on the role of agriculture; and on the planned field implementation of project activities; The training programme will also introduce hazard and vulnerability analysis (targeting current and future risks) in agriculture sectors; local good practice examples of DRM and climate change adaptation options for flood, erosion control and landslide management in agriculture will be covered. The participants include staff from DARD sub-departments at the provincial level including extension centres, selected staff from DARD district stations (6 districts in 3 provinces)

Activity 1.1.4 – Improve technical capacity of local institutions, farmers' groups through field training on community mobilization, community centered disaster risk management in agriculture and developing local risk reduction measures, seed production (e.g. irrigation canals), storage (drying court, warehouse, house for seed storage, etc.) and marketing. Training will be provided to community centered local organizations, farmers' groups during the whole project period. The training will be specifically related to on the ground risk management/reduction and preparedness activities in agriculture looking at long-term threats including climate change. The training will include tools and methods for participatory risk and vulnerability analysis involving local agricultural service providers, extension services and farmer groups in selected districts and provinces.

Output 1.2: Enhanced policy frameworks, guidelines and coordination and communication mechanisms for disaster risk reduction and climate change adaptation in agriculture in line with National Strategy for Natural Disaster Prevention, Response and Mitigation (2020) and Action Plan Framework for adaptation and mitigation of climate change in agriculture (2008 – 2020)

Activity 1.2.1: Review and complement plans for flash flood and landslide prone mountainous areas targeting food security and agriculture sector. The activity involves identification of essential elements that could be incorporated into current provincial disaster response plans currently prepared by Provincial Department for Dyke Management, Flood and Storm Control. This activity is in line with the order III-12 of the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020.

Activity 1.2.2: Formulate guidelines and recommendations for integrating climate change in food and agriculture perspectives in the northern mountain region. This involves review of current policy on conservation of pure seeds and gardens, industrial and perennial fruit trees and change in cropping patterns in the context of climate change in mountain regions. The guidelines will feed to formulation of policy on conservation of pure seeds and crop pattern movements mandated to Department of Crop Production as per the Action Plan Framework for Adaptation and Mitigation of Climate Change of the Agriculture and Rural Development Sector Period 2008 – 2020 (activities 3.6 and 3.7 for which Department of Crop Production has a lead role to play).

Activity 1.2.3 – Support to the development of communication and partnership arrangements and preparation for coordination mechanisms between partners at the national level. This activity will be performed on a regular basis to discuss work-plans, funds allocation/mobilization, and support the development of DRM related programmes/project proposal in order to prevent overlaps and gaps. Sustainability of such mechanisms will be elaborated after series of consultations among the partners, donor agencies and stakeholder organization representatives.

Activity 2.2.4 – Evolve methods and standardise procedures for joint "Needs Assessment Survey Mission" involving all partners including international/national agencies, national and local stakeholders. This activity also includes improvement of existing methods and procedures.

Outcome 2: Strengthened institutional support services to enhance coordinated and integrated DRR actions and adaptation to climate change at the provincial level (3 pilot provinces)

Output 2.1: Improved seed production, storage and maintenance system at provincial, district and commune level in place to enhance preparedness and effectively respond to climate related extremes in the mountain region

Activity 2.1.1: Conduct household/farmer survey to understand the community preferences on hybrids, improved and local varieties and assess seed supply and storage systems. This work will build on the previous FAO technical cooperation programmes on seed production and emergency response. The study is expected to highlight the economics of crop production (rice, maize and others) using various inputs including seeds and design a seed production, storage and maintenance system model for possible up-scaling in the mountain region.

Activity 2.1.2: Technical assistance and capacity building of selected staff from provincial seed centres to strengthen the seed production and storage methods including community level approaches to make them better prepared and restart the cropping activities immediately after extreme weather or climate events. The activity includes: (i) facilitation of collaboration with existing seed suppliers (private/public) of 6 selected pilot districts on the appropriate set-up and maintenance of demand responsive seed storage and supply system at district and local levels; (ii) assist local level seed producers and nurseries and farmer groups to maintain seed buffer at the community level and respond to seed/sapling demand on continuous basis; (iii) document and familiarise the indigenous methods of seed storage with local Community-Based Organizations (CBOs), farmer cooperatives and farmer groups at local level and provide technical support on innovative seed storage techniques.

Output 2.2: Enhanced capacity for developing localised early warning systems and weather/climate information application for risk management and adaptation at the provincial level

Activity 2.2.1: Enhance access and use of existing early warning, weather/climate and flood information products from MONRE (National Hydro-meteorological services - NHMS). Assess the strength/weaknesses of existing agro-meteorological data collection system in terms of reliability and accuracy of data in each pilot province and improve the information flow mechanisms to user agencies. Add to the current data collection practice, and routine parameters/questions sheets so that the data will become more useful as a basis for DRM and climate change adaptation related information and early warning systems, and able to respond to information demands of farmers. set up and test on pilot basis an end-to-end data and information management system between farmers, and local, district and national level in 2 of the selected project districts; The flow back of demand responsive information useful for farmers and local level planners would be a priority in setting up such a system.

Activity 2.2.2: Provide training to provincial and front line MARD staff on interpretation and preparation of impact outlooks, management plans in response to weather/climate information products and early warning messages for risk management. The information

will be integrated into current disaster risk management/contingency plans being prepared at the provincial, district and commune levels.

Outcome 3: Improved database management, spatial information products to facilitate local level DRR actions and strengthen resilience of vulnerable communities to climate change impacts

Output 3.1 – Developed effective database management system in order to monitor impacts of natural disasters in agricultural and food security and streamlining the communication between district and central institutions.

Activity 3.1.1 – Develop a baseline data and indicators on vulnerable livelihoods including *gender sensitive data* in order to be included and represented in the national data base and a spatial information products (spatial vulnerability and risk maps). This activity will also include review and documentation of existing time series data for the pilot provinces and screening of relevant indicators to be included for regular updating by the provincial and district level staff.

Activity 3.1.2 - Train local staff on the use of ***VietInfo*** in order to provide and monitor more effective information and integrate information with agriculture-based natural disaster indicators. FAO will work to achieve Outcome 3 in close collaboration with UNICEF, especially with regard to Activity related to Output 3.1. UNICEF has recently been working in close contact with the GSO (General Statistics Office of Viet Nam) for the development, upgrade and monitoring of Information System called VietInfo. In the future, VietInfo is intended to be disseminated among UN Agencies as existent information tool developed by the government with the vision to be used and implemented under ONE UN Plan. A database (named ONE UN Plan Database) with natural disaster indicators developed by PCG10 members has been created and those indicators are now available in VietInfo. The idea, discussed and agreed with UNICEF, is to bring and disseminate VietInfo at the provincial and district level in order to improve data availability and quality of information.

VietInfo will be installed through training sessions at provincial and district level. The staff will be trained with the idea to be able to "feed" the system with sensitive information related to agriculture in the northern mountain area. VietInfo is intended to be spread and empowered in the near future with the aim to have more effective and timely response in case a disaster occurs and a request of immediate availability of data will come from the districts to national level in an effective time. This activity will be implemented together with support of UNICEF in the preparation of training session for local staff on the use of the system. Three days training session will be initially organized and monitoring sessions will be implemented every month with the idea to gradually create a Database with natural hazard info related to agriculture in the targeted provinces at district level.

Output 3.2 – Developed spatial decision support products based on the hazards, local vulnerability and risks at the provincial level

Activity 3.2.1 – Collect and collate information on hazard profile, historical secondary data, primary and secondary indices of vulnerability and calculation of risk related data

Activity 3.2.2 - Prepare district/commune level hazard, vulnerability risk spatial information products (maps) to enable provincial and district staff to use a decision making tool. The toll spatial information products will consider the existing land use and crop suitability maps as a basis. This activity will be the starting point to make more complete information product at a later stage. The work will be carried out by engaging a

firm or an expert at head quarters to complement other basic support services at the provincial level for integrated and coordinated action on DRR and climate change adaptation.

Outcome 4 – Location specific community based disaster risk reduction, climate change adaptation and awareness actions prioritized and implemented at the community level

Output 4.1: Location specific technologies for DRR and climate change adaptation within the agriculture sector identified and screened and the CBDRM process facilitated to prioritize community actions

Activity 4.1.1: carry out a study in each selected district to deepen the understanding about local vulnerabilities, natural resource endowments, institutional setting to address climate risks and on locally available and applied natural disaster prevention/preparedness strategies, including local EWS their existing strengths and demands. The study will identify options for combining, in a demand responsive way, existing local knowledge and capacities. Partly this activity will be linked to activity 3.2.1 described above.

Activity 4.1.2: Collect and document existing local and introduced good practices in agriculture in the selected provinces of northern mountain region separated by planting season, for DRM and climate change adaptation in agriculture and collate it in the form of a good practice options menu;

Activity 4.1.3: provide basic CBDRM and community based adaptation training to selected farmers organizations. The training will introduce the basic concepts of CBDRM but will focus more on practical applications of DRM activities, as well as their coordinated planning at local level; it will also address the role and responsibilities local organizations have to take and communication means and requirements in the context of a national DRM system;

Output 4.2: Location specific technologies for DRR and climate change adaptation within the agriculture sector implemented through a participatory learning by doing process at the community levels

Activity 4.2.1: Implement community prioritized DRM and adaptation options which have been endorsed by the district and provincial level project implementation task groups. Farmer's climate field schools will be promoted at the local level for mutual learning and exchange of information and decision alternatives by the farmer groups and community members. Pilot implementation of improved technologies will also be carried out by NOMAFSI in selected communes. Technical briefing sessions will be held for the DARD front line extension staff, and representatives of farmers' groups including CBOs about the implementation, expected impacts and the monitoring of good practice. Based on the formulation mission, it is likely that the good practice techniques will address aspects such as: (i) land slide control practices, (ii) flood/water stagnation tolerant varieties; (iii) diversification of cropping systems to manage climate risk; (iv) water harvesting, management and saving technologies in drought/dry spell affected areas; (v) soil conservation measure and hedge row planting, intercropping etc., (vi) fruit tree intercropping and agro-forestry measures to better fix and protect river/stream banks, slopes, etc.; (vii) improving small scale irrigation systems; (viii) community centred seed storage and maintenance systems; (ix) promotion of indigenous practices relevant to gender and indigenous population, etc.,.

Activity 4.2.2: Improved awareness, promotion and dissemination of climate risk related information on the benefits of DRR actions and climate change adaptation practices at the community level in-line with the field implementation/demonstration.

