



MDG-F 1656: Joint Programme on  
Strengthening the Philippines'  
Institutional Capacity to Adapt to  
Climate Change

Government of the Philippines



United Nations

2008-2010

**UNDAF Outcome(s):**

By 2009, the most vulnerable sectors or communities, including the women and children among them, are able to meaningfully and equitably participate in managing the environment and energy resources in a sustainable way, so as to increase their productivity and reduce their vulnerabilities.

**MDG-F Outcome Area:**

Enhancing capacity to adapt to climate change.

**Joint Programme Outcome(s):**

1. Climate risk reduction (CRR) mainstreamed into key national & selected local development plans and processes;
2. Enhanced national and local capacity to develop, manage and administer plans, programmes & projects addressing climate change risks; and
3. Coping mechanisms improved through tested pilot schemes with national up-scaling potential.

Prog/Project Title: **Strengthening the Philippines' Institutional Capacity to Adapt to Climate Change**

Programme/project Duration  
(Start/end dates): 1 September 2008/31 December 2010

Fund Management Option(s): Pass Through

Managing or Administrative Agent: UNDP

Total estimated programme budget: US\$ 8.62M

Out of which:

1. Planned resources:

- Government (in-kind): US\$200,000
- UNDP (GEF-CC): US\$420,000
- Donor (Gov't. of Spain): US\$ 8 million

**SIGNATORIES:**

On behalf of the United Nations

On behalf of the Government of the Philippines

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**SIGNATORIES:**

On behalf of the United Nations	On behalf of the Government of the Philippines
<b>UN Resident Coordinator</b>	<b>National Economic and Development Authority (NEDA)</b>
Name: <b>NILEEMA K. NOBLE</b>	Name: <b>Secretary RALPH G. RECTO</b>
Signature:	Signature:
Date and Seal:	Date and Seal:

Witnessed by:

**ALVARO TREJO**  
 Chargé d' Affaires, a. i.  
 Embassy of Spain

**Names and signatures of participating UN organizations and national counterparts  
(Implementing Partners)**

UN Organizations	National Partners (including sub national partners)
<p><i>Name of Representative:</i> <b>NILEEMA K. NOBLE</b></p> <p><i>Signature:</i></p> <p><i>Name of Agency:</i> <b>United Nations Development Programme (UNDP)</b></p> <p><i>Date &amp; Seal:</i></p>	<p><i>Name of Head of Partner:</i> <b>Sec. RALPH G. RECTO</b></p> <p><i>Signature:</i></p> <p><i>Name of Institution:</i> <b>National Economic and Development Authority (NEDA)</b></p> <p><i>Date &amp; Seal:</i></p> <hr/> <p><i>Name of Head of Partner:</i> <b>Gov. JOEY S. SALCEDA</b></p> <p><i>Signature:</i></p> <p><i>Name of Institution:</i> <b>Province of Albay</b></p> <p><i>Date &amp; Seal:</i></p>
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<p><i>Name of Representative:</i> <b>THEODOR N. KAPIGA</b></p> <p><i>Signature:</i></p> <p><i>Name of Agency:</i> <b>United National Environment Programme (UNEP)</b></p> <p><i>Date &amp; Seal:</i></p>	<p><i>Name of Head of Partner:</i> <b>Sec. JOSE L. ATIENZA JR.</b></p> <p><i>Signature:</i></p> <p><i>Name of Institution:</i> <b>Department of Environment and Natural Resources (DENR)</b></p> <p><i>Date &amp; Seal:</i></p> <hr/> <p><i>Name of Head of Partner:</i> <b>Sec. ESTRELLA F. ALABASTRO</b></p> <p><i>Signature:</i></p> <p><i>Name of Institution:</i> <b>Department of Science and Technology(DOST)</b></p> <p><i>Date &amp; Seal:</i></p>

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<p>Name of Representative: <b>TOSHIYASHU NODA</b></p> <p>Signature:</p> <p>Name of Agency: <b>United Nations Human Settlements Programme (UN-HABITAT)</b></p> <p>Date &amp; Seal:</p>	<p>Name of Representative: <b>Vice- Pres NOLI DE CASTRO</b></p> <p>Signature:</p> <p>Name of Agency: <b>Housing and Urban Development Coordinating Council (HUDCC)</b></p> <p>Date &amp; Seal:</p>
<p>Name of Representative: <b>LINDA WIRTH</b></p> <p>Signature:</p> <p>Name of Agency: <b>International Labor Organization (ILO)</b></p> <p>Date &amp; Seal:</p>	<p>Name of Representative: <b>Sec. MARIANITO ROQUE</b></p> <p>Signature:</p> <p>Name of Agency: <b>Department of Labor and Employment (DOLE)</b></p> <p>Date &amp; Seal:</p> <hr/> <p>Name of Representative: <b>Sec. PETER FAVILA</b></p> <p>Signature:</p> <p>Name of Agency: <b>Department of Trade and Industry (DTI)</b></p> <p>Date &amp; Seal:</p>

## 1. Executive Summary

This joint programme is submitted under the MDG-F thematic window on Environment and Climate Change and is aligned to the outcome area on “Enhancing Capacity to Adapt to Climate Change”. It will be implemented over three (3) years from 2008-2010.

Halfway to the target year of the Millennium Development Goals (MDGs) in 2015, the Philippines has made a number of strategic advances towards the achievement of the MDGs, especially MDG 7 on environmental sustainability. These include: consolidating strategies for environmental management as embodied in the Environment & Natural Resources Framework, strengthening disaster risk reduction capacities by increasing the disaster knowledge base through multi-hazard mapping, risk assessment and community-based early warning systems, and moving towards holistic disaster risk management (DRM) through the DRM Framework & Strategic National Action Plan (SNAP).

But today, the achievement of the MDGs is being threatened because of the general lack of capacities to respond adequately to new development pressures like climate change. These include: a.) weak capacities of national agencies, local authorities and vulnerable communities to effectively develop coping mechanisms and strategies; b.) lack of tools and systems to enable appropriate planning and implementation of climate change adaptation; and c.) a general lack of information on technological adaptation and sustainable development options useful for addressing the impacts of climate change at the local level.

This joint programme seeks to assist the Philippines address the above key strategic issues directly affecting the achievement of the MDGs by pursuing the following three (3) outcomes:

1. Climate risk reduction (CRR) mainstreamed into key national & selected local development plans & processes;
2. Enhanced national and local capacity to develop, manage and administer plans, programmes & projects addressing climate change risks; and
3. Coping mechanisms improved through pilot demonstration adaptation projects.

Specifically, the joint programme will: i.) determine the vulnerability of critical sectors of the Philippines to climate change and strengthen the country's adaptive capacity by enhancing the policy development, planning, programming and implementation capacities of key stakeholders, particularly the responsible national government agencies; ii.) endeavor to contribute to the Philippines' achievement of its MDG targets by enhancing socioeconomic development through reduced vulnerabilities of key affected sectors and the target stakeholders in 43 ++ provinces; (iii) facilitate partnerships among participating local government units primarily from the 43++ provinces in the most natural disaster prone eastern seaboard of the country and the corresponding local higher educational institutions to anchor future scientific and capacity building needs of vulnerable communities; and (iv) showcase innovative and document best practices on climate change adaptation providing selected communities with the opportunity to develop and test coping systems which have significant potential for further upscaling and replication across the country. These demonstration projects are expected to be of sufficient 'scale' and generate best practices to ensure impact and increased capacity.

The technical outputs of the programme will inform the development of the next Common Country Assessment (CCA) and UNDAF (effective in 2010), which are expected to be 'climate change' compliant and further strengthen the UNCT collaboration on the ground, through experience gained on jointly implementing this important programme of action.

The above outcomes will support interventions anchored on national priorities including: (a) the 2004-2010 Medium Term Philippine Development Plan (MTPDP); and (b) the National Framework for Physical Planning (NFPP), which provide for the mitigation of natural disasters. The programme will also build on a considerable volume of work undertaken by the Philippines in meeting its international obligations on biodiversity conservation, climate change mitigation and adaptation, and disaster risk management through implementation of the Hyogo Framework of Action, etc.

The programme will bring together relevant UN agencies working on environmental sustainability and adaptation to climate change. These include the United Nations Development Programme (UNDP), the Food and Agricultural Organization (FAO) and the United Nations Environment Programme (UNEP), as well as, key government partners like the National Economic and Development Authority (NEDA), Department of Environment and Natural Resources (DENR) and Department of Agriculture (DA). Other UN agencies (WHO, UN-Habitat, ILO, UNICEF, UNFPA, WFP) and their government counterparts (DOH, HULRB/HUDCC, etc..) will be involved in the implementation of the demonstration projects, as well as, in the sectoral vulnerability assessment and adaptation planning, as well as, in the implementation of the capacity development programme. Following joint programming guidelines, participating UN agencies will work together on inter-agency planning and management systems with national and local partners.

## **2. Situation Analysis**

The 2004 Common Country Assessment for the Philippines (CCA) identified the major development challenges facing the country, as follows: 1.) chronic poverty and vulnerability, the latter defined as a situation where Filipinos (commonly referred to as the disadvantaged and marginalized) do not only live in poverty but are experiencing the debilitating effect of the major obstacles to the fulfillment of their human rights; 2.) a sluggish socioeconomic development 3.) a weak governance regime; 4.) a continuous degradation of the environment and natural resource base; and 5.) inadequate basic services which inhibit optimum human development. Specifically, the CCA identifies the most vulnerable as: the poorest urban and rural communities; displaced people due to natural and man-made disasters, including development projects; indigenous peoples who are usually in ecologically fragile environments; small wage earners; informal sector; and migrant workers.

The inherent vulnerability of the Philippines to natural disasters stems in part from its geographic location. As an archipelago situated in the Pacific ring of fire, with its large mountainous terrain, narrow coastal plains and interior valleys, the Philippines has always experienced natural hazards like earthquakes, volcanic eruptions and tropical cyclones. The UNDP's 2004 Global Report on Disasters ranked the country as highest in terms of tropical cyclone occurrence and resultant deaths and third in terms of people exposed to such events annually. An average of 20 cyclones traverses the country yearly, causing physical and economic devastation. Climate variability affects the amount of rainfall, with El Niño producing droughts and La Niña bringing floods.

The risk of meteorological related disasters for the Philippines' most vulnerable populations is expected to increase because of climate change. This is borne by the conclusions of the Inter-governmental Panel on Climate Change' (IPCC) Fourth Assessment Report, "Climate Change 2007: Climate Change Impacts, Adaptation and Vulnerability", Summary for Policymakers" that anthropogenic warming over the last three (3) decades has had a discernible influence on many physical and biological systems. As a result, the resilience of many ecosystems providing life-support services, especially for the poor, is likely to be exceeded this century. As climate change impacts and vulnerability of affected stakeholders are projected to increase with variances in average global temperature and aggravating non-climatic stresses like poverty and unequal access to resources, food insecurity, conflict, economic globalization and incidence of diseases like HIV and AIDS, stronger adaptation measures will be necessary.

The Philippines' Initial National Communication on Climate Change issued in 1999 documented the country's indicative vulnerabilities which this programme seeks to complete and addresses through anticipatory national and sectoral adaptation strategies. The report cites that the results of the global circulation models for a doubling of carbon dioxide scenario, a 2-3 degree centigrade rise in annual temperature is expected to impact areas like Eastern Mindanao, portions of Samar, Quezon, Metro Manila and other highly urbanized areas. An increase in annual rainfall is projected for Central Visayas and Southern Tagalog provinces, including Metro Manila. On the other hand, Northern and Eastern Mindanao and parts of Western Luzon, are expected to have a decrease in annual rainfall. Sectoral water requirements are expected to be significantly affected by these projected changes in precipitation patterns. Initial studies have established decreasing inflows in the country's reservoirs, indicating possible adverse implications on the country's water supplies.

For other ecosystems like the country's coastal areas, initial studies indicate that existing coastal problems like flooding and inundation may increase due to accelerated sea level rise and increasing frequencies of cyclones and coastal storms. This will be further aggravated by the degradation of coastal and marine

ecosystems from human-induced causes like pollution, over-exploitation of coastal resources and uncontrolled development. With approximately 70% of the country's municipalities and cities situated in the country's 32,400 kilometer coastline, about 50 million people are at risk from these climatic hazards. The poorest coastal population like fisher folks and informal settlers in coastal cities are expected to be hardest hit by climate change. In terms of impact on food security, climate change could seriously affect coastal fisheries because of coral bleaching. Coastal fisheries provide around 40-60% of total fish catch, representing approximately 4% of the country's gross national product and 70% of the total animal protein intake of its populace. Over-all, the Philippines' coastal and marine resources directly provide food and employment to around 1 million Filipinos, primarily poor fisher folks.

Watersheds, which contain the country's forests and a significant portion of its biodiversity, are also at risk of being adversely affected by climate change. In a study on climate change adaptation in watershed areas and upland farmers in the Philippines, it was noted that climate change could translate to about 17% increase in wet season stream flow and a decrease of around 35% in dry season stream flow of the watershed. The increase in stream flow could lead to higher likelihood of floods in the service areas of Upper Pampanga River Integrated Irrigation System than it is at present. Likewise, the projected decrease in stream flow during the dry season will likely increase the incidence of water shortage which could be aggravated by the increasing water demand due to increasing temperature. The projected changes in climate and the associated changes in stream flow patterns of PCW will likely have more serious impacts on the lowland farmers in view of the absence of a deliberate program to reduce the vulnerability of the lowland farmers to floods and water shortages. Downstream effects include impact on about 1.5 million of agricultural lands depending on irrigation water from these watersheds. A third of the country's total population living in the uplands of these watersheds and depending on them for sustenance, stand to be directly affected. This includes most of the indigenous peoples representing around 8.2% of the country's total population. As agriculture is the country's economic lifeline and the anchor of its food security, any factor like climate change which would adversely affect it is an issue that needs to be seriously addressed. The Philippines' wetlands covering approximately 14,100 sq. km. and comprising around 22 lakes, 8 freshwater swamps and marshes (e.g. Liguasan Marsh) and 61 coastal wetlands also stand to be affected, with possible significant change in inflows and run-off, thereby threatening their significant biodiversity.

Over-all, around two thirds of the entire poor population of the Philippines (also referred to as rural poor) reside in and depend on the country's terrestrial and coastal ecosystems for livelihood and sustenance. As of end 2007, this totaled 24.4 million Filipinos or 33% of the total population of 88.6million. Of this number, the indigenous peoples comprise approximately 8% or 7.08 million of total population. Farmers and fishermen have poverty incidences of 42 and 43%, respectively. For the urban poor (15% of the total poor), climate change poses additional problems in terms of increased risks to their safety and health since many of them live in dangerous areas like riverbanks, shorelines, dumpsites and low-lying areas susceptible to flooding. Over-all, women dominated with a poverty incidence of approximately 29%.

The emergence of new challenges like climate change is expected to strain the health sector's capacity to cope, already plagued by such factors as poverty and inequity. If this is not addressed, climate change related exposures and increase in disease vectors could translate to increases in morbidity, deaths and injury. Health impacts of climate change need to be addressed because these can further increase the vulnerability of the poor, who are already reeling from other factors like income inequity and lack of basic services.

Clearly, climate change and its impacts will exacerbate the vulnerabilities of the poor which are complex and reflect deep-rooted cultural and institutional dynamics. Natural disasters, including meteorologically induced ones, can seriously affect the natural resource base on which majority of the poor depend upon for sustenance and livelihood, as well as, increase their vulnerability in terms of increased likelihood of diseases. These events can result in the downward socio-economic spiral for this poor population. It could compromise the country's achievement of the MDGs especially poverty reduction, health, water, environmental sustainability and human settlements, among others. . Data from past and recent events bear these out. For example, from 1995 to 2007, the combined impacts of flashfloods, typhoons and dry spells on the agriculture sector alone, affected a total of 412,362 hectares equivalent to a total production loss of 5,137,923 million pesos and affecting more than 400,000 farmers/fisher folks. These events have also resulted to damages to agricultural services amounting to 4.86 million pesos. For the forestry sector, extreme droughts from 2000-2007 have adversely affected 17,152

hectares of forest lands equivalent to 106,387 million pesos worth of damages. The upland poor, who are also often indigenous peoples whose ancestral domains are in these forest lands, were the most affected, being primarily dependent on forest resources for subsistence and livelihood. Unfortunately, the factors fueling poverty and vulnerability are still very much at play, e.g., the economy remains fragile, the degradation of ecological resources continue, an optimal governance regime remains elusive and basic social services remain limited, therefore, amplifying the impacts of climatic events. This situation can be traced back to the underlying structural inequities which have prevented the poor and marginalized, including women, from improving their lives and that of others. Additional aggravating factors are: a.) the armed conflict involving a communist insurgency and a secessionist rebellion which has lasted for 35 years; b.) health challenges like HIV/AIDS; and c.) a high level of population growth.

A major factor preventing these structural inequities and the attendant problems from being effectively addressed is the inadequate capacity of the national and local authorities, as duty bearers, to provide the necessary support and enabling environment for the vulnerable communities, as claim holders, to effectively confront the socioeconomic problems facing them. This holds true for meeting the additional challenges posed by climate change risks. The capacities of these communities to cope with the projected impacts of climate change, as evidenced by their current response to increasing climate variability and unexpected changes in climatic patterns, are also severely constrained. Indicative capacity gaps are in terms of enabling policies and participatory mechanisms, institutional systems and procedures, including tools, individual skills and competencies of the concerned personnel in the bureaucracies at the national and local levels, a general lack of awareness of the magnitude of the impacts and competency to undertake appropriate adaptation measures in response to climate change among the affected populace.

