

ACCESSING THE PEOPLE'S SURVIVAL FUND (PSF)

Communities For Resilience (CORE)



TRAINING MANUAL

ACCESSING THE PEOPLE'S SURVIVAL FUND (PSF) TRAINING MANUAL

THE CORE MODULES SERIES

The Communities for Resilience or CORE Program is a flagship capacity-building program of the Climate Change Commission (CCC) for local governments launched in 2016. CORE aims to help local communities adapt to climate change, reduce disaster risk, and acquire enduring resilience. It does so by promoting science-based local development planning through training, peer-to-peer learning, and expert mentoring by academic institutions.

To this end, CCC developed The CORE Modules Series, a series of instructional training modules designed to enhance the competence and proficiency of national and local policymakers and planners in risk governance, particularly in policy development, planning, programming, and budgeting for climate change adaptation and mitigation, and disaster risk reduction.

Introduced as an initial set of seven modules, The CORE Modules Series offer tools and methodologies that had been pilot-demonstrated in several cities and municipalities of the country. Lessons from their application were carefully considered in developing the modules. The National Panel of Technical Experts of the CCC vetted and endorsed The CORE Series modules in November 2017.

The CCC will continually enhance these modules as new knowledge and innovative approaches to building community resilience emerge. Eventually, videos and best practice case studies shall accompany these modules to make the training and learning processes more efficient and effective.

Now, The CORE Modules Series are all yours to help make your community resilient to disasters and climate change! Access and download them at the CCC website, www.climate.gov.ph.

Acknowledgement

This publication is part of the CORE Modules Series initiated and developed by the Climate Change Commission (CCC). This series of instructional training modules is developed based on scientific research, available literature, relevant works of experts, and the technical advice of the National Panel of Technical Experts of the CCC.

The CCC gratefully appreciates the collaboration and contribution of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Global Green Growth Institute (GGGI) in developing the initial set of CORE Modules Series.

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The Vice Chairperson and Executive Director Climate Change Commission Office of the President Malacañang Complex Manila

 Website:
 www.climate.gov.ph

 Email:
 info@climate.gov.ph

 Telephone:
 (63 2) 426-2948/ (63 2) 426-2950

 Telefax:
 (63 2) 925-8954

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Preface

Efforts to defeat poverty and promote social justice will be difficult to sustain unless measures are undertaken to help poor and highly vulnerable communities adapt to climate change. Changes in temperature and precipitation patterns, sea level rise, and extreme weather events can easily undermine development gains that the country has attained in recent years.

The Philippines posting the highest average increase in sea level since 1901 immediately puts at risk 13.6 million Filipinos living in coastal areas across the archipelago. Studies from the Philippine Atmospheric, Geophysical and Astronomical Services Administration and the University of the Philippines have also shown that current and future shifts in temperature and rainfall regimes will have significant impacts, mostly adverse, on our agriculture, forestry, water and coastal resources, health, and urban areas – bearing serious implications on our food and water security, energy sufficiency, human security, and ecological and environmental stability.

Meanwhile, destructive weather events will continue to pose a direct threat on our people and overall socio-economic development. From our country's experience with typhoons Yolanda (2013), Pablo (2012), Sendong (2011), Ondoy (2009), and Frank (2008), we already know that reconstruction costs take a substantial chunk off of our national budget. This challenge even becomes more daunting as we center rebuilding efforts on making communities more resilient to both sudden and slow onset of the impacts of climate change.

The country has already made progress in confronting climate change since the enactment of the Philippine Climate Change Act in 2009 and the Philippine Disaster Risk Reduction and Management Act in 2010. For its part, the Climate Change Commission (CCC) has been relentless in promoting climate change action on both domestic and international fronts. But much remains to be done.

As early as 2009, the United Nations Office for Disaster Risk Reduction identified three non-climatic factors responsible for the continuing escalation of disaster risks worldwide, most notably in developing countries. These are poor urban governance, vulnerable rural livelihoods, and declining ecosystems. Because of inherent "multidimensional inequalities," the poor and highly vulnerable communities end up experiencing more the adverse impacts of climate change.

It is in this context that the CCC conceptualized and implemented the Communities for Resilience Program or CORE Program. The CCC understands that building resilience requires a whole-of-society approach and that the starting point for this is the integration of climate change adaptation and mitigation (CCAM) and disaster risk reduction (DRR) into the development policies, plans and programs of the national government and local government units (LGUs), especially in areas that are highly susceptible to the impacts of climate change.