2.2 Indicative budget structure

Comp.	Component Description	Sub Comps.	Main Comp.
5011	**Staff**		
5150			
5013	**Consultants**		**106 500**
5543	National Export – DRM and CCA	22 500	
5543	National Expert – Seeds	10 500	
5542	National Export – Database (VIETINO)	7 500	
5542	Coordinator (Training and Field Activities)	18 000	
5542	Provincial Coordinators (3)	36 000	
5542	Project Support Assistant	12 000	
5014	**Contracts**		**135 000**
5650	Contracts Budget	135 000	
5020	**Overtime**		**9 667**
5652	Casual Labour - Temporary Assistance	9 667	
5023	**Training and Workshop**		**37 500**
5920	Training	40.500	
5021	**Travel**		**20.000**
5684	Consultant - International		
5685	Consultants - National	20.000	
5024	**Euipment**		**69 000**
6000	Expendable Equipment	21 000	
6000	Materials and Supplies	54 000	
5027	**Technical Support Services**		**29 000**
6111	Report Costs	5 000	
6120	TSS	24 000	
5028	**General Operating Expenses**		**10 000**
6177	General Operating Expenses Budget	10 000	
	SUBTOTAL		**416 667**
5029	**Support Cost (7%)**		**33 333**
6118	Direct Operating Costs (7% of sub-total: 6%FAO/1%UNDP)	33 333	
	GRAND TOTAL		**450 000**

INPUTS TO BE PROVIDED BY FAO

(1) National Experts (see TORs in Annex 2).

National Expert - Disaster Risk Management and Climate Change Adaptation in Agriculture: Agriculture specialist and expert in disaster risk management, climate change adaptation and institutional policy from an agricultural perspective, including sound experience in agricultural extension and community-based approaches. Policy analysis expertise is required to assess institutional aspects and policy requirements to better link the agriculture sector into National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 and Action Plan Framework for adaptation and Mitigation to Climate Change (2008-2020). The expert will be closely working with the NPD in Project Management Unit, standing office of the Flood and Storm Control Committee (Department of Dyke Management, Flood and Storm Control (DDMFC), Disaster Management Centre (DMC), Department of Scientific Technology and Climate Change Adaptation in MARD and other project implementing partner agencies, national experts, provincial project office etc., The expert will also participate and contribute in the training programmes. The DRM and CCA expert is responsible for overall project monitoring and evaluation and has to frequately appraise the technical aspects of the project to NPD, project steering committee, FAO and PCG10 focal point. **(15 months over 24 months WAE)**.

National Expert –Seed Production, Storage and Maintenance: agriculturist to assess seed supply, storage and maintenance systems at community (commune), district and provincial levels. The expert will design and prepare a strategy on seed production, storage and maintenance in accordance with the national policies, plans and priorities and implement acceptable and preferred models at difference levels. Significant information and resources drawn from previous FAO assistance (TCP/VIE/3101; TCP/VIE/3202) in this regard should be the basis for designing the strategy. The expert should broaden the household survey (increase the number of respondents and communes) to understand the overall picture about the seed resource situation at the community level at different phases of Disaster Risk Reduction Framework. He/she will be working closely with the Department of Crop Production at the national level and Northern Mountainous and Forest Science Institute (NOMAFSI) at the provincial level. The expert need to understand the synergies, trade-offs and economics of hybrid, improved and local varieties. **(7 months over 12 months WAE).**

National expert – Disaster Database Management in Agriculture: Disaster inventories, damage and loss assessment methodologies and data archival in the Ministry of Agriculture and Rural Development (MARD). The expert should train the provincial, district and local staff on access, use and updating of VIETINFO database. Additionally, the expert need to identify the suitable indicators for agriculture sector (including livestock, forestry and fishery) to prepare a sample database for the three pilot provinces in the northern mountain region and the same can be used for the training programmes. Train local staff on the use of VietInfo in order to provide and monitor more effective information and integrate information with agriculture-based natural disaster indicators. The expert need to be familiar with the database (named ONE UN Plan Database) with natural disaster indicators developed by PCG10 members and those indicators are now available in VietInfo. The expert needs to work very closely with UNICEF.
(6 months over 12 months WAE).

Coordinator (Training and Field Activities): The coordinator of training and field activities will work very closely with FAO and assist the day today activities including programming of the capacity building activities and preparation of provincial level field demonstrations, survey and awareness raising programmes. The coordinator need to prepare a quarterly work plan in consultation with all stakeholders and project implementing partners and FAO country office and lead technical unit in FAO-hq and appraise the project team in advance. **(15 months over 24 months).**

Provincial Coordinators (3): Three provincial coordinators will assist the provincial project management office and the project focal point in day-to-day activities of the project. The coordinator is responsible to collect relevant primary and secondary data from the selected district and communes; Support Provincial Inter-agency working group to implement the project; Assist in organizing and conducting orientation workshops in each pilot community to explain the project and initiate awareness creation process on short-term disaster risk management and long-term climate change adaptation. Identify local partners/farmers groups/farmer field school/ individual households, including women and women's groups, potentially interest to collaborate in the pilot experiments. Promote and facilitate discussion between farmers, farmer groups about selection of locally preferred/ acceptable DRM and adaptation options for pilot testing. Assist in implementing the prioritized DRM and adaptation strategies at field level. Assist to implement and monitor the field activities and collect periodical data for comparison and impact assessments; Support the project team in awareness raising efforts and provide assistance in organizing provincial and commune level workshops, participatory discussions, brain storming sessions and training programmes. He/she will be working very closely with NOMAFSI at the provincial level and report to PMU and FAO. **(15 months over 24 months).**

Project Support Assistant: project support assistant is based at the Project Management Unit in MARD (Hanoi) and will assist all administrative, financial and project management operations to be performed by the project team (20 months over 24 months). He/She will be supporting the NPD, national experts and other project staff on every day activities.

FAO TSS
The following TSS missions are foreseen.

Climate Change and Bioenergy Unit (NRCB) – LTU: 35 days in four missions: Participate at the launch; multi-stakeholder planning workshops as well as the medium-term progress workshop; completion of LoAs, guide the planning of field studies in pilot sites; contribute to training; technical guidance to provincial project implementation group; and farmer associations and local institutions for disaster preparedness/prevention and climate change adaptation. Prioritization of DRM and adaptation options for local level implementation, participate in the final workshop and evaluate the performance of project implementation as a basis for drafting the terminal statement, preparation of follow-up programme.

Seed and Plant Genetic Resources Service (AGPS): 7 days in one mission: technical advice on disaster mitigation related to Plant Genetic Resources in particular crops and varieties for disaster mitigation and the development of community based seed production and storage systems for appropriate crops and varieties for disaster mitigation.

2. Travel

To cover the cost of in-country travel of FAO staff, consultants and members of the technical implementation groups. (USD 20 000)

3. Contracts, Letters of Agreements (LoAs) or contractual service agreement
Detailed information on proposed contracts is provided in Annex 2.

Contract 1: Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI) – NOMAFSI will be engaged in demonstration of DRM good practices and climate change adaptation options in selected communes in each of the pilot provinces in close collaboration with farmer groups and will assist in monitoring, systematization and documentation of good practices for further replication elsewhere in the Mountain Regions of Viet Nam. NOMAFSI will employ their staff in each of the project management unit in selected three provinces to technically assist all the activities in close collaboration with provincial storm and flood control committee and

Department of Agriculture and Rural development (DARD). NOMAFSI will also conduct a situation analysis based on the guidelines provided by the lead technical unit in FAO head quarters. (USD 45 000)

Contract 2: A national organization (such as the OXFAM) will be contracted to assist in the capacity building and training programme for local authorities and farmer associations on DRM in agriculture as well as to facilitate local mobilization and planning processes or DRM (USD 15 000).

Contract 3: National Hydro-Meteorological Service (NHMS) and/or a regional organization providing hydro-meteorological services will be contracted to improve the early warning, weather/climate forecast products suitable for agriculture sector and setting a regular mechanism to communicate the information to provincial and district Department of Agriculture and Rural Development and to the commune level to the farmer groups. The indigenous and local early warning methods will also be explored to enhance the utility to protect the agriculture livelihoods. The contracted organization will conduct need based training programmes to all the stakeholders and beneficiaries at the local level (USD 15 000).

Contract 4: Letter of Agreement will be raised with the Crop Production Department, MARD for identification and documentation of local climate change adaptation practices related to floods, land slides, and other natural hazards in all the pilot provinces. The work will build on the ongoing inventory work carried out by the department in collaboration with FAO on "Building and implementing action plan for crop production and adaptation to climate change in Viet Nam". The inventory work and field demonstration will be done in collaboration with NOMAFSI in three pilot provinces in the Northern Mountain region (Phu Tho, Yen Bai and Lao Cai). (USD 15 000).

Contract 5: Letter of Agreement (LoA)/an International expert (preferably a spatial analyst) will be working with Lead Technical Unit (LTU-NRCB) to analyse the hazard profile, vulnerabilities and risks in the selected three provinces and map the risks in combination with the land use maps. Alternatively, the work might be carried out through LoA with suitable national and/or international agencies based on the availability. This activity would be continued beyond project based on additional resource availability in future. (USD 45 000).

4. General Operating Expenses (GOE)

Expenditure related to miscellaneous expenses required for operation of the project, such as telephone communications, photocopy paper, printing, stationery, renting of transport and courier services. (USD 10 000)

5. Materials and supplies

A total amount of USD 8 000 per district is envisaged to cover costs for community level activities seeds/seedlings of flood tolerant varieties, erosion control structures, land slide control measures, construction materials for small scale (farm level) flood protection measures; water harvesting structures, localised early warning systems and other practices prioritized through community based disaster risk management by the farmer groups or local community (six districts (6) x USD 8 000 = USD 48 000); The practices will be technically screened by the project experts and other staff at national and provincial level. This will be implemented after approval from the project management unit and inter-agency working group at the provincial level and PMU/NPD. (Total USD 48 000)

6. Equipment

Office equipment: five computers with printers (two for the NPD office, one set for the project management unit (PMU) at the provincial level), one computer system at the NPD office will be used for developing disaster database in agriculture sector and to support a national level database

on food availability and seed storage systems; a video camera (extension, demonstration replication) and a photocopy machine with scanner and a power point projector for the NPD office (USD 21 000).

7. Direct operating costs
Expenditure related to miscellaneous expenses for project implementation at FAO headquarters. These costs are mostly related to editing and printing reports, brochures and training manuals.

8. Training and workshops
The allowances/daily subsistence allowance (DSA)/per diem for participants and resource persons included in the budget figures below are estimates only. The actual amounts will be established according to FAO's rules and regulations.

Trainings

National level training workshop: A national level 3 days training workshops for key staff within MARD's Professional Bureaus, relevant to agriculture at national level (eg. crop production, plan protection, animal husbandry, forestry, forest protection, cooperatives and rural development) will be organized during initial phases of the project. The training will introduce the technical, policy and coordination aspects of disaster risk management and climate change adaptation specific to agriculture sector. The national experts working for the project and the experts from other agencies within the PCG10 will serve as the resource persons. This complements the UNDP capacity building initiatives under the on-going project (Total cost USD 3 000).

Provincial level introductory training: One introductory training programme for 3 days will be conducted at the provincial level. The participants (~35) will be DARD staff from the pilot provinces and the districts. The training will cover (i) introduction on DRM and climate change adaptation (basic concepts of DRM, climate change adaptation, validation of DRM and adaptation practices documented by partners and government organizations, (ii) risk and vulnerability assessment, local perception about the risks, viable adaptation option menus and application of enhanced early warning system (Total cost USD 3 000).