Specifically, national government agencies like PAGASA have weakened capacities to generate, process and disseminate timely climate information primarily because of lack of tools, equipment and the necessary competencies, especially in forecasting. This has resulted in the vulnerable communities and populations' incapacity to appropriately deal with the impacts of extreme climatic events, resulting in catastrophes. Examples are the disasters involving significant number of fatalities for Albay, Quezon and Leyte provinces in recent years. The Bicol region, which used to pride itself in zero casualties in the face of hydro meteorological hazards like typhoons, has experienced unexpected deaths in 2006. Key national planning and sectoral agencies like NEDA, the DENR, DA, the HLURB and DOH, among others, as well as, the local governments, have likewise, insufficient capacities to factor climate change risks into key national/sectoral and local plans, resulting in development programmes that are not "climate proofed" or worse, inadvertently allowing communities to be in harm's way. A major manifestation of this is the encroachment of settlements and development projects in areas prone to multi-hazards, including meteorological ones. Comprehensive land use plans (CLUPs) at the municipal/city/provincial levels, at the moment, are not reflective of the multi-hazard risks resulting in development endeavors which are prone to disasters. This non-consideration of multi-hazards, including meteorological ones, further characterize planning at the national level (e.g. as in the NFPP, MTPDP and sectoral plans e.g. Forestry Master Plan). Communities, so far removed from the national agencies, could perhaps address the growing risks faster if they can rely on local anchors like the academic institutions for new and enhanced adaptation strategies. However, most of these institutions have not kept abreast of the developments in climate science and technologies to be of help to these communities. Over-all, there is a dearth of competencies, from the national to the local levels to be able to formulate, develop and implement anticipatory adaptation, which is direly needed in the face of the growing climate change risks.

The key, therefore, is to enhance the country's coping or adaptation capacity, especially those of the critical stakeholders who stand to be directly affected by the climate change phenomenon, as well as, those who can provide the necessary information and wherewithal to enable anticipatory adaptation to take place. A broad range of adaptation options and knowledge is available, some of which are already either in place or are being tested within the country. However, these are limited, often segmented and are generally considered inadequate to address the full brunt of climate change and its uncertainties. There are also emerging technologies and adaptation approaches, which, if tested and adapted to the Philippines, will significantly increase the country's over-all coping capacity to climate change. The challenge is to ensure that these promising approaches are tested, adapted and appropriate ones replicated throughout the country. It is also important that both duty bearers and claim holders have the capacities to jointly assess all available adaptation

options, mainstream the appropriate ones in the country's national and local development processes and develop a collective adaptive capacity to climate change risks which are expected to be of great magnitudes.

### **3. Strategies including lessons learned and the proposed Joint Programme**

#### **Background/Context:**

The Philippines and Spain, as Parties to the UN Framework Convention on Climate change (UNFCCC) and its Kyoto Protocol, have certain commitments in relation to adaptation, as enshrined in Article 4.1 (e) & (f) and Article 4.4 of the Convention. These provide for parties to cooperate in preparing for adaptation to the impacts of climate change; take into account climate change in their relevant social, economic and environmental policies and actions; and, for developed country Parties to assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change, in meeting the costs of adaptation.

The Philippines also subscribes to other related global agreements like the Johannesburg Plan of Implementation (JPOI) and frameworks like the Hyogo Framework of Action which address vulnerability, risk assessment and disaster management. Moreover, the country is committed to the Millennium Declaration to achieve the MDGs, which would be affected if climate risks are not addressed appropriately. The Philippine government, in its Initial National Communication on Climate Change, indicated the need for adaptation measures, aspects of which are echoed in its various planning and programme documents, i.e., the 2004-2010 Medium Term Philippine Development Plan (MTPDP) and the 2001-2030 National Framework for Physical Planning (NFPP), which provide for the mitigation of natural disasters.

The joint programme will enable the attainment of the above commitments and directly contribute to the achievement of the MDGs, the UNDAF outcome on environmental sustainability, i.e. "By 2009, increased capacity of stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources". Specifically, it will work for the attainment of the country programme (CP) outcome 3 which states: "By 2009, the poor and vulnerable groups, especially women and children, are able to prepare for and cope with the impacts of environmental emergencies." It will directly contribute to building the adaptive capacities of these and other critical stakeholders and is expected to contribute directly to the achievement of: MDG 1 - by safeguarding the life support systems and livelihood base of the poor and the vulnerable; MDG 3 - given the strong linkages that exist between women and the environment, putting a focus on conservation and knowing that mitigation of climate change impacts will primarily benefit the most vulnerable; MDG 7 - by arresting and preventing the loss of environmental resources due to climate change, ensuring availability of water resources that could be made safe by technology interventions and livable human settlements for slum dwellers through 'safe siting'; and MDG 6 - by ensuring that malaria and other vector borne diseases affected by climatic factors do not increase as a result of climate change. The programme also indirectly contributes to the attainment of MDGs 4 and 5 through water and other environmental resources availability.

The joint programme clearly supports and enhances collaboration among UN agencies in the country. UN agencies in the Philippines work together on DRM and this wherewithal will provide the platform for UN agencies to enhance their collaboration as the larger scope of climate change includes DRM. A natural disaster-prone country like the Philippines requires an effective disaster management programme. Owing to the visibility of the UN in providing assistance in times of disasters, it was designated to coordinate support from the donor community. In cooperation with OCHA, the UN system in the Philippines is currently working closely with the Government of the Philippines (GOP) to put in place a long-term Disaster Mitigation and Risk Reduction Plan.

The UN system also successfully adopted the "Cluster" approach for strengthening the overall humanitarian co-ordination response in the areas affected by typhoons and other natural hazards. The "Cluster" approach has been made operational through a distribution of responsibilities at the field level, frequent meetings of cluster heads, and the establishment of the Inter-Agency Standing Committee (IASC), a coordination mechanism of the UN system and the partner agencies, at the apex level. It has led to a pooling of collective resources and expertise to carry out relief activities and conduct assessment of relief and early recovery needs.

Currently, a UN DRM project is focusing on the development of the country's preparedness and coping capacities through the identification and mapping of multi-hazards and risks in the Eastern Seaboard, mainstreaming the information into national and local development processes and helping vulnerable communities prepare for and cope with natural disasters through measures like early warning systems.

Principal actors for this joint programme are the key government agencies which are critical in making climate change adaptation happen such as the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) of the Department of Science and Technology (DOST), the Environmental Management Bureau (EMB) and the National Water Resources Board (NWRB) of the Department of Environment and Natural Resources (DENR), the Department of Agriculture (DA), the Department of Health (DOH), the National Economic and Development Authority (NEDA) and the Office of Civil Defense (OCD), on behalf of the National Disaster Coordinating Council (NDCC), among others. They will be primarily supported by the academe, namely the Philippine Association for Tertiary level Institutions on Environmental Planning and Management (PATLEPAM) and the Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development (PCARRD). Non-government organization federations like the Philippine Network on Climate Change (PNCC) will also support the joint programme.

### **Lessons Learned:**

Past studies and projects like the US Country Studies Programme (Philippine component), undertaken in 1995-1997, generally raised awareness on the climate change issue and its impacts on the country. This undertaking was the first attempt to develop the capacity of key climate institutions like the PAGASA to undertake climate vulnerability and adaptation assessments through pilot activities in selected sites like Manila Bay and the Pantabangan dam. It highlighted the need for multi-disciplinary teams in undertaking the assessments. The studies developed applicable vulnerability and adaptation assessment methodologies but were limited to first order biophysical effects such as coastal inundation, crop yield and run-off changes. These did not cover the impacts of climate change on socioeconomic conditions and did not undertake cross-sectoral integration of impacts, autonomous adaptation or proactive adaptation studies.

Other undertakings like the Extreme Climate Events Programme of the Asian Disaster Preparedness Center (ADPC) in 1999 contributed to awareness raising, especially on the impacts of extreme climate events like El Niño and La Niña. It enhanced general awareness on climate variability and extremes through inter-sectoral dialogue and compilation of information base on the El Niño Southern Oscillation (ENSO) events in the Philippines. These contributed to the strengthening of linkages between climate information producers and users, as well as the development of mechanisms for the effective application of climate information for disaster reduction. This initiative also underscored the need for operational application of climate information to support decision-making. In the ADPC supported, "Adapting to Climate Variability and Climate Change" initiated in 2006, climate forecast applications for disaster mitigation were made in selected pilot municipalities in Iloilo province with the documentation of the processes and mechanisms for a community-based flood forecasting system in the municipality of Dumangas. It also assessed the training needs of PAGASA in relation to climate forecast information interpretation and translation.

Overall, these past initiatives have developed an amount of capacity on climate vulnerability and adaptation assessment at the national level (e.g. PAGASA) and some academicians involved in these activities. However, as pointed out above, a major portion of the work on socioeconomic effects, cross-sectoral impact integration, and comprehensive adaptation approaches have not been addressed. Moreover, they were not able to develop and institutionalize the capacities that would enable the country, especially the poor and the marginalized, including the women and children among them, to adequately adapt to the impacts of climate change. This programme takes off from the limited focus of past efforts on biophysical impact and expands the scope to include the coping mechanisms and capacities of the most vulnerable communities with the impacts of climate change. This will ensure their attainment of their right to development, which is a fundamental human right to be fulfilled per the 1986 UN Declaration on the Right to Development and affirmed by the 1993 World Conference on Human Rights.

### **The Proposed Joint Programme:**

The joint programme's take off is in terms of methodologies, sectoral and geographical focus, concerned government institutions and involvement of national experts. Its distinctiveness lies in its deliberate attempt to focus the assessment, planning and capacity development on the poor and most vulnerable, including women and children. At the same time, the programme will ensure that the impacts of the interventions will be wide in scope and sustainable through the use of results of projects by concerned national and local planning and decision making processes and higher and tertiary educational institutions that can provide the continuing capacity development for the attainment of the beneficiaries' relevant human rights beyond generations to come.

The joint programme will also complement current projects like: a) the Global Environment Facility (GEF) funded Enabling Activity for the Second National Communication on Climate Change which will undertake vulnerability assessment and adaptation planning in areas other than those to be included in the 43 provinces in this programme (e.g. Palawan, Pangasinan, Cebu, Davao); and b) the World Bank (WB) implemented project supported with resources from the Special Climate Change Fund (SCCF) managed by the GEF, specifically to review and strengthen the climate change institutional practices and arrangements of the DENR, DA and the National Irrigation Administration (NIA).

The proposed joint programme will also build on and boost the UN system's support to the Philippines on DRM that is currently focused on identifying and mapping multi-hazards and risks in the Eastern Seaboard, mainstreaming the information into national and local development processes and helping vulnerable communities to prepare for and cope through measures like early warning systems. Principal actors in the DRM work involve key government agencies such as the PAGASA, the Philippine Institute of Volcanology and Seismology (PhiVolcs), the Mines & Geo-Sciences Bureau (MGB), the National Mapping and Resource Inventory Administration (NAMRIA) of the DENR and the Office of Civil Defense (OCD), on behalf of the National Disaster Coordinating Council (NDCC). Financial support is provided to these national initiatives through the UNDP by AusAID, the Asian Development Bank (ADB) and the European Commission (EC) through its DIPECHO programme.

The joint programme will be implemented in three (3) phases or components to achieve the three (3) outcomes in the areas of: a) policy development, planning and programming; b) capacity development of the duty bearers, i.e., concerned national government institutions, local governments and local higher educational institutions in the target areas; and c) capacity development of the claim holders, i.e., the target beneficiary communities, especially the most vulnerable among them such as the women and children, to develop climate change adaptation measures that can be demonstrated.

The first phase or component 1 will take stock of the existing information situation in so far as climate change adaptation in the various key national and selected strategic local planning processes is concerned, identifying opportunities for institutionalizing climate change concerns into the decision making processes of the duty bearers. Phase 2 or component 2 will take stock of and identify gaps and build capacities of both duty bearers and claim holders, the former in terms of substantive competencies to factor climate change in development planning, programming and implementation, and the latter in terms of increased awareness and capacities to demand rights-based and gender sensitive adaptation measures. Phase 3 or component 3 will inter alia, demonstrate how innovative adaptive strategies and capacities can be developed on the ground in selected pilot sites.

The programme partners comprise key national duty bearers NEDA, as executing agency and key implementing agencies DENR and DA and strategic sectoral agencies like PAGASA-DOST, DOH, DPWH, and OCD, among others, local duty bearers (LGUs and HEIs of the 43++ target sites), local claim holders (key community leaders/civil society groups), the concerned UN agencies (led by UNDP, UNEP and FAO) and the private sector groups, where necessary, at the national and local levels. The national implementing agencies have planning and programming mandates and competencies: NEDA for socioeconomic and development planning, oversight and monitoring, and ensuring adoption of adaptive strategies in national level development planning processes; DENR on environment and climate change and DA for agriculture and food security.

Collectively, these agencies will enable the mainstreaming of climate change concerns, especially adaptation, into key national planning and programming processes.

From the UN side, UNDP brings to the programme its on the ground experience on promoting sustainable human development, and implementation of Global Environment Facility programmes including adaptation. UNEP is expected to play a critical role in providing technical inputs right through the life of the project such that the Philippine programme is able to draw down on cutting edge developments emanating from scientific thinking and capture of best practices from around the world informing the outputs of the programme (e.g. the IPCC and other such international panels and bodies). UNEP is also expected to assist with identification of world renowned specialists in adaptation for mid year reviews and annual assessments. Further it also brings technical expertise in the assessments, especially baseline scenarios and tools development, its experience in building key adaptive capacity, increasing ecosystem resilience and building climate resilient cities in developing countries. FAO provides expertise in food security strategic planning, including conserving the natural resource base such as forests and coastal resources. Together, they can potentially provide significant support in the capacity development of the target actors on climate change adaptation. Other UN agencies bring to the table the following comparative advantages: a.) World Health Organization (WHO)- As the coordinating authority for health within the United Nations system, it provides leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends. It is expected to provide direction to adaptation strategies for the health sector, especially on enhanced systems and capacities needed to cope with climate change impacts. (b) International Labour Organization (ILO) has a long history of promoting decent and productive work under conditions of freedom, equity, security and human dignity. It would be able to provide guidance in developing coping strategies involving economic diversification with the appropriate enabling economic governance regime. c.) The United Nations Human Settlements Programme (UN-HABITAT), as the UN agency mandated to promote socially and environmentally sustainable towns and cities towards providing adequate shelter for all, is expected to help guide the development of climate friendly settlements in the country through the programme. In addition to guiding the development of the sectoral strategies, these agencies are expected to bring innovative ideas and best practices into the demonstration projects which, in turn, are expected to develop templates on how to manage specific adaptation factors like (economic resources, technology, information and skills, infrastructure, institutions and equity).

#### 4. Results Framework

The joint programme aims to achieve three (3) outcomes in the areas of policy, planning and programming; capacity development of concerned national government institutions and local governments and local higher educational institutions; and capacity development of communities to develop demonstrable climate change adaptation measures. The programme aims to directly benefit (1000)<sup>1</sup> technical personnel of 10 concerned national and regional government agencies (PAGASA-DOST, DENR, DA, NEDA, DOH, HLURB, DILG, DPWH, DOH); (215)<sup>2</sup> planners of 43++ target provinces; (215)<sup>3</sup> instructors/professors of 43 ++ academic institutions in the target provinces; (900)<sup>4</sup> national policymakers & local government & private sector executives; and, (25) most vulnerable communities (barangays) in the 43++ target provinces. Indirect beneficiaries include all the vulnerable population 40.5 million in the 43 ++ target provinces, 50% of whom are women, 28% are youth, 22% are old and approximately 11 million (27%) are poor. Specifically, the outcomes and the required outputs are as follows:

**Outcome 1: CRR mainstreamed into key national and selected local development plans and processes.**  
*Since adaptation is a new way of doing things by responding to new factors and realities like climate change, significant impact can be obtained by influencing processes that determine the shape and direction of future development like the country's land use, development, investment planning & programming, as well as, key regulatory processes like the environmental impact assessment (EIA) system. This outcome is meant to*

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<sup>1</sup> 100 per agency for 10 agencies

<sup>2</sup> 5 per province for 43 provinces

<sup>3</sup> 5 per HEI for 43 HEIs

<sup>4</sup> 300 per major island grouping (Luzon, Visayas, Mindanao)

enhance these processes by providing the tools and systems and procedures, among others, to incorporate climate change information resulting in "climate proofed" planning and programming processes.

**Indicators:** \*7 Guidelines available for CRR integration into next cycle (2010-2016) nat'l. plans (NFPP, MTPDP, 5 sectoral) & 1 set Guidelines for CRR integration into local (municipal/city) comprehensive land use/dev't.plans.

**Baseline:**

National plans like the National Framework for Physical Planning (NFPP) or the Medium Term Philippine Development Plan (MTPDP) and local comprehensive land use and development plans, as well as, current regulatory systems (e.g. EIA) evaluation tools are not climate risk-based. However, multi-hazard maps, including meteorological ones, for some provinces (10), as well as, guidelines for disaster risk reduction mainstreaming into sub-national physical framework and development planning have been produced. Their use is starting to be institutionalized. The multi-hazard data and the risk assessment mainstreaming results, including the methodology will be the take off point for the work on attaining outcome 1.

**Alternative Scenario with MDGF funding:**

Guidelines to mainstream climate risks are made available in time for the updating and production of the next cycle national and local land use and development plans. Climate scenarios will be available in time slices of 5 years and used in the mainstreaming of CRR into and updating of the relevant national and local land use/development plans. Climate information and forecasts in easily usable form are readily available to key national and local users.

Outcome 1 will directly benefit a minimum of 10 concerned national government agencies and their approximately 1000 policy and planning personnel; 500 local planners of the 43++ participating LGUs and 500 academics of the higher level educational institutions of the 43 ++ participating provinces. Indirect beneficiaries are the 40.5 million people in the 43 target provinces, 11 million or 27% of whom are poor and 19.9 million or 50% are women.

**Outputs:**

- 1.1 5 Baseline & projected climate risk scenarios<sup>5</sup> and CRR/adaptation monitoring system(s) developed for priority sectors (water, agriculture, coastal, forestry, health), including vulnerability maps for 43++ target provinces.
- 1.2 Adaptation options for key sectors assessed, valued and prioritized, including "no regrets" options.
- 1.3 Entry points for CRR in key national plans, planning and regulatory (e.g. EIA) processes identified and CRR compendium of adaptation best practices recommended for integration, including in development and planning of the UN systems' CCA and UN Development Assistance Framework for the period 2010 onward.
- 1.4 8 CRR mainstreaming guidelines adopted by key national government agencies (NGAs) and selected local governments.
- 1.5 10 selected local comprehensive land use and development plans reflect CRR measures.
- 1.6 1 Web-based screening tool and portal for project developers and designers.