The CORE Program aims to strengthen the risk governance, science-based planning capacity, and overall resilience of LGUs along the country's 18 major river basins – areas which are sensitive to temperature changes, rain-induced floods, drought, sea level rise, extreme weather events, and other water- and weather-related hazards. All in all, the CCC initially brings its flagship capacity-building program on climate change to 48 provinces, 56 cities, and 777 municipalities that are vulnerable to climate change, with the goal of covering all the 80 provinces and 1745 LGUs and cities as it rolls-out the CORE training and capacity building initiatives.

The CORE Program neither aims to reinvent the wheel nor duplicate past and ongoing efforts by other government and non-government actors in the climate change and disaster risk reduction and management communities. Rather, it seeks to build on existing partnerships, adopt tested tools and methodologies, and harmonize different approaches from various sectors, including non-government

organizations, private sector and the academe. Fostering and facilitating the convergence of expertise, resources, and efforts of all stakeholders concerned is a key implementation strategy of the CORE Program.

State Universities and Colleges, in particular, will be tapped for their resources and expertise on research, tools development, and capacity building. Under the CORE Program, regional academic institutions will undergo training in science- and risk-based action planning for climate change to strengthen their capacities in guiding local decision makers and LGU planners on Vulnerability and Risk Assessment, Environment and Natural Resource Accounting, Natural Resource Assessment, Greenhouse Gas Inventory, Climate Change Expenditure Tagging, Geographical Information System, among other technical capacities, and on accessing climate finance such as the Peoples Survival Fund, that supports local climate change initiatives.

This publication is among The CORE Training Modules that shall come in series. The menu of methodologies and tools presented in these instructional training modules is intended to raise national awareness and competence on climate change actions among national and local government institutions, civil society, private sector, and communities, as well as among teachers and students in all levels. To LGUs, it is hoped that this would serve as a useful and practical guide as they prepare or enhance their Local Climate Change Action Plans (LCCAP).

SECRETARY EMPANUEL M. DE GUZMAN Vice Chairman and Executive Director Climate Change Commission

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Acronyms

AIP	Annual Investment Plan	
СВА	Cost-Benefit Analysis	
CBFM	Community-based Forest Management	
CBMS	Community-based Monitoring System	
CCA	Climate change Adaptation	
ссс	Climate Change Commission	
ссо	Climate Change Office	
CCVA	Climate Change Vulnerability Assessment	
CDP	Comprehensive Development Plan	
CDRA	Climate and Disaster Risk Assessment	
CDRVA	Climate and Disaster Risk and Vulnerability Assessment	
CEA	Cost-Effectiveness Analysis	
CLUP	Comprehensive Land Use Plan	
CNC	Certificate of Non-Coverage	
CSO	Civil Society Organization	
DA	Department of Agriculture	
DBM	Department of Budget and Management	
DBP	Development Bank of the Philippines	
DENR	Department of Environment and Natural Resources	
DILG	Department of Interior and Local Government	
DOF	Department of Finance	
DOST	Department of Science and Technology	
DRA	Disaster Risk Assessment	
DRR	Disaster Risk Reduction	
ECC	Environmental Compliance Certificate	
EIA	Environmental Impact Assessment	
GAA	General Appropriations Act	
IEC	Information, Education and Communication	
IP	Indigenous People	
IPCC	Intergovernmental Panel on Climate Change	
КВА	Key Biodiversity Areas	

LCCAP	Local Climate Change Action Plan
LCO	Local Community Organization
LDRRM	Local Disaster Risk Reduction Management
LDRRMO	Local Disaster Risk Reduction Management Office
LGU	Local Government Unit
M&E	Monitoring and Evaluation
MCA	Multi-Criteria Analysis
MGB	Mines and Geoscience Bureau
MOA	Memorandum of Agreement
MRF	Material Recovery Facility
NAMRIA	National Mapping and Resource Information Authority
NCCAP	National Climate Change Action Plan
NCR	National Capital Region
NDRRMC	National Disaster Risk Reduction and Management Council
NEDA	National Economic and Development Authority
NFSCC	National Framework Strategy on Climate Change
NGA	National Government Agency
NGO	Non-government Organizations
NPTE	National Panel of Technical Experts
O&M	Operations and Maintenance
OML Center	OML Center for Climate Change Adaptation and Disaster Risk Management Foundation Inc
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PDG	Project Development Grant
PHILVOLCS	Philipine Institute of Volcanology and Seismology
PIU	Project Implementing Unit
PPA	Program, Projects and Activities
PSF	People's Survival Fund
RVA	Risk and Vulnerability Assessment
UNISDR	United Nations International Strategy for Disaster Reduction
WFP	Work and Financial Plan

Definition of Terms

"Adaptation" to climate change impacts - the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates, harms or exploits beneficial opportunities. (IPCC)

Adaptive capacity - the ability to adjust to climate change to moderate damage, take advantage of opportunities or cope with consequences.