Training on seed production, storage and maintenance: A training programme on seed production, storage and maintenance for the selected 20 participants from three provinces will be conducted. The national expert (seed production, storage and maintenance) together with NOMAFSI will facilitate the sessions with need based support from other national experts. Number of days and training modules will be decided based on the training need assessment and brainstorming meetings with provincial, district and local staff. The cost on experts and training is budgeted under NOMAFSI's contract.

Training on Vietinfo database: The training programme (3 days) on Vietinfo in three distinguished aspects (access, use and update of database) in close collaboration and inline with the efforts made by UNICEF will be organized for province and district level staff (Total cost USD 3 500).

Training on early warning and weather/climate information: A two days introductory training will be organized to introduce the concepts of early warning and strengthen the provincial capacity for developing localised early warning systems and weather/climate information products and its application for risk management and adaptation at the provincial level. This activity will be undertaken by the National Hydro-meteorological Services (NHMS) in collaboration with the regional or provincial hydro-met centres through the letter of agreement. The training expenditure, costs associated with experts is included in the contract.

District level training on CBDRM: Six district level training (2-3 days) on CBDRM will be conducted. The participants are drawn from district level DARD staff, extension specialists, commune level representatives, farmer group representatives and local civil society organizations The third day will be completely allotted to prioritise the activities decided by the community representatives to take up the need based interventions at the community level. This includes workshop kits and hand outs; workshop venue; local travel, working lunch and refreshments; the expert's charges are provided through the sub-contracts. (Total cost USD 6 x 2000 = 12000).

Community awareness and social mobilization to prioritise the DRM/CCA interventions at the local level: One day technical seminar on introduction of DRM good practices and climate change adaptation options, objectives of demonstration and methods to the community workers, representatives of farmers' groups and local representatives (6 district x 500 = USD 3000).

Workshops

Inception workshop: Two days inception workshop will be conducted in Northern Mountain region; About 30 participants from all three provinces will attend the workshop. The workshop will also aim to draw the project wide work plan. The costs include resource persons, workshop venue, workshop kits and study materials, working lunch with refreshments, per diem for participants and travel costs (Total USD 2 500).

Mid-term workshop: two days mid term workshop will be conducted in Northern Mountain region covering all provinces. About 30 participants will attend the workshop. The workshop will discuss the progress of the local interventions and draw work plan for the remaining period of the project. The costs include resource persons, workshop venue, workshop kits and study materials, working lunch and refreshments, travel and per diem and accommodation for project participants from districts (Total USD 2 500).

Wrap up workshop: One day wrap-up workshop will be conducted in the northern mountain region to present the strategies for replication in the similar provinces of the mountain region. The costs for the workshop includes resource persons, workshop venue, workshop kits and study materials, working lunch and refreshments, travel for the participants form the districts and per diem (USD 2 000).

District level coordination meetings: At the beginning and middle phase of the project in the six pilot districts (two in each province); The district level workshop participants are drawn from three selected communes in each of the pilot districts. Total cost of the workshop will be USD 1000 x 6 = USD 6 000).

3. Project implementation strategy

3.1 Overall strategic approach

The overall strategic approach follows the key elements of ONE PLAN 2006-2010 and is firmly based on the results and resources framework and links directly to key outputs of the Outcome 5, which proposes "coordinated and integrated DRR actions and adaptation to global climate change". This will also be achieved in close collaboration with the relevant UN organizations represented in Viet Nam through PCGs. The One Plan represents one of the most critical issues to be addressed for a culture of risk management to be established to reduce vulnerabilities of various sectors and social groups to impacts of climate change and natural disasters.

The present project has been designed to enhance technical and institutional capacity of MARD and specifically its professional Bureaus at the national level and DARD sub-departments at the provincial level, district level stations and commune level grass root extensionists and agriculture

cooperatives and farmer groups to deal effectively the activities related to risk reduction and preparedness and enhancing resilience of communities against climate change impacts. The Justification and Strategic Approach are in line with the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 in the Framework of Natural Disaster Mitigation Partnership (NDMP).

This project assists provincial DRR actions, climate change adaptation and coordination mechanisms to build DRM capacities, based on existing capacities to support CCFSC in MARD and its provincial departments of agriculture and rural development. FAO has an integrated and proactive approach to Disaster Risk Management (DRM) linking climate change adaptation that is focused on enhancing the resilience of vulnerable communities before, during and after crises through risk assessment, risk reduction, emergency response and rehabilitation. In the preparedness phase, FAO focuses on early warning and needs assessment to increase community resilience to hazards through longer-term interventions that facilitate the transition from relief to development.

An integrated approach liking DRR and climate change adaptation is necessary to not only deal with food and agriculture crises due to sudden onset natural disasters, but also to effectively address slowly emerging environmental problems due to climate change.[12] FAO's experience in the region favours the approach where any successful intervention in the area of disaster risk prevention/preparedness is an input to increase long-term capacities for climate change adaptation. Therefore it is proposed to initiate the implementation of activities from a disaster risk reduction/management perspective and phase-in climate change issues in due course. Utilization of past extreme climate event analogues and potentially available weather and climate forecasts for managing climate risks could be the starting point to develop methodologies to better understand how climate change impacts can be translated into agricultural response options and livelihood adaptation practices. This project is therefore based on the principle that adaptation to short-term climate variability and extreme events serves as a basis for reducing vulnerability to longer-term climate change.

3.2 Strategic approach to cross-sectoral issues

The proposed project will pay particular attention to integrate gender issues into DRM interventions as women are highly vulnerable to natural disasters and climate change. UN Agencies have been requested to provide gender inputs/information especially within ONE UN Programming and in order to include gender activities from the formulation to the evaluation phases of projects also to synthesize recommendation and lessons learned for future activities. In relation to the proposed project, a specific activity related to Gender will be carried out in order to provide technical advices for preparation of gender-sensitive needs assessments.

Consideration of gender roles, responsibility, practical and strategic needs will be promoted in all DRM and adaptation activities at different stages (e.g. planning, implementation and monitoring). Collaboration with donors and NGOs in this particular cross cutting issue will also be facilitated. FAO has implemented research on gender issues in relation to Highly Pathogenic Avian Influenza (HPAI). FAO has reviewed the Gender Dimensions of Avian Influenza Control to facilitate Gender Mainstreaming in the HPAI Control Programme and propose steps for the mainstreaming process. The recommendations and leassons learned will be integrated to select and implement gender sensitive adaptation practices.

Ethnic minorities in the Northern Mountain regions are particularly important target groups of the project. The UN guidelines for the engagement of indegenous people and other local communities will be adhered. One of the entry point to effectively engaging the ethnic groups especially in the

[12] FAO Approach to community based adaptation at local level builds on the elements of disaster risk management as an entry point.

field level activities is to target farmers groups, local cooperatives and informal associations and networks at the commune level.

4. Project implementation Arrangements

4.1 Project Implementation Structure

The Project Steering Committee (PSC) will consist of members from various Departments and Professional Bureaus, Ministry of Natural Resources and Environment (MONRE), Ministry of Science and Technology, Standing Office for Central Flood and Storm Control Committee (CCFSC), FAO, UNDP and UNICEF. The Steering Committee is very similar to the UNDP project and it can be built on the existing set-up to guide on project implementation. The Project Management Unit (PMU) will be based in Hanoi. The executing agency of this project will be FAO together with MARD. The Ministry of Agriculture and Rural Development (MARD) will be the counterpart government institution together with the Central Committee for Flood and Storm Control (CCFSC). FAO project team will actively liaise with all stakeholders and agencies in order to avoid duplication of efforts and ensure complementarities with other interventions and local ownership of project activities. Technical supervision and backstopping will be through the NRCB unit of NRC division as a Lead Technical Unit (LTU) in collaboration with AGPS, TCEO and other relevant technical units in FAO-hq.

The project will be implemented over a period of 2 years, under the general supervision of FAOR-Viet Nam and technical supervision of Environment, Climate Change and Bioenergy Division (NRC). The project will facilitate rapid appraisal of the agriculture DRM systems, in order to identify strengths and weaknesses and capacity building needs of farmers and local/national institutions in order to reduce agricultural loses from natural hazards, taking also into consideration projected impacts of climate change.

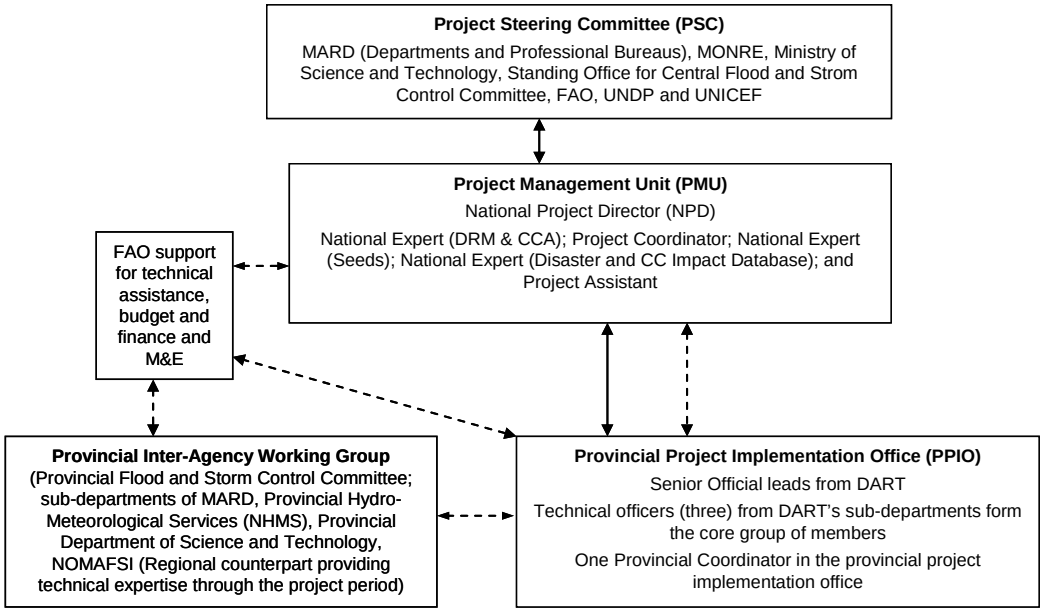

Figure 1. Project Implementation Structure at the national and provincial level

All the activities will be carried out in close collaboration with designated Government authorities. The project will be technically supported by Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), Department of Dyke management, Flood and Storm Control (DDMFC), National Hydro-Meteorological Services (NHMS), Disaster Management

Centre (DMC), Department of Science and Technology and Climate Change Adaptation (DST&CCA) within MARD in close collaboration with Province Department of Agriculture and Rural Development (DARD) and the Committee for Floods and Storm Control (PCFSC) at provincial, district and commune level of the three most vulnerable northern mountainous provinces of Phu Tho, Yen Bai and Lao Cai. A National Project Director (NPC) will be appointed by Government at project inception who will be responsible for ensuring effective collaboration between the project and relevant national authorities and institutions.