**Implementation Strategy:**

The appropriate attainment of this and the two other outcomes will be primarily dependent on PAGASA's generation of local climate scenarios at various time slices (5, 10, 20, 30 years from baseline, 2008) using available global circulation models. Hence, support for this undertaking will be a major concern of this project. Further, this outcome and its concomitant outputs will be produced by building on and complementing the various past and on-going related efforts on disaster risk reduction. For example, the multi-hazard maps and

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<sup>5</sup> Based on available climate models

risk assessment data of the 43 +++ provinces from related projects like READY and the DRR mainstreaming undertaken by UNDP- NEDA at the sub-national level, will be used to produce the climate risk scenarios and the target guidelines. The DRR mainstreaming methodology and guidelines developed under the UNDP-NEDA project will provide the templates for the CRR mainstreaming process and the required tools such as the guidelines. The CRR mainstreaming in land use and development plans will likewise be undertaken in tandem with the DRR mainstreaming process at the provincial level and the municipal/city level such that planners will need to contend with only one integrated set of guidelines using a single, uniform methodology for consideration of natural hazards, including meteorological ones in the land use/development planning processes. From the UNDP-NEDA DRR mainstreaming project experience, ten (10) provincial plans are considered optimum, in terms of focused technical assistance by this project, although all 43 ++ targeted provinces are expected to have CRR enhanced plans ready for adoption by LGUs as a result of table top exercises to be employed in the trainings which will involve the local planners from the subject provinces. As risk assessment, including for climatic ones is already included in the EIA system, the said regulatory process will be reviewed and its implementing rules and regulations enhanced.

The UNDP and UNEP, as lead implementing agencies for the UN side, will work with the DENR and NEDA in ensuring that Outcome 1 and the respective outputs for this component will be produced. Specific sectoral tasks like the conduct of sectoral vulnerability analysis will be led by the appropriate UN and counterpart government agency (e.g. WHO and DOH for health), in cooperation with other relevant entities. Provision of the necessary inputs such as capital inputs and technical expertise will be the responsibility of the lead UN and government implementing agencies.

**Outcome 2: Enhanced national and local capacity to develop, manage and administer projects addressing climate change risks.** *This outcome involves enhancing the capacities of the relevant NGAs to support national and local planning, programming & implementation endeavors in the critical sectors which would be affected by climate change like agriculture, water, ENR, coastal and health, through better and more effective forecasting and improved provision of technical support to clients, especially the local vulnerable ones like farmers, fisher folks, indigenous peoples, urban poor, including the women, children & elderly among them. It also involves enhancing the capacities of LGUs to help the communities they serve in improving climate dependent services, as well as, strengthening the academe's capacity to assist local authorities in providing a more sustainable technical support base for the climate-related endeavors of communities.*

**Indicators:**

- \*90% accuracy of climate forecasts by meteorological agency PAGASA;
- \*30% improvement over baseline in terms of real time climate information volume and timing of delivery to key nat'l & local stakeholders;
- \*30% increase in level of awareness among national policy makers, local executives & other critical stakeholders (private sector/civil society)
- \*30 % improvement in capacities of key national/sectoral agencies/local planners & target academics to develop & implement climate resilient plans/prgrammes & measures
- \*50% increase in the number of climate risk management offerings of HEIs in 43 most vulnerable provinces

**Baseline:**

PAGASA has limited capacity on climate change scenario building, but has moderately adequate competency on meteorological hazard mapping, including seasonal climate forecasting. Its typhoon and flood forecasting capacity is basic and would need augmenting. NEDA has adequate planning competency, including development of mainstreaming guidelines but very limited competency on climate risk assessment and management. Moreover, some of its personnel have basic competency on disaster risk reduction, including for meteorological hazards. Sectoral agencies like DENR, DA, DOH, DPWH, DILG, DepED, have moderate policy development, planning and programming competencies on their respective sectoral concerns but very limited operational competency on climate risk mainstreaming or programming HLURB has adequate competency on conventional land use planning but very limited competency on climate risk-based planning. Some Planning officers of the 43 target provinces have basic training on disaster risk management but no competency on

climate risk-based planning. Some professors of the academic institutions targeted in the 43 provinces have basic knowledge of climate risks and minimum competency on climate risk mainstreaming in development processes. Government decision makers in the executive branch, some legislators and some local executives in the target 43 ++ provinces have high awareness and appreciation of the need for climate risk management but majority have little or no operational knowledge on climate change issues.

***Alternative Scenario with MDGF:***

As a consequence of project capacity development interventions, it is expected that policy and decision makers in the national and target local governments will be imbued with sufficient awareness and knowledge to facilitate climate resilient planning, programming and implementation. Concerned technical personnel in key government agencies possess the requisite skills for adequate climate risk management. PAGASA would have the adequate level of competency to generate the needed climate risk scenarios, share the resulting data with the sectoral and planning agencies, as well as, download the same to the local users (planners, academe, media and other stakeholder groups) in a timely manner and in utilizable form. At the end of the project, PAGASA's competency on climate forecasting, especially for typhoons & floods is expected to improve considerably, benefiting the critical local clients like the farmers, fisher folks, indigenous peoples and other vulnerable groups like the urban poor, including the women, children & elderly among them. Planners in the sectoral and planning agencies are able to draw up cost effective climate risk sensitive options and mainstream these into the concerned sectoral and national plans. Local planners in the participating LGUs are able to generate climate risk-based comprehensive land use and development plans. Cadres of academics at the national and local level are able to provide continuing training and education, as well as, technical assistance on climate risk management endeavors.

**Outputs:**

- 2.1 Existing capacities and gaps of key NGAs (DOST-PAGASA, DENR, DA, NEDA, DOH, DPWH, DILG, DepEd, HLURB, etc.), 43++ selected LGUs and 43++ local higher educational institutions (HEIs) for CRR work assessed.
- 2.2 Awareness of key national stakeholders, especially policymakers, legislators and local executives, including inter-agency and inter-sectoral task forces and local stakeholders on climate change rose to a level that will engender policy decisions and programmes.
- 2.3 Competencies of key stakeholders identified in 2.1 and inter-agency and inter-sectoral taskforces for CRR planning, programming & implementation enhanced through an integrated competency development programme.<sup>6</sup>

***Implementation Strategy:***

Development of the capacities of the target beneficiaries on climate risk management i.e. concerned technical personnel of concerned national government agencies; executives and planners of the 43 ++ target LGUs; and instructors/professors of the 43++ participating local higher educational institutions in the 43++target provinces will be systematically developed, starting with building awareness on climate change and its impacts, developing the needed competencies for climate change risk reduction policy development, planning and programming; and, harnessing these competencies towards affirmative action through actual learning by doing initiatives.

To ensure that these envisioned capacities are developed in a systematic manner, the Capacity Development programme design will involve: identification of the climate change concepts that should be learned by the direct beneficiaries and stakeholders, articulation of these concepts through a curriculum framework and development of a medium to long term capacity development programme targeting various stakeholders and including a vigorous IEC strategy using the multi-media. A facilitated "ripple effect" will be targeted by ensuring

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<sup>6</sup> An indicative Capacity Development programme reflecting the various capacity development phases, including awareness raising, is attached as Annex A.

that the lead agencies and key institutions are involved in the trainers training and that a critical mass of capacitated personnel and academics in the vulnerable areas is developed.

The attainment of Outcome 2 and the necessary outputs will be secured by the lead UN (UNDP, UNEP) and government counterparts (NEDA, DENR). The design, development and implementation of the sectoral components of elements 1 (awareness raising) and element 2 (competency development) will be spearheaded by the key UN (e.g. FAO, WHO) and government (e.g. DA, DOH) agencies.

**Outcome 3: Coping mechanisms improved through pilot adaptation projects.** *This outcome will further increase the capacity of stakeholders, especially the claim holders (Community-based organizations of the basic sectors-fisher folks, upland farmers, urban poor, indigenous peoples) through the 'learning by doing' approach, testing innovative climate change adaptation measures and approaches. Documented lessons learned and innovative practices are expected to inform and influence national and local development processes.*

**Indicators:**

100% of innovative approaches developed & tested are documented for up scaling & mainstreamed by concerned stakeholders into existing local practices, systems and other development processes; 30% increase in competency of local stakeholders (e.g. CBOs) to draw up and implement CC adaptation measures in response to climate changes

**Baseline:**

Climate change adaptation in the selected sectors, ecosystems and geographical areas for the demonstration projects can be considered: a.) autonomous/ spontaneous/ natural/passive in terms of purposefulness; b.) merely reactive in terms of the timing; c.) usually short term/ instantaneous or routine in terms of the temporal scope; d.) localized when assessed in terms of spatial scope; and e.) in the simple tolerate-restore function mode. These adaptations are generally spurred by private interests without interventions by public agencies. Moreover, they generally ensue in response to the impacts of current climate variability and averaged annual temperatures. Adaptive capacities of the concerned population in the target areas vary in terms of their socio-economic characteristics; frequency of exposure to extreme climatic events or other hazards or cultural practices. Indigenous peoples, as in the Cordilleras or people of the Bicol region seem to have the most coping capacities to varying climate conditions, including climate extremes but this is not generally true for the other vulnerable areas.

**Alternative Scenario with MDGF:**

With the project, adaptation to climate change impacts is expected to be planned, purposeful, driven by policy, anticipatory & pro-active, long term, strategic and cumulative, cost effective, efficient, implementable and equitable. It is also projected to be widespread (comprehensive at the national level) and reproducible as a result of the development of templates based on the identified variables, as laid out in the concepts of the demonstration projects.

**Implementation Strategy:**

The demonstration projects were conceptualized and designed to enable systematic analysis of the critical determinants or variables of effective adaptation and their interaction/synergy. As the "learning by doing" approach is going to be employed, it is expected, therefore, that desired adaptive capacity, as described in the alternative scenario above, will also be developed in the participating parties. The projects will also deliberately involve the active participation of women and other disadvantaged groups like the indigenous peoples and the urban poor.

In addition to the above considerations, initial criteria used in the site selection included political will of the local leadership, willingness to participate by local higher level educational institutions, accessibility and availability of

critical data like biogeophysical and socio-economic data and other factors like presence and reach of micro-finance institutions and concerned NGOs.

### **Outputs:**

3.1 Enhanced local climate change adaptive capacities through five (5) demonstration projects on innovative practices, including alternative livelihoods, to develop/improve local coping mechanisms, and ensure sustainable development.

Since adaptation involves adjustments in ecological, social or economic systems or changes in processes, practices and structures to mitigate potential damages or maximize benefits from opportunities associated with climate change, the demonstration projects in this programme will attempt to showcase planned anticipatory adaptation for climate variability and extremes, not just changed averaged conditions. These projects will show how interventions in determinants or variables of adaptive capacity (economic resources, technology, information and skills, infrastructure, institutions and equity) can result in enhanced adaptive capacity of vulnerable communities and sectors. This component will also try to analyze the optimum combination of determinants resulting in enhanced adaptive capacities under varying spatial and temporal conditions. Iteratively, it will attempt to develop templates of adaptation strategies for various circumstances involving one or a combination of the said determinants.

Further, the demonstration projects will be showcases of: a.) sectoral (agriculture, forestry, health, etc.) adaptation strategies/innovations, b.) integrated/inter-sectoral (involving two or more sectors, ecosystems or commodities), c.) systemic (sub-national/ local governance), d.) new & innovative risk management instruments (financial mechanisms); and e.) Merger of mitigation and adaptation strategies in common areas like an urban human settlement.

The indicative criteria used for the selection of the sites were the following: i) Sites are covered under the 43++ areas of the Disaster Risk Reduction initiatives of the UN, especially multi-hazard mapping, indicating vulnerability to natural hazards (e.g., flooding, storm surges, typhoons) ii) willingness/buy-in/political will of concerned local government units, and iii) more or less equitable distribution of representative cases in the 3 major island groups. The criteria and site selection/project design will be validated during the first quarter of project implementation.

These demonstration project concepts are contained in **Annex B**.

**Table 1: Summary of Results Framework**

<p><b>UNDAF Outcome:</b> By 2009, increased capacity of stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources.</p> <p><b>JP Outcome 1:</b> Climate risk reduction (CRR) integrated into key national &amp; selected local development plans &amp; processes.</p> <p><b>Indicators:</b> * 8 Guidelines available for CRR integration into next cycle (2011-2017) nat'l. plans &amp; 100% of target local (10) land use/dev't.plans w/ qualitative &amp; quantitative CRR measures</p> <p><b>Baselines:</b> Some nat'l. plans. e.g. NFPP/MTPDP with qualitative CRR provisions; local comprehensive land use/development plans not climate risk based; Current regulatory systems evaluation tools not climate risk- based. . No adaptation monitoring system in place</p>
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JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
<p>Baseline risk scenarios, including vulnerability maps and CRR/adaptation monitoring system developed for priority sectors</p> <p><b>Indicators:</b> *43++ provincial risk /socio-economic scenarios &amp; CRR monitoring systems available by 2010 as basis for climate resilient dev't. planning</p> <p><b>Baseline:</b> Dev't. plans not climate risk based but Multi-hazard maps of 1:50,000&amp;1:10,000 scales being developed; maps available for 4 out of the 43 provinces. No adaptation monitoring system in place</p>	<p>43++ provincial vulnerability maps + Bio-physical/socio-economic data bases by 2009</p> <p>Enhanced meteorological (esp. typhoon &amp; floods) forecasting systems in place by end 2009</p>	UNDP	DENR	<p>Conduct of risk baseline characterization including mapping</p> <p>Assessment of current meteorological (typhoon &amp; flood) forecasting systems &amp; dev't. of enhancement plan</p> <p>Implementation of enhancement plan of meteorological forecasting systems</p>	438.4	438.4		876.8
	<p>43++ provincial socio-economic scenarios @ various time slices by 2009</p>	UNEP	NEDA	<p>Conduct of socio-economic projections in CC context</p>	50	50		100
	<p>43++ economic impact assessment reports by 2009</p>	UNEP	NEDA	<p>Economic impact assessment of climate change risks, incl. incremental costs</p>	50	50		100

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	5 Sectoral CC adaptation monitoring system(s) by 2009	UNEP	DENR	Dev't. of CC adaptation monitoring systems for 5 sectors	50	50	23.2	123.2
<p>Adaptation options for key sectors assessed, valued &amp; least cost alternatives prioritized, including “no regrets” options</p> <p><b>Indicator:</b> # of prescribed adaptation options and integrated least cost strategies resulting from assessment process made available by sector</p> <p><b>Baseline:</b> Information on adaptation options available globally; some local but mostly undocumented indigenous adaptation practices in various localities in the country</p>	Compendium of adaptation best practices for development planning for 5 sectors by 2009	UNEP	DENR	Compilation of best practices / selection of priority measures for integration into dev't. planning processes (integrated & sectoral)	50	50		100
	1 Report on prioritized least cost adaptation measures for 5 sectors by 200	UNEP	NEDA	Cost benefit analysis of adaptation options including “no regrets” ones.  Choice of least cost adaptation options	50	50		100
<p>Entry points for CRR in key national plans/planning &amp; regulatory (e.g. EIA) processes &amp; CCA/UNDAF, identified and prioritized CRR adaptation best practices recommended for integration</p> <p><b>Indicators:</b> # of CRR guidelines for dev't. plan integration</p> <p><b>Baseline:</b> EIA rules &amp; regulations reflect risk assessment requirements but not for climate change</p>	1 Report on plan/regulatory system(s) entry points by early 2009	UNDP	NEDA	Assessment of key nat'l. & sectoral plans for CRR entry points;	50	50		100
	2 nat'l., 5 sectoral & 1 local CRR mainstreaming guidelines for planning processes developed by 2009	UNDP	NEDA	Dev't. of CRR mainstreaming guidelines for nat'l & local dev't. plans, selected processes like EIA	100	100		200

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
<p>CRR mainstreaming guidelines adopted by key national government agencies and selected local governments</p> <p><b>Indicator(s):</b> # of executive issuances/UNCT resolution for guideline adoption</p> <p><b>Baseline:</b> No administrative issuance/UNCT resolution on adaptation in place</p>	<p>1 National Executive Issuance adopting/mandating use of CRR guidelines in key planning process(es) by 2011</p>	UNDP	NEDA	<p>Dev't. &amp; adoption of executive issuance on CRR mainstreaming into planning processes</p>			50	50
	<p>UNCT resolution adopting CRR guidelines for CCA/UNDAF by 2009</p>	UNDP	NEDA	<p>Consultative workshop(s)/meeting(s)</p> <p>Dev't. &amp; issuance of UNCT resolution adopting CRR guidelines for next cycle CCA/UNDAF</p>		25	25	50
<p>Selected local development/comprehensive land use plans reflect CRR measures</p> <p><b>Indicator(s):</b> # of local dev't plans./CLUPs which are CR based/reflecting CRR measures</p> <p><b>Baseline(s):</b> Current local dev't. plan(s)/CLUPs not CR based.</p>	<p>10 provincial development plans/CLUPs with CRR measures by 2011</p>	UNDP	NEDA	<p>Review &amp; enhancement of selected provincial development plans &amp; CLUPs</p>	200	200	100	500
<p>Web-based screening tool &amp; portal for project developers/designer</p> <p><b>Indicator:</b> # of web-based tools accessible to project designers</p> <p><b>Baseline:</b> No web-based tool available currently.</p>	<p>1 Web-based portal &amp; tool for project developers &amp; designers developed and introduced to prospective users by end 2010</p>	UNEP	NEDA	<p>Design, development, incl. piloting of web-based CRR screening tool &amp; portal</p> <p>Conduct of IEC, incl. orientation seminar(s)</p>	50	50		100