Additional national and international technical agencies/organizations experienced in risk reduction and preparedness activities and climate change adaptation will be engaged through contracts to support implementation of appropriate activities. A draft work plan is attached in the Annex, to be revised and defined in more detail at project inception.

4.2 Project steering committee[13]

The Project Steering Committee is formed by MARD and comprises the standing office for Central Committee for Flood and Storm Control (CCFSC), Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Ministry of Natural Resources and Environment (MONRE), Ministry of Science and Technology, FAO, UNDP and UNICEF. Representatives of three pilot provinces will also be part of the PSC. The MARD representative will be the chairperson of the PSC. The PSC will make all necessary decisions and provide guidance for implementation of project activities, including approval of the overall project work-plan and annual work plans. The PSC will meet twice a year and more frequently when necessary. In case of disagreement, NPD and FAO can call for a meeting with relevant parties.

4.3 Project management unit

The Project Management Unit (PMU) will have operational day-to-day responsibility for programme implementation in all respects. It is expected that the PMU will be staffed with appropriate technical support personnel that will ensure smooth implementation of the planned activities. The PMU will be temporary structure created for the duration of the project.

The PMU will work closely with MARD's professional bureaus, standing office for Central Committee for Flood and Storm Control (CCFSC), Department of Dyke Management, Flood and Storm Control (DDMFC), Disaster management Centre (DMC), Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI) and other implementing partners at the provincial level. National experts for performing various tasks will provide technical support for national workshops, training programmes, co-ordination of GOs, NGOs and support field level implementation.

MARD/CCFSC (its standing office - Department of Dyke Management, Flood and Storm Control (DDMFC)) will be the project counterpart agency and will have the main responsibility to implement the project. FAO will provide appropriate technical support services.

MARD/CCFSC will provide support to the project in kinds and in the following terms:

- allow the FAO Representative, or any other FAO officers designated by the Representative or FAO headquarters, to visit the project sites and monitor the progress of the operations;
- CCFSC shall also provide the facilities and supplies shown in the Project Document as and when required by the project;

[13] Overall policy guidance body will include members from key agencies responsible for disaster risk reduction and climate change adaptation in agriculture.

- ensure all necessary measures to facilitate the execution of the project and to assist the experts and consultants recruited by FAO in carrying out their duties and in obtaining such services and facilities as they may require fulfilling their tasks in the framework of this project;
- provide logistical support to facilitate the implementation of the project, including office space for the consultant, storing facilities and local transportation of the inputs from the chief town of the province to the ultimate beneficiary;

MARD will assign a senior official at Department Director level to be the National Project Director (NPD). The National Project Director (NPD) is accountable to the MARD for the use of project resources and to deliver on outcomes. Specifically the NPD will be responsible for overall management and implementation of the project, especially through managing a project management unit (PMU). The NPD will make major Project policy decisions and supervise as well as guide the work of the National Experts. Thus, the position requires only part-time direct involvement in the Project.

The Project Management Unit (PMU) will be hosted in Department of Dyke Management and Flood and Strom Control (DDMFSC) and will be responsible together with project team to:

- Prepare an inception report including detailed work plan and identification of target districts and communes in three provinces.
- Support the Project Steering Committee (PSC) and translate their guidance into day-to-day project coordination and management.
- Provide technical support to MARD and provincial authorities for implementation efforts to achieve the project outcomes.
- Undertake project monitoring, and fulfilling report needs to government and international donors

The PMU will comprise of the following positions:

- Project Director, who will be assigned by MARD
- National Expert (DRM & CCA)
- National Expert (Seeds, storage and maintenance)
- National Expert (Database Management)
- National Coordinator (Training and Field Activities)
- Project Support Assistant (Based in PMU office)

4.4 Provincial level Project Implementation Office (PPIO)

The pilot provinces of Phu Tho, Yen Bai, Lao Cai, were confirmed during the project approval process, and the detailed implementation arrangements were discussed during the formulation stage. Provincial Inter-Agency Working Group (PIAWG) will be established under the provincial Committees for Flood and Storm Control, supported by the Department of Agriculture and Rural Development (DARD). The Provincial People's Committees (PPCs) of the three project provinces will sign Letters of Agreement with the NPD to establish this collaboration. PPCs will assign DARDs to take charge of implementation and a Senior Official to be the focal point in liaising with the NPD. In each province, a Provincial Project Implementation Office (PPIO) will support the activities.

The Provincial Project Implementation Office (PPIO) will be responsible for:

- Mobilizing local field-staff at the district and commune level to implement the project
- Coordinating provincial level activities
- Working with the MARD-PMU on detailed (annual, quarterly) work planning concerning provincial activities and
- Reporting on provincial level activities to the Provincial People's Committees, NPD/Project Management Unit and FAO.

The project implementation at the provincial level will be assisted by NOMAFSI. The provincial level project implementation office will comprise of the following positions:

- Senior staff in MARD (focal point at the province)
- A Provincial Coordinator in each pilot province

The technical experts will be responsible for training and implementation of specific activities in collaboration with provincial project implementation office.

4.5 Participating/associating agencies

PCG10 will be part of the coordination mechanism under the ONE UN Plan. Activities will be integrated and project cycle update will be disseminated within PCG10 members. The UN agencies responsible for implementation of outcome 5 of one UN plan will be informed about the project activities through PCG10 coordination.

4.6 Project coordination

4.6.1 Coordination between concerned agencies in Viet Nam

Coordination between PMU and related departments of the governing agency will be ensured to manage the project activities. Coordination will also be maintained between implementing agencies and other partner agencies. The Project Management Unit will inform the project activities every six months to the project steering committee.

4.6.2 Coordination with donors

Coordination with donors will be ensured through participation and consultation with donor agency representatives about ongoing DRM and climate adaptation work achieved by the project. Similarly, donor coordination will also be achieved through close collaboration with MARD/CCFS projects that are linked closely with other partners and donor agencies. DRR and climate change focal points of donor agencies may have the opportunity to attend the project workshops and meetings.

4.7 Financial management mechanism

The funds provided through the PCG 10 will be managed by the FAO Representative in Viet Nam. The fund transfer will be made according to the harmonised approach of fund transfer procedures. In its role, FAO will be responsible for:

- the administration of funds for implementation of the project and disbursed as per the agreed budget against the activities described in this document;
- disbursement of funds to national coordinating authorities, partner agencies, subcontractors, consultants and implementing partners;
- consolidating financial reports for the budget.

FAO's fund management arrangement and reporting procedures will be followed. FAO TSS service provision made available for technical backstopping to implement the project will also be approved by FAO-Viet Nam. Additional requirements for backstopping from FAO headquarters for project synthesis workshops, resource mobilization, economic impact analysis and developing follow-up proposal is not covered under this proposal.

FAO will be responsible for transferring project funds related to casual Labour - temporary assistance and project management costs to PMU on request in advance and detailed expenditure statement has to be submitted by the PMU to FAO. The project coordinator is responsible for preparing the advance request and compilation of expenditure statements.

4.8 Monitoring and evaluation mechanism

FAO will work with its implementing partners to carry out periodic monitoring and evaluation exercises which would involve the active participation of the project beneficiaries. It is anticipated that different rounds of evaluation and assessment will take place, an inception mission at the start of the project to establish project modalities and a baseline, in order to gauge the potential impact of the activity on building household resilience against food security threats, and an end of contract evaluation.

The M&E exercises may use participatory principles where the Farmer Groups themselves conduct evaluations with guidance from the group facilitator. Oversight and analysis will be the responsibility of FAO and its implementing partners. This will also help identify the most effective activities and interventions at the community level that can be supported and replicated elsewhere in the future.

The national experts/consultants and implementing partners will provide periodic reports on the progress, achievements and results of their activities, outlining success stories and challenges faced in project implementation as well as resource utilisation as articulated by FAO and UNDP. The reporting will be in accordance with the procedures and harmonized with UN agencies to the extent possible. The implementing partners agree to cooperate with FAO for monitoring all activities supported by cash transfers and will facilitate access to relevant financial records and personnel responsible for the administration of cash provided by FAO.

The implementing partners, subcontractors will submit periodical financial/expenditure statement along with the work progress reports. The reports and quality of the work carried out by the subcontractors and consultants will be evaluated by the Lead Technical Unit (LTU) in FAO headquarters before releasing the budget. The project will follow a result based monitoring and will be systematically integrated into the overall evaluation plan. The project will be managed and monitored on the basis of qualitative and quantitative baselines of project progress and indicative delivery of outputs.

The National Project Director (NPD) and the project team is responsible for preparing inception reports, quarterly progress reports, and an internal mid term evaluation as well as a comprehensive terminal report in line with FAO requirements. The national experts will assist NPD in completing the reporting requirements. Reports will require technical clearance by the concerned FAO technical backstopping officer(s). The Lead Technical Unit (LTU), the Climate Change and Bioenergy (NRCB), will monitor in close collaboration with the FAOR office in Viet Nam the progress of project implementation, including the schedule of reports, deadlines, and formats.

Impact of the field demonstrations on the improvement of adaptive capacity and enhancement of the economic benefit by the DRM/CCA practices will be assessed based on the feedback from farmer groups and household survey. The data will be compared with the baseline study collected at the beginning. The indicators for improvement of early warning information are number of days in lead time and relevance of the information to the pilot locations. The provisional coordinators will monitor the field activities and liaise with all project partners at province and national level.

5. Other considerations

5.1 Impact on social and gender equity

FAO will implement new activities which are aligned with the Gender Mainstreaming Strategic Framework presented in the FAO GENDER AND DEVELOPMENT PLAN OF ACTION (2008-2013). FAO office is promoting awareness of sexual harassment. Gender activities within ONE UN Reform programmes also introducing gender focal points and gender specialists. In the year 2009/2010 it will put more effort to draw on regional or hq expertise. FAO Office is willing to harmonize and improve gender as a cross cutting issues in all programmes/projects related to agriculture, forestry, fisheries, livelihoods and food security to pilot tracking gender mainstreaming expenditure in key programmes. The target areas under gender and development plan of action are gender mainstreaming, target gender issues, accountability, capacity building and partnerships. All the elements of action plan will be considered in this project.

5.2 Environmental impact

By providing technical and institutional support through the Outputs stated above, the proposed project addresses sustainable development and environmental issues in the respect of Hyogo Framework for Action (HFA) which sets the strategic goals and priority areas of action to substantially reduce disaster losses in social, economic and environmental assets of communities and countries. The project tries to harmonize one of the strategic goals of the strategy underlined by HFA to include DRR into sustainable development and environmental policies and planning. The DRM and environment linkage is achieved through addressing climate change adaptation from the DRM perspective.

5.3 Risks and Assumptions

The project is not envisaging any serious risks that jeopardize the whole range of activities. Similar to most projects, lack of continuity in the staffing ascribed to the project can be an element of disruption in the fulfilment of the project objectives. In order to minimize this impact, particular attention will be given to the multi-disciplinary of the national teams(s). There are few risks envisaged related to provision of tools and methods for risk assessment, early warning and application of viable adaptation and DRM practices to farmers. The following matrix provides a strategy to manage the risks effectively to improve the performance of the project outcomes.

Risk	**Impact**	**Probability**	**Mitigation**
1. Unavailability of high quality project staff in the area of DRM and climate change adaptation	Limitations in quality of project delivery	Medium	Contracts have been made with a range of subcontractors which have proven track record of working on the topic.
2. Delay in procurement and delivery of inputs for demonstration of enhanced DRM practices.	Delayed project implementation & loss of trust in project among farmers	Low	An effective mechanism for procurement of inputs is agreed upon before project inception; Identification of sources of inputs and early and efficient planning with suppliers.
3. Area is again affected by hazard during project implementation	Immediate recovery needs do not allow to focus on longer terms measures	Unpredictable (low /medium)	Project activities are planned taking into consideration anticipated needs of the rainy season; Crop calendars inform the planning and implementation

			of pilot testing activities.
4. Risk of policy recommendations not adopted by policy makers	Limited improvements achieved in the institutional framework.	Low	Engage stakeholders including policy makers in the strengthening of the existing plans; Identify opportunities for synergies in DRM initiatives.
5. Overlap with UNDP One UN Plan Project	Overlapping activities may reduce efficient resource use	Low	Discussion between MARD, UNDP and FAO on regular bases to strengthen synergies and avoid duplications.

5.4 Sustainability

The project will be implemented within the context of "One-UN country team". The sustainability of project benefits would depend on several factors: (a) Government establishing an effective process for identifying and funding mitigation investments as part of its public investment program; (b) improving early warning and communications systems, including at the community level; (c) putting into operation responsive and efficient funding mechanisms for reconstruction; (d) providing well-targeted assistance schemes to communities affected by natural disasters; and (e) building up a strong institutional framework that can coordinate a national strategy for disaster risk management both across ministries and across levels of government responsibility.

The sustainability of disaster risk management and climate change adaptation at the community level would depend on effective participation in identifying adaptation measures, on building up the skills and capacities in participatory methods, and on the communities' ability to generate the needed revenue for operation and maintenance of small infrastructure works.

Annex 1: Overview of Northern Provinces affected by Natural Disasters in the year 2008

Phu Tho Province: In Phu Tho Province, the water level in the rivers started to rise very fast at the night of 8 August 2008. The peak flood was as high as +24.3 metres on the night of 10 August 2008, 1.34 metres higher than the danger level 3, and .0.3 metres higher than historical record in 1971. The agricultural sector and people relying on agriculture for income and subsistence have been seriously affected in Phu Tho Province. Namely, 5 243 ha of summer rice, 966 ha of maize, and 1 078 ha of vegetables and secondary crops were submerged in the flood water. Furthermore, 2 100 ha of ponds and lakes were flooded causing massive losses of aquaculture and more than 861 heads of animals, mainly pigs, were taken away by flood. Moreover, infrastructures which are important for agriculture, such as: 179 km of national and provincial level roads; 38 km of IV-grade dikes; 18 km of primary dikes; 42 km of irrigation canals, 12 pumping stations, 11 lakes, 80 damps have been severely damaged or destroyed. The Provincial People's Committee estimates the total economic loss to be VND 354 708 billion.

As a result, the Provincial People's Committee estimates that livelihoods and food security of 5 825 households are adversely affected. In order to address such situation, the Provincial Peoples' committee has allocated VND 2.1 billion to provide food to relieve from the immediate hunger and money to rebuild their houses, while the Government has allocated money to repair infrastructure. The most affected districts in Phu Tho are Ha Hoa, Thanh Ba, Cam Khe and Doan Hung. In three most heavily damaged communes in Ha Hoa, namely Y Son, Chue Luu and Van Lang, almost all rice fields were totally destroyed and no harvest is expected, where, as of 28 August 2008, still large areas are flooded.

Yen Bai Province: In Yen Bai Province, heavy rains continued from 6 to 10 August 2008 with the rainfall of 246 mm, 680 mm, 284 mm, 202 mm, 119 mm and 286 in Yen Bai city and districts of Thac Ba, Ba Khe, Nghia Lo, Mu Cang Chai, and Luc Yen, respectively. In the Red river, the water level reached the peak of 34.3 m on the evening of 10 August, exceeding the alarming level three by 2.26 m. The Provincial People's Committee estimates that the total economic losses reach VND 438 billion of which agriculture loss is reported to be about VND 102 billion. Tran Yen, Van Yen, Luc Yen, Yen Binh and Yen Bai city are the most affected districts and city.

While 80 percent of the households in Yen Bai derive their main income from agriculture, severe damages to agriculture sector have affected approximately 10 000 households. About 4 651 ha of summer rice and secondary crops are flooded and 680 ha of fish ponds were damaged causing the loss of 246 tonnes of fish. Also, 2 796 heads of animals, mainly pigs, were taken away by flood. In addition to damages to transportation networks and irrigation works, large areas of crop fields were buried deeply under stones, sands and alluvial soils that they became irrecoverable for crop production.

Lao Cai Province: In neighboring province of Lao Cai, heavy rains occurred continuously for three-four days with the rainfall of 401 mm, 371 mm and 289 mm in districts of Bat Sat, Bao Yen and Sapa, respectively. In some localities, it reached up to 700 mm. In the Red and Chay rivers, the water levels exceeded the alarming level three by 1.4 metres. In the evening of 9 August 2008, the water level reached the peak of +84.91 metres in the Red River and +76.4 metres in the Chay River. Consequently, all 40 communes along the rivers were flooded. To make the situation worse, flash floods and landslides occurred in many districts such as: Bat Xat, Sapa, Bao Yen, and Van Ban.

Agricultural production, which is a main source of income and subsistence food for the majority of the victims, was also badly affected. Out of 31 000 ha of summer rice crops, 5 627 ha were damaged, of which 1 950 ha were totally destroyed. 350 ha of paddy fields were deeply buried under sands and stones and became irrecoverable. Another 1 210 ha of secondary crops were also totally destroyed. Fifty tonnes of rice stock were swept away by flood. For aquaculture, 252 ha of fish ponds were damaged causing the loss of 246 tons of fish. Furthermore, 131 animals such as buffaloes, cows and horses were lost. Infrastructures were also largely damaged including 185 transportation works, 150 irrigation works and 86 clean water supply works.

Annex 2 – Project Results & Budget

Project Outcomes, Outputs and Activities	Lead agency	Comments	ODA US$
Outcome 1: Support to strengthen institutional, technical and policy frameworks and coordination for disaster risk reduction and climate change adaptation in agriculture at national, provincial and local level (in the northern mountain regions)			
Output 1.1: Institutional and technical capacity of relevant provincial and local (district and commune) institutions strengthened to enhance coordinated and integrated DRR actions and to reduce vulnerability to climate change	MARD, FAO		
Activity 1.1.1: Assess the institutional needs and analyze the technical gaps and key issues in agriculture disaster risk reduction and climate change adaptation at provincial level.	MARD, FAO	National expert on DRM and CCA	
Activity 1.1.2: Training workshops for key staff within MARD's Professional Bureaus relevant to agriculture at national level (eg. crop production, plan protection, animal husbandry, forestry, forest protection, cooperatives and rural development)	MARD, FAO	Training costs	3 000
Activity 1.1.3 – Provincial level introductory training on Disaster Risk Management and Climate Change Adaptation:	MARD, FAO	Training cost	3 000
Activity 1.1.4 – Improve technical capacity of local institutions, farmers' groups through field training on community mobilization, community centered disaster risk management in agriculture	Local NGO/FAO	CBDRM training and community mobilization	18 000
Output 1.2: Enhanced policy frameworks, guidelines and coordination and communication mechanisms for disaster risk reduction and climate change adaptation in agriculture in line with National Strategy for Natural Disaster Prevention, Response and Mitigation (2020) and Action Plan Framework for adaptation and mitigation of climate change in agriculture (2008 – 2020)	MARD, FAO		
Activity 1.2.1: Review and complement plans for flash flood and landslide prone mountainous areas targeting food security and agriculture sector.	MARD, FAO	Budgeted under national expert	
Activity 1.2.2: Formulate guidelines and recommendations for integrating climate change in food and agriculture perspectives in the northern mountain region.	MARD, FAO	National expert	
Activity 1.2.3 – Support to the development of communication and partnership arrangements and	MARD, FAO	National	

Project Outcomes, Outputs and Activities	Lead agency	Comments	ODA US$
preparation for coordination mechanisms between partners at the national level.		expert	
Activity 2.2.4 – Evolve methods and standardise procedures for joint "Needs Assessment Survey Mission" involving all partners including international/national agencies, national and local stakeholders.	MARD, FAO	National experts	
Outcome 2: Strengthening institutional support services to enhance coordinated and integrated DRR actions and adaptation to climate change at the provincial level (3 pilot provinces)			
Output 2.1: Strengthen seed production, storage and maintenance system at provincial, district and commune level to enhance preparedness and effectively respond to climate related extreme events in the mountain region	NOMAFSI, FAO		
Activity 2.1.1: Conduct household/farmer survey to understand the community preferences on hybrids, improved and local varieties and assess seed supply and storage systems.	NOMAFSI, FAO	National expert (seeds)	10 500
Activity 2.1.2: Technical assistance and capacity building of selected staff from provincial seed centres to strengthen the seed production and storage methods including community level approaches to make them better prepared and restart the cropping activities immediately after extreme weather or climate events.	NOMAFSI, FAO	National expert/NOMAFSI	-
Output 2.2: Strengthen capacity for developing localised early warning systems and weather/climate information application for risk management and adaptation at the provincial level	NHMS-MONRE		
Activity 2.2.1: Enhance access and use of existing early warning, weather/climate and flood information products from MONRE (National Hydro-meteorological services - NHMS).	NHMS-MONRE	Contract	15 000
Activity 2.2.2: Provide training to provincial and front line MARD staff on interpretation and preparation of impact outlooks, management plans in response to weather/climate information products and early warning messages for risk management.	NHMS-MONRE	Contract	-
Outcome 3: Improved location specific database management, spatial information products to facilitate local level DRR actions to strengthen resilience of vulnerable communities to climate change impacts			
Output 3.1 – Developed effective database management system in order to monitor impacts of natural disasters in agricultural and food security and streamlining the communication between district and central institutions.	MARD, FAO		
Activity 3.1.1 – Develop a baseline data and indicators on vulnerable livelihoods including *gender sensitive data* in order to be included and represented in the national data base and a spatial information products (spatial vulnerability and risk maps).	MARD, FAO	National experts	-
Activity 3.1.2 - Train local staff on the use of ***VietInfo*** in order to provide and monitor more	MARD, FAO	National	11 000