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
				on the use of the portal & tool.				
<p><b>JP Outcome 2:</b> Enhanced national and local capacity to develop, manage and administer projects addressing climate change risks.</p> <p><b>Indicators:</b>  *90% accuracy of climate forecasts by meteorological agency PAGASA;  *30% improvement over baseline in terms of real time climate information volume and timing of delivery to key nat'l &amp; local stakeholders; *30% increase in level of awareness among national policy makers, local executives &amp; other critical stakeholders (private sector/civil society) on CC issues  *30 % improvement in competencies of key nat'l. /sectoral agencies to develop &amp; implement climate resilient plans/prgrammes &amp; measures</p> <p><b>Baseline:</b> Climate forecasting systems &amp; national/local institutional capacities inadequate for optimum CC resilient planning/programming; Competency of local academic institutions insufficient to provide long-term, sustainable technical assistance for CC resilient planning, programming &amp; implementation of local stakeholders.</p>								
Existing capacities and gaps of key NGAs, selected LGUs and local HEIs) for CRR work assessed.  <b>Indicator:</b> Documentation in place by 2009 reflecting state of CRR planning/programming/implementation capacities of concerned NGAs/target LGUs/HEIs  <b>Baseline:</b> NCSA Report available incl. assessment of climate change work capacities of concerned NGAs	1 Capacity Assessment report on key NGAs, 43 provincial LGUs & local HEIs for CRR work by 2 <sup>nd</sup> quarter 2009	UNDP	NEDA	Assessment of adaptation capacity building needs of key NGAs & local stakeholders.	61.6			61.6
Awareness of key national & local stakeholders raised on climate change issues.  <b>Indicator:</b> 30 % increase over baseline of level of awareness of target clientele ( NGAs, LGUs, academe, private sector, CSOs, media)  <b>Baseline:</b> Data unavailable; to be determined at start up.	1 Nat'l. IEC programme, incl. multi-media materials developed & implemented by 2009.  900 national policymakers, LGUs, CSOs, private sector partners, local stakeholders of 25 barangays in the project demonstration sites and stakeholders in the 43++ provinces oriented on CC issues, esp. adaptation by 2011;	UNDP	DENR	Dev't. of nat'l. CC IEC programme  Dev't. & production of multi-media IEC materials  Implementation of the CC IEC programme, including dissemination of multi-media materials.	100	100	100	300

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
<p>CRR planning &amp; implementation competencies of key stakeholders (NGAs, LGU planners, Academe) enhanced/increased.</p> <p><b>Indicator:</b> 10 CRR planning tools available; 30 % increase in competencies of concerned NGAs &amp; target LGUs with implementation of CB programme.</p> <p><b>Baseline:</b> Basic impact &amp; decision models available &amp; being used by NGAs; Data on current level of competency for CRR work of target LGUs/HEIs limited.</p>	10 CRR tools e.g. local climate models; Integrated socio-economic planning models; enhanced biophysical models developed by 2009	UNEP	NEDA	Dev't. of CRR tools for policy & programme implementation	250	250		500

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	<p>1 Integrated Competency Dev't.(CD) Programme, including training materials, developed by 2009</p> <p>1,000 NGA technical personnel, 215 LGU planners &amp; 215 instructors from the academe trained on CRR planning, programming &amp; implementation by 2011</p> <p>Lessons learned documentation on competency dev't. programme by end of 2011</p>	UNDP	NEDA	<p>Dev't of competency dev't. programme, including production &amp; testing of training materials.</p> <p>Implementation of CD programme.</p> <p>Evaluation &amp; documentation of lessons learned on the CD programme implementation.</p>	500	450	588.4	1538.4
<p><b>JP Outcome 3:</b> Coping mechanisms improved through pilot adaptation projects<sup>8</sup></p> <p><b>Indicators:</b> 100% of innovative approaches designed &amp; tested are documented for up scaling &amp; mainstreamed by concerned stakeholders into existing practices, systems and local development processes; 30% increase in competency of local stakeholders (e.g. CBOs) to draw , recommended up and implement CC adaptation measures</p>								

<sup>7</sup> As indicated in Annex A, this is a subset of the envisioned Capacity Development programme which includes awareness raising and the affirmative action demonstrated in the learning by doing exercises.

<sup>8</sup> Other UN agencies comprising the UN Country Team in the Philippines, as well as, other government agencies other than the lead implementing ones may be joining the programme for pilot project implementation, depending on the results of the criteria setting process.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
<b>Baseline:</b> Indigenous coping measures in effect but only to current climate variability & extremes; undocumented and mostly anecdotal; many proposals awaiting implementation								
Enhanced capacities of local stakeholders through demonstration projects on best practices to improve local coping mechanisms, including alternative livelihoods.  <b>Indicator:</b> 30 % increase over baseline in CRR planning/ implementation capacity of community-based organizations (CBOs) by end 2010  <b>Baseline:</b> Data unavailable; to be determined upon start of criteria setting	Report on validated project concepts by 3 <sup>rd</sup> quarter of 2008	UNDP	NEDA	Consultations on demonstration project concepts	50			50
	5 implemented CC adaptation demonstration projects by mid-2010	See Annex B for details	See Annex B for details	Implementation of pilots on local coping mechanisms, incl.dev't.of alternative livelihood options. <sup>9</sup>		1,500	1,500	3,000
	5 CBOs capacitated on climate adaptation strategies by end 2011							
	1 nat'l. publication on lessons learned	UNEP	DENR	Analysis of best practices/lessons; publishing & dissemination of results		50	50	100
	1 scaling up /replication plan by 2010	UNDP	NEDA	Conduct of evaluation & dev't. of scaling up plan.			50	50

**Summary:**

UN Organization	Cost Items	Y1	Y2	Y3	TOTAL
UNDP	Programme Cost	1514.55	1397.99	933.04	3845.58
	Indirect Support Cost	114.00	105.23	70.23	289.45
UNEP	Programme Cost	506.39	552.42	67.40	1126.20
	Indirect Support Cost	38.12	41.58	5.07	84.77
FAO	Programme Cost	151.92	368.28	354.47	874.67
	Indirect Support Cost	11.43	27.72	26.68	65.84
ILO	Programme Cost	23.02	501.78	27.62	552.42

<sup>9</sup>Mainstreaming of successful and tested adaptive strategies in sectoral plan at national and local levels.

<b>UN Organization</b>	<b>Cost Items</b>	<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>TOTAL</b>
	Indirect Support Cost	1.73	37.77	2.08	41.58
<b>UN-HABITAT</b>	Programme Cost	73.66	202.55	230.18	506.39
	Indirect Support Cost	5.54	15.25	17.33	38.12
<b>WHO</b>	Programme Cost	101.28	313.04	46.04	460.35
	Indirect Support Cost	7.62	23.56	3.47	34.65
<b>TOTAL*</b>	<b>Programme Cost</b>	<b>2370.80</b>	<b>3336.06</b>	<b>1658.73</b>	<b>7365.60</b>
	<b>Indirect Cost</b>	<b>178.45</b>	<b>251.10</b>	<b>124.85</b>	<b>554.40</b>

\* Excluding 1% AA Fee

## Work Plan and Budget

The proposed work plan and budget are indicatively presented in **Annex C**. The final AWP will be submitted after the conduct of the Inception Workshop

## Annual Reviews

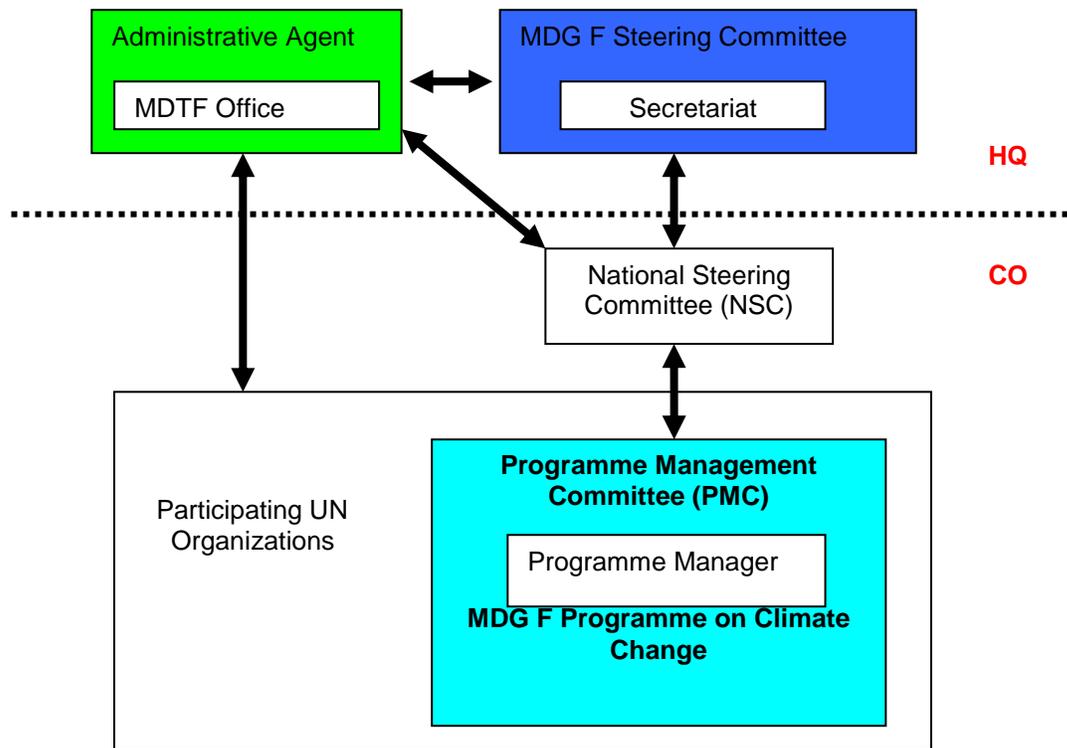
The Government, particularly the Executing Agency, or Lead Implementing Partner, and the participating UN Organizations, shall jointly conduct scheduled/annual planning and review meetings for all activities covered in the results framework, monitoring and evaluation plan and work plans covered by this joint programme. This will include an assessment of the risks and assumptions to determine whether they are still holding.

At the beginning of Year 1, and annually for the 3-year duration of the programme, a new work plan and budget will be produced with the necessary adjustments made based on the lessons learned from a review of the risks and assumptions and implementation progress achieved. The new work plan is approved in writing by the Steering Committee. The JPD need not be signed every year. However, any substantive change in the joint programme scope will require revision of the JPD. The amendments will need to be signed by all parties.

## 5. Management and Coordination Arrangements

### Coordination and Oversight Mechanisms

To ensure that the programme is on track and results are delivered, the UN Resident Coordinator (UNRC) will facilitate the collaboration among and between Participating UN Organizations (UNOs). Committees at two levels will be established by the UN Resident Coordinator (UNRC) to ensure the proper checks and balances of programme implementation.



The programme will be implemented by the participating UN Agencies in cooperation with participating national partners. NEDA which serves as the national focal point for the UN System in the Philippines, is responsible for overall coordination of the Programme and is ultimately responsible for achieving its objectives. It has the authority to sign the Joint Programme Document on behalf of all Government Partners. NEDA takes the lead coordination role in implementation of the Programme. The UN RC reports to the UNDP/Spanish MDG Achievement Fund Office on behalf of the Programme. The UN RC takes overall responsibility for facilitating collaboration between participating UN Organizations to ensure that the programme is on track and that promised results are being delivered.

### **National Steering Committee<sup>10</sup> (NSC)**

The implementation of the joint programme will be under the over-all guidance and oversight management of a National Steering Committee (NSC) composed<sup>11</sup> of the UN Resident Coordinator or her Representative, the Ambassador of Spain to the Philippines or his Representative and the Director General of NEDA or his Representative. The UNRC and the NEDA will co-chair the NSC which shall meet at least semi-annually.<sup>12</sup> To the extent possible, the NSC will use existing coordination mechanisms to undertake the process of planning and stakeholder consultation that the programme operations will require. The NSC will make decisions by consensus. Decisions on programme documents, including revisions and Annual Work plans and Budgets will only be taken upon completion of a review by the Programme Management Committee (PMC). Specific responsibilities of the NSC include:

- 1) Reviewing and adopting the terms of reference and rules of procedures of the NSC and/or modify them as necessary
- 2) Approving the Joint Programme Document before submission to the Fund Steering Committee
- 3) Approving the strategic directions for the implementation of the Joint Programme within the operational framework authorized by the MDG F Steering Committee
- 4) Approving the documented arrangements for management and coordination
- 5) Approving the annual work plans and budgets as well as making the necessary adjustments to attain anticipated outcomes
- 6) Reviewing the Consolidated Joint Programme Report from the MDTF Office and providing strategic comments and decisions and communicating the same to the participating UNOs,
- 7) Suggesting corrective action to emerging strategic and implementation problems
- 8) Creating synergies and seeking agreement on similar programmes and projects by other donors
- 9) Approving the communication and public information plans prepared by the PMCs.

The role of the UN Resident Coordinator (UNRC) is clearly defined in the MDG-F Framework document owing to his/her strategic leadership of the UN Country Team and his/her direct reporting link to the MDG-F. It is understood that these functions will be undertaken within the framework of the role of the NSC. The Fund will rely on the UNRC to exercise leadership and provide ongoing oversight that the programme is on track, that promised results are being delivered, and that participating organizations are meeting their obligations. The Resident Coordinator will exercise his or her authority over the programme by being entrusted with leadership of the overall programme design, ongoing programmatic oversight of the Fund's activities and by chairing regular Steering Committee meetings (with the Government and where possible Spanish Cooperation present). On receipt of consolidated country level reports, the Resident Coordinator will provide an overall assessment of the programme's progress and results. He/she will also facilitate ongoing monitoring and evaluation of Fund-

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<sup>10</sup> *There should only be one NSC in each country.*

<sup>11</sup> *NGOs, civil society and other organizations may be invited by the co-chairs to participate in NSC meetings as observers based on the involvement of the organization (s) in projects financed or to be financed by the Programme and impact of the projects financed by the Programme on the activities of the organization.*

<sup>12</sup> *Additional meetings based on the requirement of the Programme may be convened exceptionally. For emergency issues, the NSC may conduct its business electronically. The agenda and supporting documentation will be prepared and disseminated by the UNRC office.*

supported activities in conformity with UN standards and any guidance provided by the Fund Secretariat or Steering Committee.

### **Programme Management Committee (PMC)**

The Programme Management Committee (PMC) will be established by the NSC to provide technical and operational support to the Programme and to be composed of the focal points from the lead UN agencies (UNDP, UNEP, FAO), the lead government agencies (NEDA as Executing/Implementing Agency, EMB-DENR as secretariat of the IACCC, DA) and such other UN/government agencies as may be needed for the programme's implementation. The PMC will be chaired by the UNRC or his/her representative and will normally meet quarterly<sup>13</sup>. The NSC will oversee that the PMC:

- 1) Appoints a Programme Manager or equivalent thereof;
- 2) Manages programme resources to achieve the outcomes and outputs defined in the programme
- 3) Aligns MDG F funded activities with the UN Strategic Framework or UNDAF approved strategic priorities;
- 4) Establishes programme baselines to enable sound monitoring and evaluation;
- 5) Establishes programme implementation modalities to ensure a cohesive, uniform and standardized approach to delivery of outputs;
- 6) Establishes adequate reporting mechanisms in the programme;
- 7) Integrates work plans, budgets, reports and other programme related documents and ensures that budget overlaps or gaps are addressed;
- 8) Provides technical and substantive leadership regarding the activities envisaged in the Annual Work Plan and provide technical advice to the NSC;
- 9) Establishes the communication and public information plans;
- 10) Makes recommendations on re-allocation and budget revisions to the NSC;
- 11) Addresses emerging management and implementation problems; and
- 12) Identifies emerging lessons learned

Given the inter-sectoral nature of the programme, the lead agencies, both from the government and the United Nations are expected to work inter-sectorally, going beyond their natural partners in the government.

### **Cash transfer modalities:**

On receipt of a copy of the signed Joint Programme Document, the MDTF Office will transfer the first annual installment to the each Participating UN Organization (UNO). This initial transfer will be done within three to four business days upon receipt of the documentation from the NSC. Installments are annual and the first release will be made in accordance with the budget of year 1. Subsequent installments will be released in accordance with Annual Work Plans approved by the NSC. The release of funds is subject to meeting a minimum expenditure threshold of 70% of the previous fund release to the Participating UN Organizations combined. If the 70% threshold is not met for the programme as a whole, funds will not be released to any organization, regardless of the individual organization's performance.

On the other hand, the following year's advance can be requested at any point after the combined disbursement against the current advance has exceeded 70% and the work plan requirements have been met. If the overall expenditure of the programme reaches 70% before the end of the twelve-month period, the participating UNOs may upon endorsement of the NSC request the MDTF to release the next installment ahead of schedule. The UNRC will make the request to the MDTF Office on NSC's behalf. Any fund transfer is subject to submission of an approved Annual Work Plan and Budget to the MDTF Office.