Project Outcomes, Outputs and Activities	Lead agency	Comments	ODA US$
effective information and integrate information with agriculture-based natural disaster indicators.		expert	
Output 3.2 – Developed spatial decision support products based on the hazards, local vulnerability and risks at the provincial level	FAO		
Activity 3.2.1 – Collect and collate information on hazard profile, historical secondary data, primary and secondary indices of vulnerability and calculation of risk related data	FAO	Contracts/International expert	45 000
Activity 3.2.2 - Prepare district/commune level hazard, vulnerability risk spatial information products (maps) to enable provincial and district staff to use a decision making tool.	FAO	Contract/International expert	-
Outcome 4 – Location specific community based disaster risk reduction, climate change adaptation and awareness actions prioritized and implemented at the community level			
Output 4.1: Location specific technologies for DRR and climate change adaptation within the agriculture sector identified and screened and the CBDRM process facilitated to prioritize community actions	MARD, NOMAFSI, FAO		
Activity 4.1.1: carry out a study in each selected district to deepen the understanding about local vulnerabilities, natural resource endowments, institutional setting to address climate risks and on locally available and applied natural disaster prevention/preparedness strategies, including local EWS their existing strengths and demands.	MARD, NOMAFSI, FAO	Contracts/National expert	
Activity 4.1.2: Collect and document existing local and introduced good practices in agriculture in the selected provinces of northern mountain region separated by planting season, for DRM and climate change adaptation in agriculture and collate it in the form of a good practice options menu	MARD, NOMAFSI, FAO	Contracts/National expert	
Activity 4.1.3: provide basic CBDRM and community based adaptation training to selected farmers organizations.	MARD, NOMAFSI, FAO	Contracts	15 000
Output 4.2: Location specific technologies for DRR and climate change adaptation within the agriculture sector demonstrated through a participatory learning by doing process at the community levels and awareness on climate change impacts enhanced.	MARD, FAO		
Activity 4.2.1: conduct pilot demonstration of the community prioritized DRM and adaptation options which have been endorsed by the district and provincial level project implementation task groups.	MARD, NOMAFSI, FAO	Contracts/National experts	
Activity 4.2.2: Improved awareness, promotion and dissemination of climate risk related information on the benefits of DRR actions and climate change adaptation practices at the	MARD, NOMAFSI,	Contracts/National experts	

Project Outcomes, Outputs and Activities	Lead agency	Comments	ODA US$
community level in-line with the field implementation/demonstration.	FAO		
Outcome 5 – Technical advice and project management			
National Expert (DRM and CCA in Agriculture)	FAO	15 x 1500	22 500
National Expert (seed production, storage and maintanence)	FAO	7 x 1500	10 500
National Expert (Disaster database Management in Agriculture)	FAO	6 x 1500	9 000
Coordinator (Training and Field Activities)	FAO	15 x 1200	18 000
Provincial Coordinators (Phu Tho, Yen Bai and Lao Cai)	FAO	15 x 3 x 800	36 000
Project support Assistant at MARD	FAO	20 x 600	12 000

Annex 3: Project Monitoring Framework

Project Outcomes and Outputs	Indicators	Baseline	Target	Risks and assumptions
Outcome 1: Support to strengthen institutional, technical and policy frameworks and coordination for disaster risk reduction and climate change adaptation in agriculture at national, provincial and local level (in the northern mountain regions)	Institutional and technical capacity enhanced in Professional Bureaus (national) and DARD staff at provincial and district level	DARD staff in the Northern Mountainous region is not exposed to DRR and climate change adaptation approaches.	At least 20 staff from 5 Professional Bureau at national level and 75 staff from 3 provincial DARD sub-departments are trained in various aspects of DRR and CCA.	The MARD and DARD staff are willing to enhance their institutional and technical capacity to meet the emerging challenges related to climate change.
Output 1.1: Institutional and technical capacity of relevant national, provincial and local (district and commune) institutions strengthened to enhance coordinated and integrated DRR actions and to reduce vulnerability to climate change	Technical capacity of DARD staff enhanced to implement coordinated and integrated action of DRR and CCA	Very limited capcity building efforts at provincial level and no efforts taken at district and commune level to operationalise CBDRM and CCA.	At least so national staff and 25 staff from each province and six pilot districts and 12 communes will be trained on DRR, CBDRM and CCA approaches. Farmer groups and community representatives from 12 communes will prioritise the local actions.	Community most affected by extreme climate events are interested to take up mitigation measures.
Output 1.2: Enhanced policy frameworks, guidelines and coordination and communication mechanisms for disaster risk reduction and climate change adaptation in agriculture in line with National Strategy for Natural Disaster Prevention, Response and Mitigation (2020) and Action Plan Framework for adaptation and mitigation of climate change in agriculture (2008 – 2020)	Improved guidelines for needs assessment, integration of DRR and climate change adaptation priorities into the provincial DRR plans.	Current focus is on response plans and climate change aspects are integrated into provincial action plans.	At least one set of guidelines are developed for needs assessment missions; three provinces integrates DRR and CCA priorities into their annual plans; recommendation for CCA and DRR actions plans agreed.	The provincial people's committee and its standing office are eager to incorporate the changes considering new challenges.

Outcome 2: Strengthening institutional support services to enhance coordinated and integrated DRR actions and adaptation to climate change at the provincial level (3 pilot provinces)	Improved mechanisms to provide need based support services to communities in three provinces.	The existing support services on seeds and early warning are not systematically tuned for localised needs.	Capacity of DARD offices in three provinces enhanced to supply necessary seed inputs and localised early warning information.	DARD is capable of balancing the demand for varieties and hybrid seeds; the weather/climate information from NHMS is relevant to the pilot provinces.
Output 2.1: Strengthen seed production, storage and maintenance system at provincial, district and commune level to enhance preparedness and effectively respond to climate related extreme events in the mountain region	Improved seed production, storage, maintenance mechanism at district and commune level.	There is organized way of distributing seeds in the event of natural disasters to restart the cropping activity.	At least 6 district extension offices and 3 seed centres are capable of providing necessary seed inputs to the farmers.	Farmers prefer improved and local varieties for their household consumption and also to manage climate risks.
Output 2.2: Strengthen capacity for developing localised early warning systems and weather/climate information application for risk management and adaptation at the provincial level	Customized local early warning systems to assist proactive decision making at the farm level	The early warning and reliable weather and climate information is not available to the farmers in the pilot provinces.	Three DARD offices in pilot provinces are capable of interpreting early warning information and communicate to the farmers in 12 communes of 6 pilot districts.	Sufficient predictability exists to forecast reliable weather and climate information in the northern mountain region.
Outcome 3: Improved location specific database management, spatial information products to facilitate local level DRR actions to strengthen resilience of vulnerable communities to climate change impacts	Database on disaster impacts, damage and loss, spatial information on vulnerability and risks enhanced.	The indicators relevant to agriculture have not been integrated in VietInfo and spatial maps describing vulnerability are not available.	At least 5 indicators relevant to agriculture DRM prioritised and data collected and integrated into VietInfo; and spatial maps for three provinces developed.	It is assumed that the data bases are relevant to inform the DRR and response operations and also climate change adaptation.
Output 3.1 – Developed effective database management system in order to monitor impacts of natural disasters in agricultural and food security and streamlining the communication between district and central institutions.	Disaster database management for agriculture developed and integrated in VietInfo, useful for decision making related to DRR	The indicators relevant to agriculture have not been systematically integrated with VietInfo.	At least 5 indicators prioritized and long term historical data collected and synthesized to make available with VietInfo and at least 30 provincial	Expected to ensure close collaboration with UNICEF to complete this output.

	actions and emergency response.		and district staff trained on access, use and update.	
Output 3.2 – Developed spatial decision support products based on the hazards, local vulnerability and risks at the provincial level	Improved spatial database on hazards, vulnerability and risks at the provincial level.	The spatial data sets are not available to identify risks and opportunities in combination to land use maps.	Spatial maps covering three provinces and pilot districts and communes developed using the data collected by different partners and experts.	The relevant data are collected and scrutinized to develop the spatial vulnerability and risk maps.
Outcome 4 – Location specific community based disaster risk reduction, climate change adaptation and awareness actions prioritized and implemented at the community level	Location specific disaster risk reduction and climate change adaptation actions prioritized and implemented in partnership with community and awareness enhanced on climate change.	There is no facilitation to identify potential DRR and climate change adaptation practices at the local level and community is unaware of the impacts of climate change.	At least 20 good practice examples identified and implemented in all the project pilot communes and a minimum of 18 farmer groups participate in local DRR/CCA actions.	Locally relevant DRR and CCA practices are available and are suitable to match the community needs.
Output 4.1: Location specific technologies for DRR and climate change adaptation within the agriculture sector identified and screened and the CBDRM process facilitated to prioritize community actions	Location specific DRR and CCA practices identified and prioritized.	DRR/CCA actions are not prioritized in the selected provinces	At least 20 different DRR/CCA practices prioritized in 18 communes of three provinces.	It is assumed that there is enough indigenous and improved DRR/CCA good practices are available in the selected communes.
Output 4.2: Location specific technologies for DRR and climate change adaptation within the agriculture sector demonstrated through a participatory learning by doing process at the community levels and awareness on climate change impacts enhanced.	Prioritized location specific DRR and CCA practices implemented and awareness on disaster risks and climate change impacts enhanced.	There are no community level initiatives to implement good practice examples.	At least 15 different DRR/CCA practices implemented and 5 practices demonstrated suitable for wider adoption.	The screened and prioritized practices would reduce the impact of disaster risks and suitable to manage climate change related impacts.