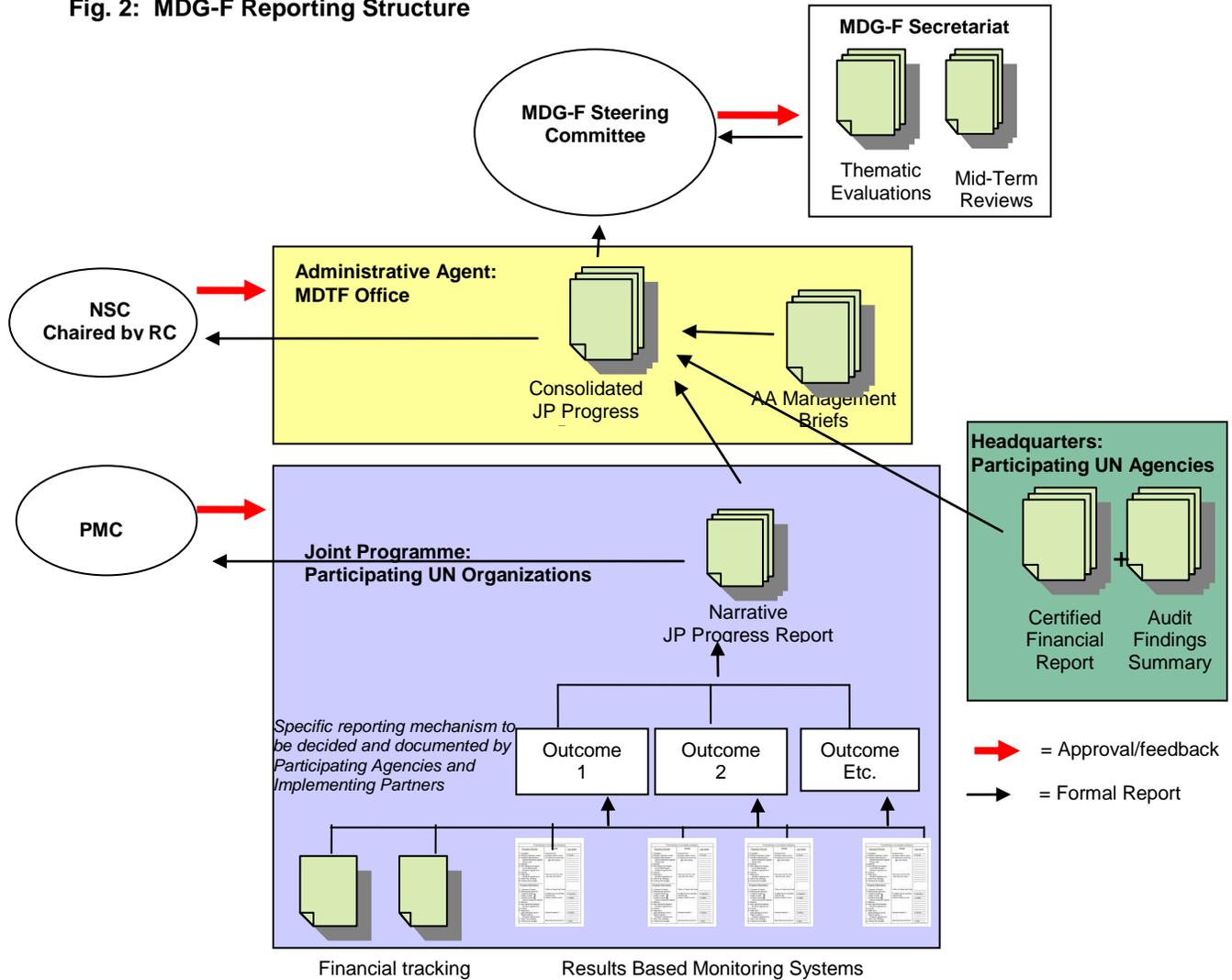
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<sup>13</sup> Experts can be invited as observers to PMC meetings when needed.

**Reporting:**

The MDG F has several layers of reporting requirements at both the fund and programme levels as illustrated below. On an annual basis, the participating UNOs are required to provide narrative reports on results achieved, lessons learned and the contributions made to the Joint Programme.

**Fig. 2: MDG-F Reporting Structure**



The MDTF Office will provide guidance on reporting formats and procedures to ensure that all fiduciary reporting requirements are met. The MDTF Office is responsible for the annual **Consolidated Joint Programme Progress Report, which** consists of three parts:

- 1) **Administrative Agent (AA) Management Brief** – consist of analysis of the certified financial report and narrative report. The management brief will identify key management and administrative issues, if any, to be considered by the NSC
- 2) **Narrative Joint Programme Progress Report** – This report is produced through an integrated Joint Programme reporting arrangement. The report should be reviewed and endorsed by the PMC before it is submitted to the MDTF Office o 28 February of each year.

- 3) **Financial Progress Report.** Each participating UNO will submit to the MDTF Office a financial report stating expenditures incurred by each programme during the reporting period. The deadline for this report is 31 March.

Report Name	Coordinating Author /Consolidator	Approving Authority	Dead-Line (reporting period: 1 Jan - 31 Dec)	Required Language
<b>Consolidated Joint Programme Progress Report</b> (including AA Management Brief, JP Narrative Report and Financial Reports)	MDTF Office	MDTF Executive Coordinator	31 May	AA Management Brief in English
<b>Narrative Joint Programme Report</b>	Participating UN Organizations jointly at Country Level	PMC	28 February	Working Language of CO
<b>Financial Progress Reports</b>	Participating UN Organizations HQ Level	Financial Officer/ Comptroller	31 March	English

In addition to the required annual reports Participating UN Organizations will submit quarterly updates to ensure an open flow of information to the donor and others. The quarterly update will be designed to satisfy basic information requirements to serve as a “rough”, but timely management tool. The MDTF will design and roll out an online system to capture the updates. The systems will be designed to allow Participating UN Organizations to report informally on outputs and achievements over the past quarter by using a standard online form.

#### **Midterm Review and Evaluation:**

The Fund through its Secretariat will establish an Evaluation Plan which ensures that all programmes supported by the Fund will undertake a final evaluation, which will assess the relevance and effectiveness of the intervention, and measure the development impact of the results achieved, on the basis of the initial analysis and indicators described at the time of programme formulation. Furthermore, the Fund Secretariat will lead Mid-Term Reviews and thematic reviews for all programmes.

#### **Audit:**

Activities carried out by the Participating UN Organization shall be subject to internal and external audit as articulated in their applicable Financial Regulations and Rules. In addition, the Secretariat will consult with the UN Agencies on any additional specific audits or reviews that may be required, subject to the respective Financial Regulations and Rules of the Participating UN Organizations. Participating UN Organizations will provide a summary of their internal audit key findings and recommendations for consolidation by the MDTF Office and submission to the Fund Steering Committee and NSC as applicable.

## **6. Fund Management Arrangements**

Each organization assumes complete programmatic and financial responsibility for the funds disbursed to it by the administrative agent and can decide on the execution process with its partners and counterparts following the organization’s own regulation and rules.

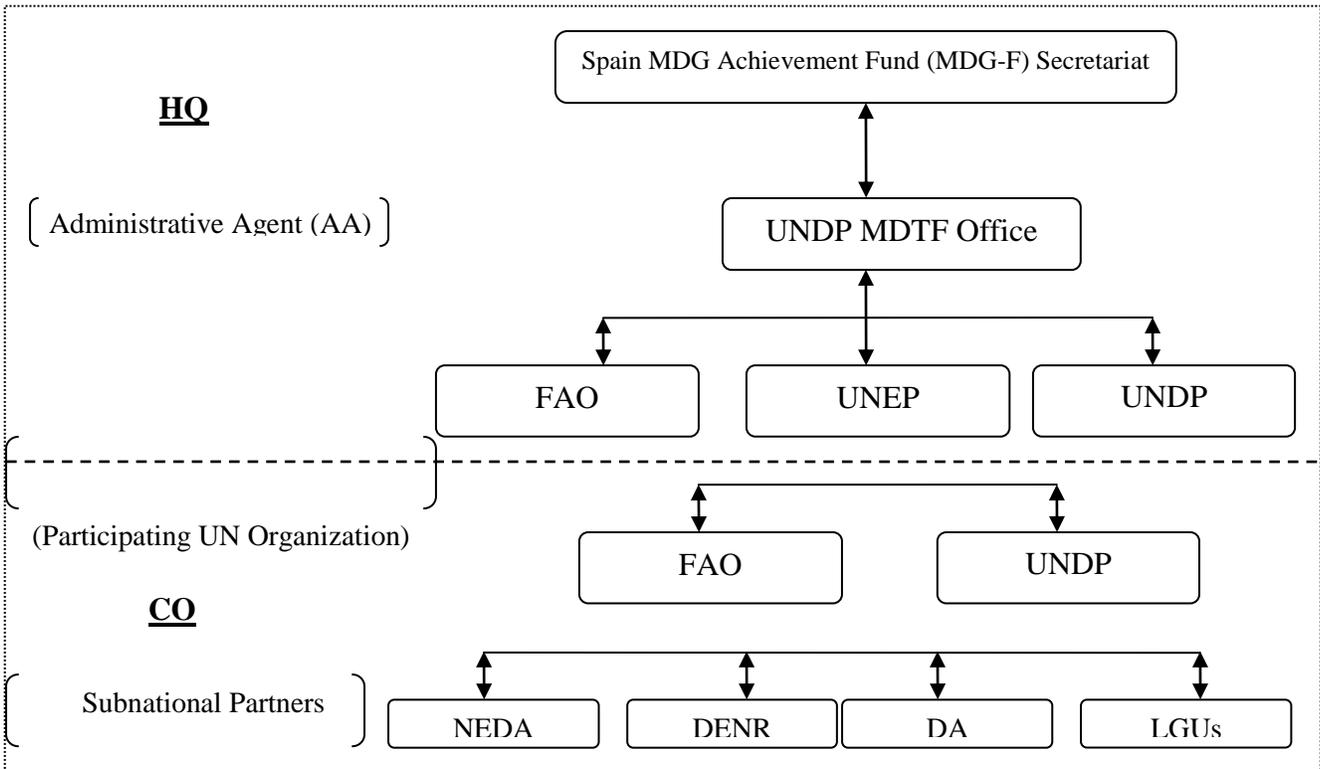
Each Participating UN Organization establishes a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent. Participating IN organizations are requested to provide certified financial reporting according to the budget template. Participating UN Organizations are entitled to deduct their direct costs on contributions received according to their own regulations and rules, taking into account the size and complexity of the particular programme.

Subsequent installments will be released in accordance with Annual Work Plans approved by the NSC. The release of funds is subject to meeting a minimum commitment threshold of 70% of the previous fund release to the Participating UN Organizations combined commitments (Commitments are defined as legally binding contracts signed, including multi-year commitments which may be disbursed in future years). If the 70% threshold is not met for the programme as a whole, funds will not be released to any organization, regardless of the individual organization's performance.

On the other hand, the following year's advance can be requested at any point after the combined disbursement against the current advance has exceeded 70% and the work plan requirements have been met. If the overall expenditure of the programme reaches 70% before the end of the twelve-month period, the participating UN Organizations may upon endorsement by the NSC request the MDTF to release the next installment ahead of schedule. The RC will make the request to the MDTF Office on the NSC's behalf.

Any fund transfer is subject to submission of an approved Annual Work Plan and Budget to the MDTF Office.

The administration of this Programme will follow the "Pass-Through" fund management option with UNDP's Multi Donor Trust Fund (MDTF) Office acting as the Administrative Agent (AA). The funds flow is illustrated graphically below:



Upon receipt of the Fund Steering Committee's final approval of the Joint Programme Document, the Fund Secretariat will release the funds for the implementation of the full Joint Programme to the MDTF Office. On receipt of a copy of the signed Joint Programme Document, the MDTF Office will transfer the first annual

installment to the respective Headquarters of each Participating UN Organization (UNO). In accordance with its own rules, regulations and procedures, each participating UNO will/is:

- 1) assume complete programmatic and financial responsibility for the funds disbursed to it by UNDP MDTF Office;
- 2) decide on the execution process with its partners and counterparts
- 3) establish a separate ledger account for the receipt and administration of funds disbursed to it by UNDP MDTF Office;
- 4) provide certified financial reporting according to the budget template in **Annex 1 (schedules A & B)**;
- 5) entitled to deduct its indirect costs on contributions received taking into account the size and complexity of the particular programme. However, indirect costs cannot exceed 7% of the programmable expenditure.

On the other hand, accountability for UNDP's AA function rests with the Executive Coordinator of the Multi-Donor Trust Fund (MDTF) Office in Headquarters. Specifically, the MDTF Office as AA will be responsible for:

- 1) Disbursing approved resources to the Participating UN Organizations Headquarters, i.e. FAO, UNEP and UNDP;
- 2) Consolidating the joint programme narrative report with financial reports from Participating UN Organizations, including analysis of financial and narrative data; and providing the same to the National Steering Committee (NSC);
- 3) Providing the Consolidated Joint Programme Progress Reports and other reports as appropriate to the donor, i.e. the Fund Steering Committee through the Secretariat;
- 4) Streamlining the reporting systems and harmonizing reporting formats based on joint programming best practices;
- 5) Facilitating the work of the Participating UN Organizations to ensure adherence to a results based reporting structures around outcomes and outputs; and
- 6) Ensuring that fiduciary fund management requirements are adhered to.

However, and with explicit delegation from the MDTF Office Executive Coordinator, specific tasks related to the AA role can be performed by the UNDP Resident Representative. Hence, in certain cases the consolidation of the Joint Programme Narrative Report with the financial reports of Participating UN Organizations maybe delegated by the MDTF Office to the UNDP Resident Representative. Such a delegation could be considered in cases where a request for delegation of authority has been made by the Executive Coordinator of the MDTF confirming that:

- 1) availability of systems renders it more efficient to delegate (e.g. use of web-based DevInfo v 5.0 to track outputs)
- 2) sufficient staff capacity exists and is available at the country level

## 7. Feasibility, risk management and sustainability of results

The achievement of results, including the smooth implementation of the JP, hinges on the adequate capacity of the various partners to deliver, both the duty bearers and claim holders, and the fulfillment of contributions by the government and other partners, including those of the subject pilot communities. Possible risks and risk management measures to ensure achievement of the results are described below:

Risk	Risk Type and Rating	Risk Management Measure
Lack of political commitment of leadership at national & local levels may delay project implementation timetable.	Political- Medium	The JP will ensure conduct of proper and continuing consultations & dialogue at all levels and sectors to ensure support and continuous ownership of/buy in for the project.

Risk	Risk Type and Rating	Risk Management Measure
Lack of coordination among Government Agencies, LGUs and UN Agencies.	Political – Low Risk	<p>The JP will build on past and on-going programmes both on climate change and disaster risk management where government agencies involved in the JP have already worked together and built coordination foundations (e.g., UN system support to DRM involving OCD/NDCC, EMB/DENR, PAGASA/DOST, NEDA, etc.). The JP will also link with on-going related programmes on adaptation (WB/DENR/DA/NIA) to ensure coordination and complementation of efforts.</p> <p>The JP Steering Committee built into the project design shall also ensure overall coordination of the programme.</p>
Capacity to implement the various JP components varies from agency to agency and may impede achievement of outputs.	Operational-Medium	<p>The JP outputs require intensive, highly technical studies and mapping, including development of sectoral adaptation and monitoring systems. The challenges associated with these baseline assessments require a pool of highly technical and trained implementation team on CRR. In addition to building on previous programmes, the JP has built-in capacity development strategies for concerned agencies and included resource provisions for CRR experts and facilities/equipment.</p> <p>The Technical Working group (TWG) will also provide technical and operational support including M&amp;E.</p>
Lack of understanding of the various issues on adaptation to climate change may lead to non-prioritization and support to ensuing policy reforms	Operational - Low	Raising level of awareness on climate change for various stakeholders, especially policy makers, as well as competency development for the technical personnel of the concerned NGAs and LGUs, as well as, instructors & professors of the participating academic institutions will address this risk.

## 8. Accountability, Monitoring, Evaluation and Reporting

**Table 2: Programme Monitoring Framework (PMF)**

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
<p><b>Outcome 1:</b> Climate risk reduction (CRR) mainstreamed into key national &amp; selected local development plans &amp; processes.</p>	<p><b>Indicators:</b> *Guidelines available for CRR integration into next cycle (2011-2017) nat'l. plans &amp; 100% of target local (43++) land use/dev't.plans w/ qualitative &amp; quantitative CRR measures</p> <p><b>Baselines:</b> Some nat'l. plans., e.g. NFPP/MTPDP with qualitative CRR provisions; local comprehensive land use/development plans not climate risk based; Current regulatory systems evaluation tools not climate risk- based</p>	<p>Desk reviews, surveys, interviews; published agency reports</p>	<p>Assessment of agency reports (e.g. midterm and annual reports (MTPDP and Socio-economic profile)- Annual</p>	<p>UNDP/UNEP/NED A/DENR</p>	<p>Assumptions: *Climate information &amp; guidelines produced on time. * Strong political commitment to effecting planning/programming changes.</p> <p>Risks: *Weak political support for required planning/programming changes due to lack of appreciation of climate change impacts.</p>
<p>Baseline risk scenario, incl. vulnerability maps for 43 provinces and CRR/adaptation monitoring system developed for priority sectors</p>	<p><b>Indicators:</b> *43 provincial risk scenarios available by 2010 as basis for climate resilient dev't. planning</p> <p><b>Baseline:</b> Dev't. plans not climate risk based but Multi-hazard maps of 1:50,000&amp;1: 10,000 scales being developed; maps available for 4 out of the 43 provinces. No adaptation monitoring system in place.</p>	<p>Submitted JP Annual Reports</p>	<p>Review of JP Reports; field monitoring quarterly</p>	<p>UNDP/UNEP/DEN R/NEDA</p>	<p>Assumptions: *Timely availability of the required climate &amp; other biophysical/socioeconomic information on the 43 provinces</p> <p>Risks: *Delay in the acquisition of the required information resulting in delayed production of model results &amp; monitoring system. *</p>

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
Adaptation options for key sectors assessed, valued & prioritized, including “no regrets” options.	<p><b>Indicator:</b> # of prescribed adaptation options resulting from assessment process made available by sector</p> <p><b>Baseline:</b> Information on adaptation options available globally; some local but mostly undocumented indigenous adaptation practices in various localities in the country.</p>	JP Annual Reports	Review of JP reports – quarterly/annual	UNEP/DENR/NEDA	<p>Assumptions:</p> <ul style="list-style-type: none"> <li>* Timely availability of experts &amp; easy access to existing body of knowledge on CC adaptation.</li> <li>*Active participation of stakeholders in the prioritization consultations.</li> </ul> <p>Risks:</p> <ul style="list-style-type: none"> <li>*Failure to identify appropriate adaptation options for key sectors on time.</li> <li>* Weak sectoral participation &amp; ownership esp. in prioritization exercises.</li> </ul>
Entry points for CRR in key national plans/planning & regulatory (e.g. EIA) processes identified and CRR compendium of adaptation best practices recommended for integration.	<p><b>Indicators:</b> # of CRR guidelines for dev’t. plan integration</p> <p><b>Baseline:</b> No available guidelines</p>	Data collected from interviews and surveys	Review of JP/agency reports - Annual	UNDP/NEDA	<p>Assumptions:</p> <ul style="list-style-type: none"> <li>*Timely availability of prioritized adaptation options.</li> <li>*Strong local political leadership in support of planning/programming shift towards being CRR based.</li> </ul> <p>Risks:</p> <ul style="list-style-type: none"> <li>* Weak political commitment &amp; buy-for anticipated reforms.</li> <li>* Non-consensus on prioritization of adaptation options.</li> </ul>
CRR mainstreaming guidelines adopted by key	<b>Indicator(s):</b> # of executive issuances for guideline adoption	Submitted Annual Reports of agencies	Review of NGA reports – Annual	UNDP/NEDA	<p>Assumptions:</p> <ul style="list-style-type: none"> <li>*Strong political commitment</li> </ul>

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
national government agencies and selected local governments.	<b>Baseline:</b> No administrative issuance on adaptation in place.				to CRR based planning/programming. * Key NGAs/LGUs have required competencies for mainstreaming CRR.  Risks: *Resistance of NGAs and LGUs to change in planning/programming. *Poor leadership support * Technical competencies on CRR based planning/programming not available on time.
Selected local development/ comprehensive land use plans reflect CRR measures.	<b>Indicator(s):</b> 10 local dev't plans./CLUPs which are CR based/reflecting CRR measures  <b>Baseline(s):</b> Current local dev't. plan(s)/CLUPs not CR based.	JP Annual Reports; Surveys/Interviews. Independent evaluation	Review of JP reports - Annual	UNDP/NEDA	Assumptions: *Strong local political commitment to change in planning/programming processes.  Risks: *Untimely change in political leadership *Weak political support for process change. *Poor technical capability in mainstreaming CRR
Web-based screening tool & portal for project developers/designers.	<b>Indicator:</b> # of web-based tools accessible to project designers  <b>Baseline:</b> No web-based tool available currently.	JP Annual Reports; Surveys/Interviews. Independent evaluation	Review of JP reports - Annual	UNEP/NEDA	Assumptions: *Timely availability of contents & IT experts to develop operational portal. * Moderate to high demand for tool & portal.