Annex 4 – Project work-plan (December 2009 - November 2011)

Project Outcomes, Outputs and Activities	Year I				Year II			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Activity 1.1.1: Assess the institutional needs and analyze the technical gaps and key issues in agriculture disaster risk reduction and climate change adaptation at provincial level.								
Activity 1.1.2: Training workshops for key staff within MARD's Professional Bureaus relevant to agriculture at national level (eg. crop production, plan protection, animal husbandry, forestry, forest protection, cooperatives and rural development)								
Activity 1.1.3: Provincial level training on Disaster Risk Management and Climate Change Adaptation:								
Activity 1.1.4: Improve technical capacity of local institutions, farmers' groups through field training on community mobilization, community centered disaster risk management in agriculture								
Activity 1.2.1: Review and complement plans for flash flood and landslide prone mountainous areas targeting food security and agriculture sector.								
Activity 1.2.2: Formulate guidelines and recommendations for integrating climate change in food and agriculture perspectives in the northern mountain region.								
Activity 1.2.3:Support to the development of communication and partnership arrangements and preparation for coordination mechanisms between partners at the national level.								
Activity 1.2.4**:** Evolve methods and standardise procedures for joint "Needs Assessment Survey Mission" involving all partners including international/national agencies, national and local stakeholders.								
Activity 2.1.1: Conduct household/farmer survey to understand the community preferences on hybrids, improved and local varieties and assess seed supply and storage systems.								
Activity 2.1.2: Technical assistance and capacity building of selected staff from provincial seed centres to strengthen the seed production and storage methods including community level approaches to make them better prepared and restart the cropping activities immediately after extreme weather or climate events.								
Activity 2.2.1: Enhance access and use of existing early warning, weather/climate and flood information products from MONRE (National Hydro-meteorological services - NHMS).								
Activity 2.2.2: Provide training to provincial and front line MARD staff on interpretation and								

Project Outcomes, Outputs and Activities	Year I				Year II			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
preparation of impact outlooks, management plans in response to weather/climate information products and early warning messages for risk management.								
Activity 3.1.1 – Develop a baseline data and indicators on vulnerable livelihoods including *gender sensitive data* in order to be included and represented in the national data base and a spatial information products (spatial vulnerability and risk maps).								
Activity 3.1.2 - Train local staff on the use of ***VietInfo*** in order to provide and monitor more effective information and integrate information with agriculture-based natural disaster indicators.								
Activity 3.2.1 – Collect and collate information on hazard profile, historical secondary data, primary and secondary indices of vulnerability and calculation of risk related data								
Activity 3.2.2 - Prepare district/commune level hazard, vulnerability risk spatial information products (maps) to enable provincial and district staff to use a decision making tool.								
Activity 4.1.1: carry out a study in each selected district to deepen the understanding about local vulnerabilities, natural resource endowments, institutional setting to address climate risks and on locally available and applied natural disaster prevention/preparedness strategies, including local EWS their existing strengths and demands.								
Activity 4.1.2: Collect and document existing local and introduced good practices in agriculture in the selected provinces of northern mountain region separated by planting season, for DRM and climate change adaptation in agriculture and collate it in the form of a good practice options menu								
Activity 4.1.3: provide basic CBDRM and community based adaptation training to selected farmers organizations, community representatives including ethnic groups.								
Activity 4.2.1: conduct pilot demonstration of the community prioritized DRM and adaptation options which have been endorsed by the district and provincial level project implementation task groups.								
Activity 4.2.2: Develop improved awareness and dissemination materials and promote and disseminate climate risk related information and its benefits and climate change adaptation practices at the community level in-line with the field implementation/demonstration.								

Annex 5 – List of experts, contracts and technical support services

NATIONAL PROJECT DIRECTOR

(No cost to the project; In-Kind contribution from the Government)

In close coordination with the FAOR office in Hanoi, Viet Nam and FAO headquarters, the National Project Director (NPD) will be responsible for the overall execution of the project. He/she will ensure adequate collaboration between the project team (including consultants), as well as other government agencies at national, provincial, district and local levels and other partners thus ensuring smooth and effective project implementation. He/she will be responsible for the organizational and logistical arrangements and the mobilizing and coordinating the technical support services required from national level for the effective implementation of all aspects of the project. He/she will be responsible for the overall reporting *vis-á-vis* the MARD and FAO. The NPD will lead the project activities and supervise and guide the work of the National Experts including coordinators.

In particular, he/she will:

- participate in the preparation of the detailed work plan for the project;
- assist in identifying candidates for the national consultancy;
- supervise and advise on the implementation of the field level activities;
- provide overall technical guidance to the design and implementation of the national, provincial, district and local level training and capacity building programmes and contribute as resource person as appropriate;
- ensure intensive and regular networking and transparent collaboration with other government line agencies at national, provincial, district and local levels [commune levels] as well as with other partner agencies and subcontractors;
- ensure project representation and contribute to relevant meetings/consultation related to disaster prevention/preparedness, climate change adaptation in agriculture sector.
- Guide the national experts, and ensure that the national experts are empowered to effectively manage the Project, and other Project staff in performing their duties.
- Ensures that work plans are prepared and updated, in consultation with FAO, and distributed to the Government and other relevant agencies.
- Undertakes the recruitment and contract of FAO financed Project professional and support staff using agreed procedures.

Qualifications: longstanding field experience at local and national level with planning, implementation and monitoring of sustainable agricultural development and/or natural resource management and/or disaster prevention and preparedness programmes and activities, in particular related to climate change adaptation are desirable.

Duty Station: Hanoi and need based travel to pilot provinces.

Duration: entire period of the project (part-time input).

TERMS OF REFERENCE (TOR)

National Expert - Disaster Risk Management (DRM), Climate Change Adaptation (CCA) in Agriculture[14]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB), and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forest Science Institute (NOMAFSI), national experts, and other project partners, the national expert of DRM and CCA will conduct the following major tasks at national and local levels;

- Assess the institutional needs and analyze the technical gaps and key issues in agriculture disaster risk reduction and climate change adaptation at provincial level.
- analyse the institutional aspects and policy requirements to better link the agriculture sector into DRM strategy in Viet Nam and preparation of Plan of Action (PoA) at national and district levels;
- Review and complement plans for flash flood and landslide prone mountainous areas targeting food security and agriculture sector
- Formulate guidelines and recommendations for integrating climate change in food and agriculture perspectives in the northern mountain region
- Evolve methods and standardise procedures for joint "Needs Assessment Survey Mission" involving all partners including international/national agencies, national and local stakeholders
- building on the lesson learned from project implementation process and pilot interventions in selected provinces, facilitate a discussion process within MARD about the components and implementation arrangements of a detailed five year PoA to be implement by DoA under the umbrella of the new National Policy and Strategy for DRM in Viet Nam;
- assess institutional and policy requirements to better link the current and longer term climate change adaptation activities at district and local levels;
- design a resource mobilization strategy and conduct resource mobilization meetings and workshops with key donors as a basis for replication of pilot activities undertaken under this project to other similar regions in Viet Nam;
- assist NPD in organizing project meetings, workshops and training programmes at national, district and local levels;
- facilitate the work of the project partners, subcontractors in carrying out their situation assessment, training need assessment, documentation of DRM and climate change adaptation practices;
- prepare a field demonstration plan at the beginning of each season and assist the NPD in organizing the demonstrations through subcontracted organizations and field monitoring officer;
- participate in the project wide workshops and training programmes organized by MARD in association with the subcontracted regional and national organizations;

[14] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.

- assist provincial level DARD officers, Provincial level flood and storm control committee in preparing revised DRM plans for disaster prevention/preparedness and climate change adaptation;
- submit a substantive technical report at the end of the mission;
- any other duty required to support a successful implementation of the project.

Qualifications: advanced degree in agriculture and related subjects together with long standing field experience at local and national level on planning, implementation and monitoring of disaster prevention/preparedness and climate change adaptation programmes in Viet Nam. Experience in institutional assessment and preparation of strategy documents is an additional value.

Duty Station: Hanoi, Viet Nam and need based travel to pilot provinces.

Duration: 15 months WAE over 24 months.

TERMS OF REFERENCE (TOR)
National Expert – Seed Production, Storage and Maintenance[15]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Seed and Plant Genetic Resources Service (AGPS), and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forest Science Institute (NOMAFSI), national experts, and other project partners, the national expert of seed production, storage and maintenance will conduct the following major tasks at national and local levels;

- assess crops and varieties used by the communities and the seed supply and storage practices particularly in the pre and in post emergency situations and link with the existing seed production programmes at the provincial and district level;
- Assess the potential to introduce new crops and varieties for disaster mitigation and the development of community based seed production and storage systems for appropriate crops and varieties for disaster mitigation.
- Provide technical assistance and capacity building of selected staff from provincial seed centres to strengthen the seed production and storage methods including community level approaches to make farmers better prepared and restart the cropping activities immediately after the natural disasters;
- Assist to enhance the capacity of provincial and district DARD office staff through training on seed storage and quality maintenance in order to respond timely and demand responsive manner in the time of disaster;
- advise in collaboration with existing seed suppliers on the appropriate set-up and maintenance of demand responsive seed storage and supply system at local level and provide training and assist selected local seed producers and farmer groups to maintain seed buffer at the community level and respond to seed demand on continuous basis;
- document and familiarise the indigenous methods of seed storage with local Community-based Organizations (CBOs), farmer cooperatives and farmer groups at local level and provide technical support on innovative seed storage techniques;
- Design and prepare a strategy on seed production, storage and maintenance in accordance with the national policies, plans and priorities and implement acceptable and preferred models at difference levels. Significant information and resources drawn from previous FAO assistance in this regard should be the basis for designing the strategy.
- Broaden the household survey (increase the number of respondents and communes) to understand the overall picture about the seed resource situation at the community level at different phases of Disaster Risk Reduction and document the synergies, trade-offs and economics of hybrid, improved and local varieties.
- Work closely with the Department of Crop Production at the national level and Northern Mountainous and Forest Science Institute (NOMAFSI) at the provincial level.

Qualifications: advanced degree in agriculture and related subjects together with long standing field experience at local and national level on planning, implementation and monitoring of disaster preparedness and climate change adaptation programmes in Viet Nam.

Duty Station: Hanoi, Viet Nam and need based travel to pilot provinces.
Duration: 5 months AWE over 12 months

[15] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.

TERMS OF REFERENCE (TOR)

National expert – Disaster Database Management in Agriculture sector[16]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB), and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forest Science Institute (NOMAFSI), UNICEF focal points for Vietinfo, national experts, and other project partners, the national expert of Disaster Database management in Agriculture sector will conduct the following major tasks at national and local levels;

- assess data and information gaps as perceived by the Ministry of Agriculture and Rural Development (MARD), Provincial level Department of Agriculture and Rural Development (DARD), Community-based Organizations (CBOs), and farmers;
- Identify the suitable indicators for agriculture sector (including livestock, forestry and fishery) to prepare a sample database for the three pilot provinces in the northern mountain region and the same can be used for the training programmes.
- Develop a baseline data and indicators on vulnerable livelihoods including *gender sensitive data* in order to be included and represented in the national data base and a spatial information products (spatial vulnerability and risk maps)
- Train local staff on the use of *VietInfo* in order to provide and monitor more effective information and integrate information with agriculture-based natural disaster indicators.
- add to the current disaster data collection practice, and routine parameters/questions sheets so that the data will become more useful as a basis for Disasters Risk Management (DRM) related information able to respond to information demands of farmers;
- provide training to front line DARD staff on data collection (disaster impacts, damage to infrastructure, loss to production, etc.) according to the new format to be elaborated;
- train provincial and district staff on the data collection, monitoring, analysis and communication of data along with criteria set for the establishment of an improved strategy for risk preparedness in agriculture;
- submit a substantive technical report at the end of the mission;
- provide any other duties which may be identified and agreed upon with the Lead Technical Unit (LTU).

Qualification requirements: higher degree in agricultural sciences, preferably statistics with sufficient background on database management and data archiving. Experience in Vietinfo will be considered.

Duty Station: Hanoi, Viet Nam and need based travel to pilot provinces.

Duration: Six months AWE over 8 months.

[16] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.