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
					Risks: * Delay in production/availability of screening tool & other portal contents & dev't. of portal itself. .
<b>Outcome2:</b> Enhanced national and local capacity to develop, manage and administer projects addressing climate change risks.	*90% accuracy of climate forecasts by meteorological agency PAGASA; *30% improvement over baseline in terms of real time climate information volume and timing of delivery to key nat'l & local stakeholders; *30% increase in level of awareness among national policy makers, local executives & other critical stakeholders (private sector/civil society) on CC issues *30 % improvement in competencies of key nat'l. /sectoral agencies to develop & implement climate resilient plans/prgrammes & measures  <b>Baseline:</b> Climate forecasting systems & institutional capacities inadequate for optimum impact planning/programming *Competency of local academic institutions insufficient to provide long-term, sustainable technical assistance for CC resilient planning, programming &	Competency assessments; Surveys; interviews; desk review of relevant reports	Surveys; review of NGA/JP reports - Annual	UNDP/NEDA/DEN R	Assumptions: *Active participation of stakeholders * Political commitment to CRR change process * Mechanisms & inputs for capacity development process are made available on time.  Risks: *Delayed provision of inputs * Lack of political commitment & poor buy-in/ participation of stakeholders

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
	implementation of local stakeholders.				
Existing capacities and gaps of key NGA, selected LGUs and local HEIs for CRR work assessed.	<p><b>Indicator:</b> Documentation on level of capacities of concerned NGAs/target LGUs/HEIs in place by 2008</p> <p><b>Baseline:</b> NCSA Report available incl. assessment of climate change work of concerned NGAs</p>	Interviews/Surveys; Reports on results of competency assessments	Review of JP reports - Annual	UNDP/NEDA	<p>Assumptions: *Active participation of stakeholders</p> <p>Risks: Survey instruments not developed on time.</p> <p>Poor participation of stakeholders in surveys/consultations.</p>
Awareness raised for key national & local stakeholders on climate change.	<p><b>Indicator:</b> 30 % increase over baseline of level of awareness of target clientele ( NGAs, LGUs, academe, private sector, CSOs, media)</p> <p><b>Baseline:</b> Data unavailable; to be determined at start up.</p>	JP Reports, Survey, Interviews, Independent evaluations	Surveys – Annual	UNDP/DENR	<p>Assumptions: *IEC plan &amp; materials developed on time. * Strong interest and advocates in place for a dynamic awareness raising programme.</p> <p>Risks: * Delay in implementation of preparatory activities to produce IEC plan &amp; materials. *Poor participation of stakeholders</p>
CRR planning & implementation competencies of key stakeholders (NGAs, LGU planners, Academe) enhanced/increased.	<p><b>Indicators:</b> 10 CRR planning tools available; 30 % increase in competencies of concerned NGAs &amp; target LGUs with implementation of CB programme.</p>	JP Reports; Surveys/Interviews; Independent evaluation	Review of JP reports; Field monitoring - Annual	UNDP/NEDA	<p>Assumptions: * Timely dev't. of tools * Timely availability of competency dev't. programme. * Timely availability of trainees &amp; their active</p>

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions
	<p><b>Baseline:</b> Basic impact &amp; decision models available &amp; being used by NGAs; Data on current level of competency for CRR work of target LGUs/HEIs limited.</p>				<p>participation in competency dev't. programme.</p> <p>Risks:            * Competency dev't. programme not developed on time.            * Poor participation of stakeholders/trainees.</p>
<p><b>Outcome 3:</b> Coping mechanisms improved through pilot adaptation projects.</p>	<p>100% of innovative approaches designed &amp; tested are documented for up scaling &amp; mainstreamed by concerned stakeholders into existing practices, systems and local development processes; 30% increase in competency of local stakeholders (e.g. CBOs) to draw , recommended up and implement CC adaptation measures</p> <p><b>Baseline:</b> Indigenous coping measures in effect but only to current climate variability &amp; extremes; undocumented and mostly anecdotal; many proposals awaiting implementation</p>	<p>Integrated assessment/independent evaluation of pilot sites; Desk review of national/local issuances; Surveys/Interviews</p>	<p>Surveys/filed monitoring - Annual</p>	<p>UNEP/UNDP/FAO /DENR/DA/ NEDA</p>	<p>Assumptions:            * Strong buy in and ownership by stakeholders.            * Strong support of partners, including local political leadership.</p> <p>Risks:            * Weak buy in/ownership of projects by stakeholders.            * Premature change in political leadership.            * Delayed provision of inputs especially technical ones.</p>
<p>Enhanced capacities<sup>14</sup> to ensure sustainability through demonstration projects showcasing innovative practices to improve local coping mechanisms, including alternative livelihoods.</p>	<p><b>Indicator:</b> 30 % increase over baseline in CRR planning/ implementation capacity of community-based organizations (CBOs) by end 2010  <b>Baseline:</b> Data unavailable; to be determined upon start of validation exercise.</p>	<p>JP annual reports: agency reports; independent evaluations</p>	<p>Surveys; field monitoring – Annual</p>	<p>UNEP/UNDP/FAO /WHO/ILO/UN-HABITAT/DENR/DA/NEDA/DOH/ HLURB/</p>	<p>Assumptions:            * Timely provision of inputs esp. CRR information,            * Full cooperation of communities &amp; partners.</p> <p>Risks:            * Changes in political leadership.            * Force majeure setting back timetables.</p>

<sup>14</sup> e.g. local capacities on integrated assessment tools related to climate change adaptation; improved coping mechanisms and alternative livelihoods; local capacities and system in place to reduce the risks to development investments, etc...

Expected Results (Outcomes & outputs)	Indicators (with baselines & indicative timeframe)	Means of verification	Collection methods (with indicative time frame & frequency)	Responsibilities	Risks & assumptions

## **9. Ex Ante Assessment of Cross-cutting Issues**

The joint programme seeks to contribute to the fulfillment of human rights of the target beneficiaries and claim holders, i.e. the rural (fisher folks, upland farmers, small landholders) and urban poor and the marginalized and vulnerable (e.g. indigenous peoples, including women and children in the 43++ priority provinces by enabling the duty bearers (key government agencies such as the NEDA, DENR, DA, DOST, DOH, DPWH, DILG, etc. and the concerned local government units) to develop and implement rights based and gender sensitive climate change interventions, enabling the former to cope with the phenomenon's impacts in a participatory and sustainable manner. By doing so, the joint programme, therefore, enables the target beneficiaries to attain their rights to life and socio-economic development.

Currently, some of the duty bearers like DENR (EMB) and DOST (PAGASA) have a level of capacity to develop climate change interventions, being the focal agencies on climate change matters. The DENR chairs the Inter-agency Committee on Climate Change (IACCC) that has a critical role in developing policy recommendations on climate change issues in the country while PAGASA-DOST is co-chair. DENR has sub-sectoral expertise on forestry management, biodiversity management, coastal management and water management that are important areas for climate change adaptation. It also has competency in hazard mapping and risk assessment. PAGASA-DOST has institutional expertise and capacity on current climate modeling and seasonal climate forecasting, hazard mapping, vulnerability and adaptation assessment and flood and drought early warning systems. It would need capacity development in downscaling the global circulation models and training on the impact models (e.g. water resource, crop, and ecosystem).

NEDA leads the country's socio-economic planning and therefore, has a critical role in influencing the development planning agenda and processes. It has specific competency in macro-economic planning, monitoring and evaluation of sectoral development interventions. Capacity gaps are in the area of impact modeling and use of decision tools (e.g. cost effectiveness analysis) for adaptation planning purposes and substantive technical knowledge on climate change. As a member of the IACCC, together with the DA and DOH which have almost the same need for capacity development on the use of planning tools for climate change adaptation purposes, it forms part of the climate change knowledge base of the bureaucracy. The major capacity gap common to all of these agencies is the capacity to design and implement rights based and gender sensitive interventions to address climate change impacts.

At the local level, the local authorities have bigger capacity constraints in developing not only of rights-based and gender sensitive planning and programming initiatives, but technical knowledge and competencies on climate change and its impacts. In this sense, this joint programme needs to raise awareness, develop basic competencies and monitor affirmative action of the concerned LGUs in relation to climate change issues, especially adaptation. They would also need training on climate risk information gathering and processing, development of specific adaptation options and use of impact assessment and decision tools. The higher level educational institutions which are envisioned to be major partners on the ground by providing continuing technical assistance, training and education to affected communities and LGUs, have medium capacity on developing interventions to address climate change, including both mitigation and adaptation. Like the NGAs, they would need additional training on vulnerability analysis and adaptation and use of the impact and decision tools, among others. All of the above would need training on rights-based, gender sensitive planning and programming.

The capacity development strategy to be employed for this programme is envisioned to be systematically progressive and comprehensive, from awareness raising to competency building and finally, learning by doing through affirmative action, as showcased in the demonstration and pilot projects. In this sense, informal and formal venues like the schools and training institutions and the media will be harnessed to heighten awareness on climate change issues, particularly the need for adaptation.

## **10. Legal Context or Basis of Relationship**

This document is consistent with the cooperation/assistance agreements signed by the lead UN agencies involved in this programme with the Philippine government. For the UNDP, this Project Document is pursuant to

the Country Programme Action Plan and the Standard Basic Assistance Agreement (SBAA) it signed with the government of the Republic of the Philippines. All provisions in the SBAA therefore apply to this document.

Consistent with Article III of the SBAA, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried; and
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

The **UNDP** reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

On the part of the **FAO**, this document is consistent with the basic agreement with the Philippine Government as indicated in the exchange of letters between the Philippine Government and FAO on 02 and 14 November 1977, respectively. On that Agreement, under Item 2, paragraphs 1 and 2.

The FAO Representative shall represent the Organization in the Philippines, and shall be responsible within the limits of the authority delegated to him, for all aspects of the Organization's activities in the country.

In the effective performance of his/her functions, the FAO representative shall have access to appropriate policy and planning levels of Government in the agriculture, fishery and forestry sectors of the economy, as well as, to central planning authorities. He/she shall maintain close liaison with the Government's coordinating agency for external assistance (National Economic and Development Authority) and thereby serve to keep all the appropriate Government agencies fully informed on all aspects of the policies and procedures of FAO's programme in the Philippines."

For **UNEP**, in line with its position as a non-resident agency with a global mandate for technical cooperation and capacity building, the signed Joint Programme document shall be the legal basis of UNEP's relation with the Government of the Philippines within the context of this programme. UNEP will work in close coordination with the MDG-F project management team in the Philippines. Its Regional Office for Asia and the Pacific (ROAP) will manage the Funds in accordance with UNEP's financial rules and regulations. Accountable advances will be transferred to the selected partners in this Joint Programme, following the designated modalities outlined in the agreements and/or subcontracts with UNEP.

**ILO** is the only 'tripartite' United Nations agency in that it brings together representatives of governments, employers and workers to jointly shape policies and programmes. This unique arrangement gives the ILO an edge in incorporating 'real world' knowledge about employment and work. The ILO formulates and implements technical cooperation in an active partnership with constituents, which includes the government, to help countries promote and apply international labour standards. The overall purpose of ILO technical cooperation is the implementation of the Decent Work agenda at a national level, assisting constituents to make this concept a reality for all men and women.

**UN-Habitat**, established in 1978, is the lead agency within the UN system for coordinating activities in the field of housing and urban development. The agency's mandate is outlined in the Vancouver Declaration on Human Settlements, Habitat Agenda, Istanbul Declaration on Human Settlements, the Declaration on Cities and Other Human Settlements in the New Millennium, and Resolution 56/206. UN-Habitat serves as the focal agency for monitoring progress on the implementation of the Habitat Agenda- the global plan of action adopted at the Second United Nations Conference in Human Settlements (Habitat II), held in Istanbul, Turkey in 1996. In addition to its advocacy and monitoring function, UN-HABITAT also plays an important role in providing technical assistance to countries and cities in the areas of urban governance, housing, environmental management, disaster mitigation, post- conflict rehabilitation, urban safety, water management and poverty reduction. UN-Habitat works with the Government of the Philippines and other Habitat Agenda partners in the country to pursue the goals and principles of the Habitat Agenda and the Millennium Development Goals. UN-Habitat's participation in the MDGF Climate Change Joint Programme is in line with its mandate and the agency's commitment to the UNDAF. The agency's participation in the joint programme shall be covered by the provisions of the Standard Basic Assistance Agreement (SBAA) between the GoP and UNDP as it extends to UN-Habitat being an agency administered by UNDP in the Philippines.

## LIST of ACRONYMS

AA	Administrative Agent
ADB	Asian Development Bank
AIDS	Acquired Immuno Deficiency Syndrome
CBO	Community Based Organization
CCA	Common Country Assessment
CLUP	Comprehensive Land Use Plan
CP	Country Programme
CRR	Climate Risk Reduction
CSO	Civil Society Organization
DA	Department of Agriculture
DA	Department of Agriculture
DBP	Development Bank of the Philippines
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DILG	Department of the Interior and Local Governance
DOH	Department of Health
DOST	Department of Science and Technology
DPWH	Department of Public Works and Highways
DRM	Disaster Risk Management
DSWD	Department of Social Welfare and Development
EC	European Commission
EIA	Environmental Impact Assessment
EMB	Environmental Management Bureau
EMB	Environmental Management Bureau
ENSO	El Nino Southern Oscillation
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
HIV	Human Immuno Virus
HLURB	Housing and Land Use Regulatory Board
HUDCC	Housing and Urban Development Coordinating Council
IACCC	Inter-Agency Committee on Climate Change
IASC	Inter-Agency Standing Committee
IEC	Information Education Campaign
ILO	International Labor Organization
IPCC	Inter-governmental Panel on Climate Change
IPs	Indigenous Peoples
JPD	Joint Programme Document
LBP	Land Bank of the Philippines
LGU	Local Government Unit
MDG-F	Millennium Development Goal Fund
MDG	Millennium Development Goal
MDTF	Multi Donor Trust Fund
MGB	Mines and Geo-sciences Bureau
MTPDP	Medium Term Philippine Development Plan
NAMRIA	National Mapping and Resource Inventory Administration
NDCC	National Disaster Coordinating Council
NEDA	National Economic and Development Authority
NFPP	National Framework for Physical Planning
NGA	National Government Agency
NGO	Non-Government Organization

NGO	Non Government Organization
NIA	National Irrigation Administration
NSC	National Steering Committee
NWRB	National Water Resources Board
OCD	Office of Civil Defense
PAGASA	Philippine Atmospheric Geophysical and Astronomical Services Administration
PATLEPAM	Philippine Association for Tertiary Level Institutions on Environmental Planning and Management
PCARRD	Philippine Council for Agriculture, Forestry, and Natural Resources Research and Development
PCIC	Philippine Crop Insurance Corporation
PhiVolcs	Philippine Institute of Volcanology and Seismology
PMC	Programme Management Committee
PMF	Programme Monitoring Framework
PNCC	Philippine Network on Climate Change
“READY”	Hazards Mapping and Assessment for Effective Community-Based Disaster Risk Management Project
SBAA	Standard Basic Assistance Agreement
SCCF	Special Climate Change Fund
SNAP	Strategic National Action Plan
TWG	Technical Working Group
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNO	United Nations Organization
UNRC	United Nations Resident Coordinator
WB	World Bank
WFP	World Food Program
WHO	World Health Organization

## CONCEPTS OF THE PROPOSED DEMONSTRATION PROJECTS

### 1. Equitable Integrated Ecosystems Climate Change Adaptation in the Cordilleras

#### ***Background/ Rationale:***

This project is envisioned to showcase development of adaptation options for a number of interacting sectors, e.g. agriculture, forestry and biodiversity and water and for interacting/contiguous ecosystems. Specifically, it will attempt to demonstrate the development of adaptation strategies involving the determinants: information and skills, technology and equity.

It is proposed to be undertaken in the Cordillera region with focus on Benguet and Ifugao. The Cordillera mountain range is one of Northern Luzon's major watersheds, from which many of the headwaters of major river systems originate. These river systems include the Chico, Agno, Abra, Siffu, Amburayan-Naguilian-Aringgay, Ahin, and Abulog Apayao with a total drainage area of 5,447,500 hectares, these rivers supply most of the irrigation needs of Northern Luzon. The Cordillera mountain ecosystem is very important from a socio-economic point of view because of its significant biodiversity resources and habitats, energy sources, minerals and the ecological services it provides such as regulating stream flow, nutrient cycling, and soil stability, among others. It is also very important culturally as the Cordilleras is home to a diverse group of indigenous peoples. These include the Ibalois, Kankanai, Kalanguya, Iwac, Ifugao, Bontoc, Kalinga, and Tinguian who hold indigenous knowledge of the local environment and sustainable management of resources.

Although the proposed focus areas are Benguet and Ifugao, the sectoral/ecosystem (agriculture, forestry, water) adaptation strategies to be developed would also benefit and involve the other localities comprising the Cordillera region: the province of Abra, as well as the city of Baguio.

The province of Benguet is located in the Central Cordillera range and is bounded on the north by the Mountain Province, Ilocos Sur on the northwest, Pangasinan on the east and La Union in the west. It has a land area of 2,833 square kilometers, 1,776.4 sq. km. of which is forest land and 1,388.1 sq.km. is timberland. It comprises 13 municipalities and one city, as well as, 140 baranggays. As of 2007, Benguet has an estimated population of 372,533, where 159,640 (48%) of whom are women and an annual growth rate of 1.68 %. Of the total population, 27,000 (8.2%) are poor. Its major sources of income are vegetable farming/high value crops, mining and timber production.

The province of Ifugao is situated deep in the Cordillera Mountain range bounded by the mountains of Benguet on the west and of the Mountain Province in the north while its neighbors are Isabel and Nueva Viscaya in the east and south. Lagawe is the capital of Ifugao. Mountainous, sloping into gently rolling hills and plateaus best describe its terrain. The mountain ranges reach an elevation of 2,523 meter above sea level. V-shaped gullies, creeks, streams and U-shaped rivers drain through the valleys.

Ifugao has a land area of 251,778 hectares, 90% of which is forest land. Land Utilization for Agriculture is 30,548 hectares, Grassland is 160,774 hectares, Wood/forestland is 65,684 hectares and Pasture land is 2,245 hectares.

It has 11 municipalities, 175 baranggays and 10 declared special zones. The estimated population of Ifugao is 161, 623 with a growth rate of 1.67 and a population density of about 64 persons per square kilometers. According to NSO-CAR (2003), the Province's poverty incidence is about 30.9%. (50,000 of the population). Sixty five (65%) of labor force is predominantly employed in agriculture. The main agricultural crop in Ifugao is rice. It is also one of the country's major vegetable suppliers of beans, sweet peas, cabbages, corn, potatoes, squash, among others. On the other hand, the Sloping Agricultural Land Technology (SALT) is already in use for orchards to extend farming land availability in critical sloping areas.

Mining of metallic and nonmetallic deposits, limestones and red and white clays is another source of income of Ifugao people.

Collectively, the Cordillera region has a total population of 1,520,743

In terms of physical vulnerability, Benguet has been identified as among the 43 provinces susceptible to natural hazards, and among the top five provinces susceptible to rainfall induced landslides, with around 93,000 hectares of its total land area at high risk from the said hazard. Ifugao, on the other hand, is experiencing problems with its rice terraces which are rapidly degrading and postulated to be further affected by climate change. It has, however, one of the oldest and most effective climate adaptation strategies in terms of an integrated system which includes the muyong or woodlot for water retention.

Forest fire occurrences in the Cordillera from 2000-2007 is reported to have damaged 5,380 hectares of forests, translating to 41,711 million pesos in damages.

**Objectives:**

- To develop inter-sectoral, rights-based and gender friendly adaptation approaches, including "no regrets" options in contiguous mountain/forest-lowland agricultural ecosystems; and
- To test innovative adaptation measures/technologies for agriculture, water/watershed management, including biodiversity conservation.

**JP Outcome 3.1:** Enhanced CC adaptation capacity of communities in contiguous fragile ecosystems

**Indicators:** 30% increase in capacities of vulnerable populations, e.g. CBOs of indigenous peoples, especially the women among them, to plan, programme, innovate & implement CC adaptation measures in critical forest & agricultural ecosystems in the Cordilleras, esp. Ifugao & Benguet; % improvement over baseline in species conservation/protected areas establishment; # of new &/or innovative CC coping strategies introduced and adopted by target populations; % decrease/increase over baseline in forest cover.

**Baseline:** Existing adaptive capacities of target population unknown; to be determined at project start up.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner*	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
<b>An integrated multi-sectoral climate change adaptation model for contiguous fragile ecosystems</b>	CC Vulnerability Assessment Report on the Cordillera region  Community based climate variability and vulnerability assessment tool developed	FAO	DA	<ul style="list-style-type: none"> <li>Conduct vulnerability and adaptation capacity assessments in the Cordillera region for the concerned sectors (agriculture, water resources, forestry /biodiversity)</li> <li>Design and develop the community based climate variability and vulnerability assessment tool</li> </ul>	70.00	0.00	0.00	70.00

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Program Priority	Implementing Partner*	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	<ul style="list-style-type: none"> <li>• Three (3) Sectoral consultations and One Inter-sectoral Consultation;</li> <li>• Report on compendium of prioritized no regrets options</li> <li>• Report on new adaptation measures for testing</li> </ul>	FAO	DA	<ul style="list-style-type: none"> <li>• Conduct consultation among local farmers and other major stakeholders to identify and prioritize “no regrets” adaptation options</li> <li>Identify new &amp; innovative adaptation options for testing</li> </ul>	30.00	0.00	0.00	30.00
	<ul style="list-style-type: none"> <li>• Pilot tested integrated /multisectoral CC adaptation strategy for the Cordilleras</li> </ul>	FAO	DA	<ul style="list-style-type: none"> <li>• Design &amp; pilot test an integrated/multi-sectoral adaptation strategy for the Cordilleras, incl. new measures/ /technologies</li> </ul>	50.00	350	350	750.00
	<ul style="list-style-type: none"> <li>• CC Adaptation data base &amp; KM system;</li> <li>• Guidelines on Integrated/multi-sectoral CC adaptation strategy in contiguous fragile ecosystems</li> </ul>	FAO	DA	<ul style="list-style-type: none"> <li>• Develop information &amp; KM systems from the results of the pilot exercise.</li> <li>• Develop guidelines on dev't. of integrated strategy for CC adaptation in contiguous fragile ecosystems</li> </ul>	<b>15.00</b>	50.00	35.00	100.00
<b>Total</b>					<b>165.0</b>	<b>400.0</b>	<b>385.0</b>	<b>950.00</b>

\* DA as the lead government partner with DENR and concerned LGUs as co-implementor

## **2. Strengthening Disease Surveillance, Emergency Preparedness, and Response for Climate Change –Related Conditions in Metro Manila and Albay**

### **Background/Rationale:**

Climate change is expected to significantly threaten public health which is expected be particularly pronounced in areas with large vulnerable populations

The Center for Environmental Geomatics of the Manila Observatory conducted mapping of Philippine vulnerability to environmental disasters. Among the areas identified as prone to climate change related disasters are Metro Manila and Albay,. Climate change sensitive diseases such as malaria, dengue, water- and food-borne diseases such as typhoid fever and cholera are also common in these areas. It is proposed that the above-mentioned areas be the site for the pilot implementation of climate change related health sector interventions in the Philippines.

Metro Manila is a rapidly growing urban center with increasing challenges like traffic, housing need, unemployment, pollution, garbage, peace and order, and increasing incidence of diseases. Metro Manila or the National Capital Region accounts for 14% percent of the national population and approximately a third of the urban population. As of 2007, its total population was placed at 11,553,427 with an annual growth rate of 2.11 %. Poverty incidence is 7.1% affecting 700,000 of the population. With a population density of 16,661 persons per square kilometer and a land area of 636 square kilometers, it has one of the highest population densities in the region. Although its poverty incidence level is low (only 4.8% of its families are poor), a significant portion of its population is relatively vulnerable to climatic changes, with 29.4% aged 0-14 years old while 3.7% are 65 years old and above. Dengue has emerged as one of the top ten leading causes of mortality in the region, while climate related diseases are five (5) out of ten leading causes of morbidity.

The province of Albay experiences an average of 20 typhoons per year, the most destructive to date being Typhoon Reming (international name: Durian). The province has a total population of 1,190,823 with annual growth rate of 1.22% and a population density of 464 persons per square kilometer. The economy is basically agricultural and the average annual family income is Php110, 057 (2000). Poverty incidence is 38% which would be reflective of the whole region as Bicol is the second poorest region in the Luzon Island group and the fourth in the country in terms of poverty incidence. Leading causes of morbidity are mainly respiratory and gastrointestinal (food and water-borne) illnesses which regularly exacerbate in times of extreme weather events. Dengue is also a major cause of morbidity.

As health of populations is an important element of adaptive capacity to climate change, this project will try to showcase the development of adaptation options for the health sector in an urban landscape like Metro Manila and in rural communities of Albay. The project will work through adaptation interventions like early warning systems for climate related disease outbreaks and disease surveillance systems, disaster and emergency preparedness, enhancing capacity of health workers to prevent and manage climate-sensitive diseases, and increasing public awareness and action on the health impact of climate change..

### **Objectives:**

- Strengthen early warning and surveillance systems for climate change sensitive diseases;
- 
- Strengthen emergency- and disaster-preparedness and response for effects of climate change;

- Enhance knowledge and skills of health workforce on prevention and management of climate-sensitive diseases and mitigating and adapting to climate change;
- Increase public awareness and action on prevention of climate-sensitive diseases; and
- Document best practices on health adaptation strategy to climate change and develop a template for replication/upscaling

**JP Outcome 3.2:** Strengthened public health system with climate change adaptation measures and enhanced capacities of health institutions to anticipate and deal with the health impacts of climate change.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
.2 Early Warning and Surveillance, Disaster Preparedness, and Response Systems for Climate Related Diseases/Conditions in Metro Manila and Selected Provinces	Design of Model System for Early Warning & Surveillance for climate related diseases	WHO	DOH	Design strengthened early warning and surveillance system with guidelines on the following: (1) surveillance of climate-sensitive diseases during disaster; (2) community-based early warning systems and disease surveillance; (3) epidemic investigation and control for local government units; (4) coordination for multisectoral response during epidemics.	30.00			30.00
	System Pretested	WHO	DOH	Evaluate & refine design of systems	0.00	20.00	0.00	20.00

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Program me Priority	Implementin g Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	Implementation/Operationalization of Early Warning and Surveillance System in MM and other pilot areas	WHO	DOH	Implementat/Operationalize Surveillance System in MM and other pilot areas; Conduct capacity building of responsible institutions (DOH, sentinel sites, health centers, and local government units) for early warnings and disease surveillance systems	0.00	200.0		200.00
	Policy Document to implement the system.	WHO	DOH	Generate policy document to initiate implementation of systems	0.00		0.00	0.00
	Design and pre-test of assessment tool for safe hospitals during disasters	WHO	DOH	Design assessment tool for safe hospitals during disasters based on existing standards/indicators	20.00			20.00
	Assessment of vulnerability of hospitals to hazards	WHO	DOH	Conduct assessment of hospitals using developed tool	20.00	20.00		40.00
	Policy document for safe hospital indicators to be integrated to disaster risk reduction (DRR) policies and measures to ensure hospitals are safe from disasters	WHO	DOH	Generate policy document to initiate implementation of systems	.00		20.00	20.00
	Manual on climate sensitive diseases for health workers developed and reproduced	WHO	DOH	Develop and reproduce manual on climate sensitive diseases for health workers	40.00			40.00

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	Orientation and training of health workforce on mitigating health effects of climate change	WHO	DOH	Conduct training of health workforce on health effects of climate change	0.00	100.00		100.00
	Lessons learned KM product	WHO	DOH	Document processes, initiatives, and results of pilot project on climate change			30.00	30.00
				Total	110.0	340.0	50.0	500.00

### **3. Designing & Building with Nature: Showcasing a Climate Change Resilient Human Settlement in Sorsogon City**

#### **Background/Rationale:**

This project is proposed to showcase the development/enhancement of adaptive capacity on two (2) determinants: infrastructure and technology. Specifically, it will attempt to demonstrate the design and development of a model urban community with the appropriate social infrastructure.

Many human settlements in cities and municipalities are relatively ill equipped to cope with climate change impacts because they have not been designed to stand up to the challenges of this new phenomenon. These constraints are basically in terms of improper or poor siting, inadequate/inappropriate infrastructure and inflexible/undiversified economies, among others.

Majority of the Philippine's cities and municipalities are faced with these limitations and are not adapting to the new realities rapidly enough. It is, therefore, important to produce a template on how cities or human settlements can be developed to cope with or forestall adverse climate change consequences. Sorsogon City, being an "emergent" coastal city and situated in one of the most disaster prone provinces of the country, offers possibilities for showcasing a shift to such a settlement.

It is the currently the only city of the Province of Sorsogon which is located at the southeastern part of the Bicol Peninsula. Sorsogon Province is bounded on the north by the Province of Albay, on the east and northeast by the Pacific Ocean, on the south by the San Bernardino Strait, and on the west and northwest by the Ticao and Burias Passes, respectively. The province has an irregular coastline with the seas providing fishing activities for its artisanal fisher folks. Sorsogon is the epitome of a coastal province with most of its population concentrated in its coastal towns and lone city. Thirteen of its fourteen (14) municipalities and its capital, Sorsogon City, dot the province' 336 kilometers long coastline, stretching from the northern portion of Sorsogon City (Bacon District area) to the municipalities of Prieto Diaz, Gubat, Barcelone, Bulusan, Sta. Magdalena and Matnog, which face the Pacific Coast. The towns of Bulan, Magallanes, Pilar and Donsol are found on the western side while Casiguran, Castilla and the southwestern portion of Sorsogon City line the shores of the semi-circular Sorsogon Bay. Irosin, the only inland town, is at the heart of the southern half of the province, at the southwestern side of the Bulusan Volcano.

Sorsogon Province has been identified as one of the most high risk provinces relative to natural hazards, especially combined climate related and volcanic hazards. Its population, which stand at 709,673 as of August, 2007, are at risk of being severely affected in the event of any disaster. Of the total provincial population, Sorsogon City has the largest population share at 14.22%. 373,288 or 52.6% of the provincial population are poor, of whom 49 (%) are women. With its land area of 2,141.4 square kilometers, of which 81% or 173.4 thousand hectares classified as alienable and disposable lands and its population growing at 2% annually, a greater portion of Sorsogon may grow into population centers which could encroach into dangerous areas. At the same time, it has the opportunity to showcase sustainable human settlements which can be climate resilient. With a current LGU leadership with enough political will, to shift to a more sustainable development option, Sorsogon, specifically Sorsogon City, is an ideal location to showcase a model "climate proofed" community and adaptation options from which can be drawn up a template for climate risk resilient human settlements.

#### **Objectives:**

- To design and develop the appropriate social infrastructure for a climate change vulnerable urban community in a coastal city;
- To try out innovative climate mitigation and adaptation technologies in the urban/coastal setting;
- To codify a set of adaptation options for vulnerable human settlements

**JP Outcome 3.3:** A model “ climate resilient “ human settlements/community with climate change adaptable socio-economic infrastructure

**Indicators:** Guidelines on climate change sensitive human settlements development for coastal cities available by end of project; 30% increase in capacity of national & local planners to design climate resilient coastal human settlements.

**Baseline:** Guidelines currently non-existent; Capacity data non-existent and will be determined upon project start up.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
3.3 A Climate Change Resilient Human Settlement in Sorsogon City	Vulnerability Assessment Report of Sorsogon City, with emphasis on human settlement areas.	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Conduct of Vulnerability assessment of Sorsogon Province/City</li> </ul>	30.00	0.00	0.00	30.00
	City Shelter Plan with CC elements and parameters developed and implemented	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Conduct of Shelter Plan formulation workshop<sup>1</sup></li> </ul>			10.00	10.00
	Selected site for model “climate resilient” human settlement/ community.	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Site selection for the model climate resilient coastal settlement /community</li> </ul>	0.00	5.00	0.00	5.00
	Design of climate resilient coastal settlement/ community.	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Adaptation planning and settlements design with a follow up resource mobilization and partners/ donor’s buy-in</li> </ul>	30.00	15.00	0.00	45.00

<sup>1</sup> With legislative adoption through an ordinance.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	A well-designed Climate Resilient Human Settlement demonstrated.	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Implementation start-up</li> <li>Preparation of policy paper on climate resilient coastal settlements for the Philippines</li> </ul>	0.00	200.0	200.0	400.00
	Knowledge Product(s) documenting lessons learned  Guidelines on green houses/community infrastructure	HABITAT	HUDC	<ul style="list-style-type: none"> <li>Documentation of lessons learned &amp; production of knowledge products, sharing with other cities and national partners for policy learning.</li> <li>Dev't. of guidelines on green houses &amp; related community infrastructure</li> </ul>			50.00	50.00
							10.00	10.00
				Total	80.00	220.0	250.0	550.00

#### **4. Climate Resilient Farming Communities in Agusan del Norte through Innovative Risk Transfer Mechanisms**

##### **Background/Rationale:**

The economic condition of populations at risk, whether in terms of economic assets, capital resources, financial means, etc. is a very important determinant or factor of adaptive capacity to climate change impacts. Poor people are more vulnerable to projected impacts while the wealthy ones are better equipped to deal with the costs of adaptation. Moreover, access to, and not only availability of resources is also another important determinant which could spell the difference in a population's capacity to adapt to climate change and other similar phenomena. These resources include not only financial resources but also access to productive resources such as training, markets and technology. It is recognized that adaptive capacity of vulnerable communities will be greater if social institutions and arrangements governing the allocation of power and access to resources is more equitably distributed. A more integrated and comprehensive approach is required to ensure long-term preparedness for climate change.

This project aims to showcase these determinants at work, where target vulnerable populations are provided access to financial and productive resources for purposes not only of helping them cope in the event of climate change triggered disasters but of improving their socio-economic lot, especially through diversified livelihoods schemes. Risk transfer mechanisms like revolving funds and innovative insurance schemes are expected to help develop resiliency through opportunities for farmers to diversify their livelihood base and reduce risk exposure through flexible financial mechanisms. Providing the enabling conditions for livelihood diversification is critical as new types of livelihoods are often required to effectively adapt to disasters and climate change vulnerabilities.