TERMS OF REFERENCE (TOR)

Coordinator (Training and Field Activities)

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB), and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forest Science Institute (NOMAFSI), national experts, and other project partners, the coordinator (Training and Field Activities) will conduct the following major tasks at national and local levels;

- The coordinator of training and field activities will work very closely with the NPD and FAO and assist the day today activities including programming of the capacity building activities
- Prepare schedule for provincial level field demonstrations, survey and awareness raising programmes.
- Prepare a quarterly work plan in consultation with all stakeholders and project implementing partners and FAO country office and lead technical unit in FAO-hq and appraise the project team in advance.
- Support to the development of communication and partnership arrangements and preparation for coordination mechanisms between partners at the national level.

Qualifications: Advanced degree in agriculture and related subjects together with field experience at local and national level on planning, implementation and monitoring of disaster prevention/preparedness and climate change adaptation programmes in Viet Nam. Experience in knowledge management and communication is desirable.

Duty Station: Hanoi, Viet Nam and need based travel to pilot provinces.
Duration: 15 months AWE over 24 months

TERMS OF REFERENCE (TOR)

Provincial Coordinators

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB), and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forest Science Institute (NOMAFSI), national experts, and other project partners, the provincial coordinator will conduct the following major tasks at national and local levels;

- Three provincial coordinators will be engaged and they will assist the provincial project management unit and the project focal point in day-to-day activities of the project.
- The coordinator is responsible to collect relevant primary and secondary data from the selected district and communes;
- Support Provincial Inter-agency working group to implement the project;
- Assist in organizing and conducting orientation workshops in each pilot community to explain the project and initiate awareness creation process on short-term disaster risk management and long-term climate change risk management.
- Identify local partners/farmers groups/farmer field school/ individual households, including women and women's groups, potentially interest to collaborate in the pilot experiments.
- Promote and facilitate discussion between farmers, farmer groups about selection of locally preferred/ acceptable DRM and adaptation options for pilot testing.
- Assist in implementing the prioritized DRM and adaptation strategies at field level.
- Assist to implement and monitor the field activities and collect periodical data for comparison and impact assessments;
- Support the project team in awareness raising efforts and provide assistance in organizing provincial and commune level workshops, participatory discussions, brain storming sessions and training programmes.
- He/she will be working very closely with NOMAFSI at the provincial level and report to PMU and FAO.

Qualifications: Advanced degree in agriculture and related subjects together with field experience at local and national level on planning, implementation and monitoring of disaster prevention/preparedness and climate change adaptation programmes in Viet Nam. Experience in knowledge management and communication is desirable.

Duty Station: Phu Tho/Yen Bai/Lao Cai provinces of Viet Nam and need based travel to pilot districts and communes.
Duration: 15 months AWE over 24 months

LETTER OF AGREEMENT (LoA)

Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI)

Contract 1

Situation Assessment Study, Documentation and demonstration of Good Practices of Disasters Risk Management (DRM) and Climate Change Adaptation Options[17]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB), and the Crop and Grassland Service (AGPC) and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, national experts, and other project partners, the contractor will conduct the following major tasks at national and local levels;

- Carry out a detailed study in each selected district to deepen the understanding about local vulnerabilities, natural resource endowments, institutional setting to address climate risks and on locally available and applied natural disaster prevention/preparedness strategies, and their existing strengths and demands.
- Collect and document existing local and introduced good practices in agriculture in the selected provinces of northern mountain region separated by planting season, for DRM and climate change adaptation in agriculture and collate it in the form of a good practice options menu
- Conduct pilot demonstration of the community prioritized DRM and adaptation options which have been endorsed by the district and provincial level project implementation task groups.
- Conduct community level actions to improve awareness, promotion and dissemination of climate risk related information and the benefits of DRR actions and climate change adaptation practices at the community level in-line with the field implementation.
- assist the local authorities in identifying locally adaptable Disasters Risk Management (DRM), good practices and climate change adaptation options in the cropping sector helping farmers to minimize their losses due to natural calamities and provide seeds/planting materials for provincial/district level project implementation group and farmers; This will include an assessment of the economic and social profitability of new crop varieties of crops, flood management practices, varieties suitable for climate risk management (dry and wet spells, drought, flood, temperature extremes, homestead agriculture, alternative farming systems, etc.);
- conduct field demonstration of the selected technologies (including crop varieties) in collaboration with the DARD, farmers groups and provincial coordinators;
- train DARD staff at provincial/district and members of farmer groups on introduced DRM and practices in all the pilot communes;
- guide farmer groups and local agricultural extension staff during field demonstration cycle;

[17] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.

- conduct economic analysis and derive environmental benefits of the new innovative technologies in the context of DRM and climate change adaptation and present the results in the project workshops at provincial level for wider adoption;
- prepare technology dissemination and awareness raising strategies and develop locally applicable leaflets, pamphlets, brochures for wider dissemination;
- organize demonstration field days (all selected districts) for the local agricultural extension officers and farmer groups during the critical time of the demonstrations to show the measurable improvements of innovative technologies compared to control (current farmers' practice);
- document the results of all demonstrations with economic analysis and present in the project wide workshops and meetings.

Contract volume: USD 45 000, including national travel, daily subsistence allowance (DSA) and documentation of good practices of DRM and viable climate change adaptation, preparation of materials for awareness raising, and materials for field demonstrations. The national institute will contribute to staff salaries, infrastructure, overheads and other required inputs for demonstrations at the selected pilot districts.

Letter of Agreement (LoA)

Contract 2
National Organization Experienced in Training and Capacity Building Support

Training and Capacity Building Support [18]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB) and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), national experts, and other project partners, the contractor will conduct the following major tasks at national and local levels;

- training need assessment related to disaster prevention/preparedness and adaptation to climate change at provincial and district level agriculture, fishery, livestock, irrigation and local development staff;
- training need assessment related to disaster preparedness and adaptation to climate change at local levels with Community-based Organizations (CBOs), farmer groups, women groups etc.;
- adoption of training manual on community based disaster management based on the training requirement at various levels concentrating Disasters Risk Management (DRM), climate change impacts and adaptation;
- assist and collaborate with the national coordinator (training and field activities) in organizing disaster preparedness and climate change adaptation training programmes at local levels;
- guide in selected districts and communities the participatory process to prepare DRM priorities for agriculture and natural resource management linked to overall DRM planning in the respective project pilot areas.
- Organize and facilitate a series of village and district level consultations with relevant key stakeholders to agree upon contents and priorities for an enhanced DRM plans from a sectoral perspective.

Basic requirement of partner organization to be contracted:

- experience in the assessment and analysis of the training needs related to disaster preparedness and climate change adaptation at district and local levels;
- experience in facilitating training programmes at district and local levels regarding disaster preparedness and climate change adaptation.

Contract volume: USD 15 000, including national travel, daily subsistence allowance (DSA), and salaries for services of a minimum of six person/months, physical presence within the project area (six districts) and sufficient time required for preparatory background work at the organizations home base and overheads.

[18] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Letters of Agreement.

Letter of Agreement (LoA)

Contract 3
National Hydro-Meteorological Services (NHMS)
Ministry of Natural Resources and Environment (MONRE)

Improvement Early Warning and Weather/Climate Forecast Systems in Northern Mountain Region [19]

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB) and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), national experts, and other project partners, the contractor will conduct the following major tasks at national and local levels;

- review the existing warning systems and products available at the national level and document the strengths and weaknesses of the system in addressing needs of the MARD/DARD at national and provincial levels;
- strengthen the existing forecast products at the provincial level, ensuring timely information and communication flow as needed between district and national levels;
- discuss the climate change scenarios results and impacts relevant to northern mountain region with partner agencies;
- assess training needs related to understanding of available forecast products at national, provincial and district levels with MARD/DARD;
- organise training programme to the provincial and district level staff to familiarize existing forecast products and early warning information

Contract volume: USD 15 000, including national travel, daily subsistence allowance (DSA), conducting training needs assessment, preparation of training materials and organizing training programmes.

[19] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.

Letter of Agreement (LoA)

Department of Crop Production
Ministry of Agriculture and Rural Development (MARD)

Contract 1

Documentation of details of improved varieties, DRM and Climate Change Adaptation Technologies Suitable for Northern Mountain Region

Under the overall supervision of the National Project Director (NPD) and the FAOR and the technical supervision of the Natural Resources, Climate Change and Bioenergy Unit (NRCB) and in close collaboration with the MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), national experts, and other project partners, the contractor will conduct the following major tasks at national and local levels;

- assist the local authorities in identifying locally adaptable Disasters Risk Management (DRM), good practices and climate change adaptation options in the cropping sector helping farmers to minimize their losses due to natural calamities;
- guide to assess the economic and social profitability of new crop varieties of crops, drought and flood management practices, crops/varieties suitable for climate risk management and propose alternative farming systems;
- participate in the training programme at national and provincial level and introduce DRM and climate change adaptation practices suitable for northern mountain region;
- conduct economic analysis and derive environmental benefits of the new innovative technologies in the context of DRM and climate change adaptation and present the results in the project workshops at the provincial level for wider adoption;
- prepare technology dissemination and awareness raising strategies and develop locally applicable leaflets, pamphlets, brochures for wider dissemination;

Contract volume: USD 15 000, including national travel, daily subsistence allowance (DSA) and documentation of good practices of DRM and viable climate change adaptation, preparation of materials for awareness raising.

TERMS OF REFERENCE/LETTER OF AGREEMENT

Hazard, Vulnerability and Risk Mapping to facilitate Disaster Risk Reduction and Climate Change Adaptation Actions[20]

Under the overall supervision of the Director, Environment, Climate Change and Bioenergy Division (NRC) and technical supervision of the Climate Change and Bioenergy Unit (NRCB) and in close collaboration with the FAOR-Viet Nam, MARD and its related Departments such as Department of Dyke Management and Flood, Storm Control (DDMFSC), Department of Crop Production, Department of Scientific Technology and Climate Change Adaptation, Northern Mountainous Agriculture and Forestry Science Institute (NOMAFSI), national experts, and other project partners, the contractor will conduct the following major tasks at national and local levels;

- carry out an in-depth study in each selected provinces to deepen the understanding about local vulnerabilities, natural resource endowments and provincial level hazard and vulnerability maps to be used by the provincial and district authorities;
- Collect and collate information on hazard profile, historical secondary data, primary and secondary indices of vulnerability and calculation of risk related data;
- Prepare provincial/district level hazard, vulnerability risk spatial information products (maps) to enable provincial and district staff to use a decision making tool.
- train the provincial and district staff on the use of spatial information products for decision making and to identify potential areas suitable for various crops and varieties.

Qualifications: the expert/organization selected must have substantial demonstrated understanding and practical field experience in risk and vulnerability assessment and risk mapping. He/she needs strong facilitation and communication skills as well as capability to write clear and concise reports.

Contract volume: USD 45 000, including international/national travel, daily subsistence allowance (DSA), and salaries for services, physical presence within the project area and sufficient time required for preparatory work and overheads.

[20] This contract will be elaborated in detail based on the project requirement by the Lead Technical Unit (LTU) in close collaboration with the NPD and FAO-Viet Nam into a detailed Terms of Reference.