Agusan del Norte is a province with a land area of 259,052 hectares. It is bounded on the north by Butuan Bay and the Province of Surigao del Norte, Agusan del Sur on the south, Surigao del Sur on the east and Misamis Oriental on the west. It comprises 10 municipalities, 163 barangays and 1 city. Surrounded by mountains on the northwestern and southeastern fronts, the sea embraces valleys at its mid portion that runs in triangular form from the west and the plains fronting Butuan Bay on the east. Lording over this landmass in terms of elevation is the 2,012 meters Mt. Hilong-hilong in Cabadbaran which is part of the Diwata Mountain Range as its northeastern boundary with the provinces of Agusan del Sur and Surigao del Sur, the latter acting as watershed to the Caraga Region's major rivers. The other highlands in the province are Mt. Mabaho, 1,823 meters in Buenavista and Mt. Piglalahan, 810 meters in Carmen. Primarily an agricultural province, Agusan del Norte is the region's leading rice producer. Other major crops are coconut, corn, mango, bananas, vegetable and prawns. The province continues to be a major timber producer, with plywood plants operating in Butuan City, Buenavista and Magallanes. Minor licenses concentrate on gathering rattan which is considered as the best in the country. The emerging industry mix is on agri-business where the 2 special economic zones (TAPCEN & NANIE) will play a vital role in transforming the place from a timber dependent industry to a balanced agri-forestry-tourism industry. As of 2000 census, Agusan del Norte has a total population of 285,570, of who 138,647 are women (48%) and approximately 100,000 (35.2%) are poor. The annual growth rate stands at 1.42%. The province has also been identified as an area vulnerable to climate change impacts, with many poor corn farmers standing to be affected significantly.

##### **Objectives:**

- To develop and test financial safety nets for vulnerable populations, especially women; and
- To develop the capacities of vulnerable populations to participate and avail of the benefits under economic diversification and a democratized governance system.

**JP Outcome 3.4:** Vulnerable groups 'climate change adaptive capacity strengthened through increased access to financial resources and economic diversification opportunities

**Indicators:** An operational revolving alternative livelihood fund and insurance scheme for farmers; 30% increase in capacities of Agusan CBOs, especially women farmers & groups to develop, implement & monitor alternative livelihood(s); % increase over baseline in income of farmers, esp. women farmers by end of project.

**Baseline:** A number of revolving fund in place but none set up deliberately for climate change impact mitigation esp. loss or decrease in income).

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Program Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
3.4 Innovative Financing Scheme for Climate Change Adaptation in ( Area)	Guidelines for the Innovative Financing	ILO	DTI/DOLE	<ul style="list-style-type: none"> <li>Design an innovative financing scheme(s) including the guidelines to enable vulnerable groups in study site to access financing assistance for CC resiliency purposes</li> </ul>	25.00	25.00	0.00	50.00
	Agreement with a Financing Institution to implement the Financing Scheme	ILO	DTI/DOLE	<ul style="list-style-type: none"> <li>Select Fund manager to administer the financing scheme.</li> </ul>		20.00	0.00	20.00
	Climate Change Adaptation Insurance Fund	ILO	DTI/DOLE	<ul style="list-style-type: none"> <li>Establish initial Fund for the innovative scheme</li> </ul>	0.00	500.0	0.00	500.00
	KM products & Policy Paper on possible upscaling/replication	ILO	DTI/DOLE	<ul style="list-style-type: none"> <li>Document results &amp; produce KM products &amp; policy documents</li> </ul>	0.00	0.00	30.00	30.00
Total					25.00	545.0	30.00	600.00

## **5. A2C2: A Local Governance Reform Model for Climate Resilient Development in the Bicol Region**

### **Background/Rationale:**

Developing the adaptive capacities of communities require scientific understanding of the problem, a unifying vision for its solution, community involvement in the required actions and commitment at the highest political levels. Forestalling the adverse impacts of climate change requires characterization and understanding of the risks involved. These knowledge and understanding should translate into increased managerial capacities of the concerned risk management institutions, including local government units and the local academic base. In short, a climate friendly governance infrastructure must be developed and put in place, including for planning , programming and regulatory processes. A major strategy to achieve this target is mainstreaming climate risk information into these processes and developing the capacities of the concerned entities in the whole governance sphere to operationalize this mainstreaming.

The national government, through the National Economic and Development Authority (NEDA) has developed a mainstreaming methodology for disaster risk reduction in sub-national physical framework and development planning processes, building upon the on-going multi-hazards mapping of the risk management agencies (PhiVolICS, MGB, PAGASA, NAMRIA) under the auspices of the National Disaster Coordinating Council. The same methodology is proposed to be applied in this demonstration project including developing a template for mainstreaming climate risk reduction measures into the education sector of the selected project site. Lessons learned from best practices such as that of the FAO on land-use planning, school garden programme, organic agriculture, and integrated pest management could provide the necessary technical inputs in the development of climate change curriculum framework especially in the elementary and high school levels particularly for those taking "vocational agriculture".

For this purpose, Albay, as one of the most highly disaster prone provinces, including to meteorological hazards , is proposed to be the showcase of this exercise. Albay is located in the Bicol region, a highly vulnerable group of provinces to climate change risks and other natural hazards. It is bordered by Camarines Sur in the north, Sorsogon and Lagonoy Gulf to the northeast and Burias Pass to the southwest. It also hosts one of the country's most active volcano- Mayon Volcano which recently figured in one of the most devastating climate triggered landslides. It has a total land area of 2,565.8 square kilometers, 50.6% of which is agricultural, 13.65% forestlands, 30.23% grasslands and 2.4% classified as miscellaneous.

Albay's total population count as of 2007 is 1,190,823 with an annual growth rate of 1.22%. The number of women are 537,006 and 412,000 are poor (37.8%). Its economy has a big agricultural base (32.2%), with abaca as the prime export commodity, as well as, pottery. Albay also hosts a number of industrial establishments, totaling 6,369, including the large geothermal sites in Tiwi and Manito and cement pulp and paper, as well as coconut oil milling plants. Fishery and forestry also contribute a significant portion of the province ' income at 21.46% but the biggest share of the economy is taken up by services at 46.18%.

Albay has the requisite political will to embark on this demonstration exercise. Its political leadership has exhibited not only great enthusiasm for climate friendly development but has taken a high profile stance in climate change adaptation advocacy. It has, de facto, started to put in place reforms in the governance regime, envisioned to develop a climate and disaster risk resilient province. The project will translate this political will into a governance regime which systematically plans, programs and implements climate friendly development options.

**Objectives:**

- To develop climate risk information for mainstreaming into the comprehensive land use and development plans and programmes, as well as, the concerned regulatory processes of Albay province and its municipalities and cities;
- To develop the climate change curriculum framework of Albay province for mainstreaming climate change concepts into the primary, secondary and tertiary levels of the formal educational system; and
- To develop the required capacities of the key stakeholders in the governance infrastructure on the formulation and implementation of climate friendly, rights-based development options

**JP Outcome 3.5:** Enhanced governance infrastructure for mainstreaming climate risk management into local land use/development planning & programming & regulatory systems

**Indicators:** Comprehensive land use & development plans are climate risk based and guidelines for climate sensitive planning & programming available by end of project; 30% improvement in competencies of local planners of Albay to plan, programme and implement climate resilient development endeavors; % increase in awareness & knowledge of students on climate change issues, especially adaptation.

**Baseline:** Some inputs for Guidelines available; land use and development planning are not climate risk based. Data on level of awareness & extent of knowledge unavailable; to be determined at project start up.

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
3.5A model climate friendly governance infrastructure with adaptive capacities for climate change	Capacity gaps and Needs analysis report for the Province of Albay to adapt to Climate Change	UNDP	Province of Albay	<ul style="list-style-type: none"> <li>Conduct capacity gaps and needs analysis for the entire province to mainstream climate risk management into local development/land use planning &amp; programming, regulatory &amp; education system..</li> </ul>	25.00	0.00	0.00	25.00
	A total of 100 participants from these agencies and academic institutions will have been trained under this activity	UNDP	Province of Albay	<ul style="list-style-type: none"> <li>Conduct of training on climate impact risk assessment &amp; management</li> </ul>	50.00	0.00	0.00	50.00

JP Outputs	SMART Outputs and Responsible UN Organization	Agency/ Country Programme Priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame ('000 US\$)			
					Y1	Y2	Y3	Total
	A strong and well capacitated governance infrastructure for Albay with adaptive capacities for climate change.	UNDP	Province of Albay	<ul style="list-style-type: none"> <li>Establish a coordinating mechanism among the sectoral agencies represented at the provincial level to serve as policy support in Albay's decision making process</li> </ul>	50.00	100.0	50.00	200.00
	Consolidated Provincial CC risk based Development and Land Use plans	UNDP	Province of Albay	<ul style="list-style-type: none"> <li>Dev't. of CRR enhanced land use &amp; dev't. plans for the province</li> </ul>	0.00	25.00	50.00	75.00
	Enhanced Curriculum Framework for all levels with mainstreamed climate change concepts  50 educators trained as trainers in their respective academic institutions.	UNDP	Province of Albay	<ul style="list-style-type: none"> <li>Develop a curriculum framework &amp; exemplar lessons for the primary, secondary and tertiary levels integrating climate change concepts.</li> <li>Conduct a Trainers Training among educators at the three educational levels for the proper execution of the curriculum framework.</li> </ul>	20.00	30.00	0.00	50.00
				Total	145.0	155.0	100.0	400.00

# Annex C



## INDICATIVE ANNUAL WORK PLAN<sup>1</sup>

United Nations Development Programme  
 Philippines  
 Year One (1)  
 Award Number: 000XXXXX  
 Award Title: MDG-F Climate Change Adaptation

Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Description Code	Amount US\$	
Strengthening the Philippines' Institutional Capacity to Adapt to Climate Change	JP Outcome 1: Climate risk reduction (CRR) integrated into key national & selected local development plans & processes.											
	Outputs under Activity 1	Activity 1. Develop baseline risk scenario, including vulnerability maps and CRR/adaptation monitoring system for priority sectors								71200	International Consultant	20,000.00
									71300	National Consultants(s)	80,000.00	
									71400	National Staff	38,400.00	
	By 2009, 43++ prov'l vulnerability + Biophysical socio-eco databases.	1.1 Conduct of risk baseline characterization including mapping					UNDP/DENR	30000	MDG-F	71600	Travel	40,000.00
	By 2009, an assessment report on the current meteorological forecasting systems and a development enhancement plan	1.2 Assessment of Current meteorological (typhoon & flood) forecasting systems & development of enhancement plan.					UNDP/DENR	30000	MDG-F	72100	Sub-Contract	100,000.00
									72200	Transport Equipment	25,000.00	
									72400	Communications & IT	136,600.00	

<sup>1</sup> Final 2008 AWP version to follow after the Inception Workshop

Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Code	Description	Amount US\$
	By 2009, an enhanced meteorological (esp typhoons & floods) forecasting systems in place.	1.3 Implementation of enhancement plan of meteorological forecasting systems					UNDP/ DENR	30000	MDG-F	74500	Equipment Miscellaneous	9,719.63
										75100	GMS (Management Fee 7%)	28,680.37
											<b>Sub-total</b>	<b>438,400.00</b>
	By 2009, 43++ provincial socioeco scenarios @various time slices.	1.4 Conduct of socio-economic projections in CC context					UNEP/ NEDA	30000	MDG-F	72100	Sub-Contract	140,186.92
	- By 2009 43++ economic assessment reports	1.5 Economic impact assessment of climate change risks, incl. incremental costs					UNEP/ NEDA	30000	MDG-F	75100	GMS (Management Fee 7%)	9,813.08
											<b>Sub-Total</b>	<b>150,000.00</b>
	- By 2010, 5 Sectoral CC adaptation monitoring system.	1.6 Dev't. of CC adaptation monitoring system for 5 sectors.					UNEP/ DENR	30000	MDG-F			
											<b>Activity 1 Total</b>	<b>588,400.00</b>
	<b>Outputs under Activity 2</b>	<b>Activity 2. Assess, value &amp; prioritize Adaptation options for key sectors, including "no regrets" options.</b>										
	By 2009, a compendium of adaptation best practices for development planning for 5 sectors.	2.1 Compilation of best practices / selection of priority measures for integration into dev't. planning processes.					UNEP/ DENR	30000	MDG-F	72100	Sub-Contract	50,000.00
										74200	Printing&Publication	43,457.93
	By 2009, a report on prioritized adaptation measures for 5 sectors.	2.2 Cost benefit analysis of adaptation options including "no regrets" ones.					UNEP/ NEDA	30000	MDG-F	75100	GMS(Management Fee 7%)	6,542.07
											<b>Activity 2 Total</b>	<b>100,000.00</b>

Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Description	Amount	
			Code		US\$							
	<b>Outputs under Activity 3</b>	<b>Activity 3.</b> Identify entry points for CRR in key national plans/planning & regulatory (e.g. EIA) processes and prioritize CRR adaptation best practices recommended for integration.										
	By end 2009, a report on plan/regulatory system(s) entry points.	3.1 Assessment of key nat'l. & sectoral plans for CRR entry points					UNDP/ NEDA	30000	MDG-F	72100	Sub-Contract	140,186.92
	By 2009, 2 nat'l, 5 sectoral & 1 local CRR mainstreaming guidelines for planning & regulatory processes developed.	3.2 Develop CRR mainstreaming guidelines for nat'l & local dev't. plans & selected regulatory processes like EIA					UNDP/ NEDA	30000	MDG-F	75100	GMS(Management Fee 7%)	9,813.08
											<b>Activity 3 Total</b>	<b>150,000.00</b>
	<b>Outputs under Activity 4</b>	<b>Activity 4.<sup>2</sup></b> Adopt CRR mainstreaming guidelines by key national government agencies and selected local governments.										
	By 2010, 1 nat'l executive issuances adopting/ mandating use of CRR guidelines in key planning/ regulatory process(es).	4.1 Develop. & adopt executive issuance(s) on CRR mainstreaming into planning/regulatory processes					UNDP/ NEDA	30000	MDG-F			0.00 (Zero budget for the first year)

<sup>2</sup> This activity will be undertaken on the second year.

Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Description	Amount	
										Code	US\$	
	By 2010, UNCT resolution adopting CRR guidelines for CCA/UNDAF.	4.2 Conduct consultative workshop(s)/ meetings(s)  4.3 Develop & issue UNCT resolution adopting CRR guidelines for next cycle CCA/UNDAF					UNDP/ NEDA	30000	MDG-F			
										<b>Activity 4 Total</b>	<b>0.00</b>	
	<b>Outputs under Activity 5</b>	<b>Activity 5.</b> Reflect in selected local development/ comprehensive land use plans CRR measures.								72100	Sub-Contract	186,915.89
	By 2011, 10 provincial development plans/ CLUPs with CRR measures.	5.1 Review & enhancement of selected provincial development plans & CLUPs.					UNDP/ NEDA	30000	MDG-F	75100	GMS(Management Fee 7%)	13,084.11
										<b>Activity 5 Total</b>	<b>200,000.00</b>	
	<b>Outputs under Activity 6</b>	<b>Activity 6.</b> Acquire web-based screening tool & portal for project developers/designers.										
	By 2009, 1 web-based portal & tool for project developers & designers.	6.1 Design, development, incl. piloting of web-based CRR screening tool & portal					UNEP/ NEDA	30000	MDG-F	72800	IT Equipment	46,728.97
	By 2009, IEC & orientation seminars on the use of the portal & tool	6.2 Conduct of IEC, including orientation seminar(s) on the use of the portal & tool.								75100	GMS (Management Fee 7%)	3,271.03
										<b>Activity 6 Total</b>	<b>50,000.00</b>	
<b>JP Outcome 2: Enhanced national and local capacity to develop, manage and administer projects addressing climate change risks.</b>												

Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Code	Description	Amount US\$
	<b>Outputs for Activity 7:</b>	<b>Activity 7.</b> Assess existing capacities and gaps of key NGAs, selected LGUs and local HEIs for CRR work.								72100	Sub-Contract	57,570.09
	By end 2009, 1 capacity assessment report on key NGAs, 43++ provincial LGUs & local HEIs for CRR work.	7.1 Assessment of adaptation capacity building needs of key NGAs & local stakeholders.					UNDP/ NEDA	30000	MDG-F	75100	GMS(Management Fee 7%)	4,029.91
											<b>Activity 7 Total</b>	<b>61,600.00</b>
	<b>Outputs for Activity 8:</b>	<b>Activity 8.</b> Raise awareness for key national & local stakeholders on climate change issues.										
	By 2009, one (1) national programme incl. multi media materials developed and implemented.	8.1 Develop a national CC IEC Programme.					UNDP/ DENR	30000	MDG-F	72100	Sub-Contract	40,000.00
										72500	Supplies	3,457.94
	By 2009, 900 decision makers from nat'l, LGUs, CSOs, private sector, target communities, media, academe oriented on CC issues esp. adaptation; 1 nat'l IEC plan implemented.	8.2 Develop and produce multi-media IEC materials.					UNDP/ DENR	30000	MDG-F	74200	Printing&Publication	10,000.00
										74500	Miscellaneous	40,000.00
										75100	GMS(Management Fee 7%)	6,542.06
		8.3 Implement the CC IEC programme, including dissemination of multi-media materials.					UNDP/ DENR	30000	MDG-F			
											<b>Activity 8 Total</b>	<b>100,000.00</b>



Project ID	Expected Output	Key Activities	Timeframe				Resp. UN Agency/ Party	Planned Budget				
			Q1	Q2	Q3	Q4		Fund	Donor	Budget Description	Amount	
			Code		US\$							
	<b>Output 3:</b>  By 2010, 1 nat'l publication on best practice & scaling up/ replication plan.	<b>Activity 10.</b> Enhance capacities of local stakeholders through demonstration projects on best practices to improve local coping mechanisms, including alternative livelihoods.										
	By 1 <sup>st</sup> quarter of 2009, 1 report on validated project concepts.	10.1 Conduct consultations on demonstration project concepts.					UNDP/ NEDA	30000	MDG-F	71600	Travel	3,728.97
	By mid-2010, 5 CC adaptation demonstration projects implemented.	10.2 Implement pilots on local coping mechanisms incl. devt' of alternative livelihood options.					See Annex B for Details	30000	MDG-F	72100	Sub-Contract	18,000.00
	By 2010, one (1) national publication on lessons learned.	10.3 Analysis of best practices, lessons; conduct evaluation and scaling up.					UNEP/ DENR/DA/ NEDA	30000	MDG-F	72200	Transport Equipment	25,000.00
	By 2010, one (1) scaling up/ replication plan.	10.4 Conduct evaluation & devt. of scaling up plan					UNDP/ NEDA	30000	MDG-F	75100	GMS(Management Fee 7%)	3,271.03
											<b>Activity 10 Total</b>	<b>50,000.00</b>
											<b>YEAR 1TOTAL</b>	<b>2,050,000.00</b>