Climate - average weather conditions at a particular place over a long period of time, ranging from months to thousands of years. The classical period is 3 decades, as defined by the World Meteorological Organization (WMO). More rigorously climate is defined, as the statistical description in terms of the mean and variability of relevant variables such as temperature, precipitation, and wind.

Climate Change - is defined as "change in the climate attributed directly or indirectly to human activities, in addition to natural climate variability observed, over comparable time periods." (UNFCCC)

Climate variable and climate stimuli - can be used interchangeably and refer to the variables of climate such as temperature, precipitation, and wind. However, climate stimuli or climate-related stimuli often refer to "all the elements of climate change, including mean climate characteristics, climate variability, and the frequency and magnitude of extremes." (IPCC)

Disaster prevention and disaster mitigation - refers to avoiding hazards and mitigating their potential impacts by reducing the vulnerabilities and exposure, and enhancing the capacities of communities.

Disaster Mitigation - addresses proactively both natural and man-made hazards.

Exposure - characterized by the magnitude, frequency, duration and/or spatial extent of a climate event

Hazard - potential occurrence (not the physical event) of a natural or human induced physical event that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, and environmental resources (IPCC)

Mitigation - in the context of climate change, refers to human intervention to address anthropogenic emissions by sources and removals by sinks of all green-house gases (GHG), including ozone-depleting substances and their substitutes (IPCC). Mitigation addresses the greenhouse gases that cause climate change, which is either by reducing further the emissions/ greenhouse gases or enhancing the sinks that will absorb these greenhouse gases.

Potential impact - potential effect of a climate change hazard on a system of interest; can be positive or negative.

Sensitivity - the degree to which a system can be affected, negatively or positively, by changes in climate

System of Interest - the unit of analysis being looked at, e.g. watershed, agriculture sector, coastal community

Results framework - represents the logic that explains how the objective of a project is to be achieved. The results framework is translated into the set of indicators that measure the degree to which inputs are being transformed into specific activities and outputs, and the degree to which a relevant target population is using those outputs as the anticipated outcomes of the project. (Guidance Note on Results Framework, World Bank, 2013)

Weather - is the day-to-day conditions of the atmosphere at a particular place and time (OECD)

I. Overview

1.1 Background

The Peoples' Survival Fund (PSF) Training Manual was developed by the Climate Change Office (CCO) of the Climate Change Commission (CCC), with support fromdevelopment partners, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Global Green Growth Institute (GGGI). The Training Manual aims to guide resource persons in designing and conducting training workshops on the PSF that will cover the basic information to understand the nature, processes, and requirements to access the PSF.

1.2 Concept and Methodology

The Training Manual is composed of four parts. Each part corresponds to core topics that will support the local government units (LGUs)in developing their project proposals for the PSF. It is recognized that developing projects for PSF will require the participants to have a basic understanding on the following:

- Basic climate change concepts, such as the difference between climate change adaptation (CCA) and climate change mitigation, areas of complementation with disaster risk mitigation, and on the establishing climate data and information;
- Risk and Vulnerability concepts, and the importance of Climate and Disaster Risk and Vulnerability Assessments (CDRVAs);and,
- Different tools essential in determining the viability of an adaptation measure and the different processes to be undertaken in developing further a project concept.
- This Module serves as the foundation for LGUs in building their project proposals. This module also has ready references annexed, which includes the Frequently Asked Questions (FAQs) (Annex A) on the PSF, the Glossary of Terms, and List of Acronyms.

Part I	Part 2	Part 3
The Philippine Climate Change and Disaster Risk Context	The People's Survival Fund (PSF)	Understanding Climate Risk and Vulnerability Assessment
Part 4 Developing Project Proposals for the PSF		
Other References: FAQs, Glossary of Terms and List of Acronyms		

Figure 1. Structure of the Training Manual

Ideally, the module will be run sequentially starting from Part I to Part 4. However, depending on the level of experience or knowledge of the participants on the topics of eachpart, the trainer may shorten or skip some of the sessions or thepart entirely.

Each part is accompanied by a PowerPoint presentation that the trainer can use in delivering the session.Parts I and 3 have audio visual presentations (AVPs) that can be used as a visual aid. In general, standard training supplies such as manila papers, metacards, and markers are needed for the proposed learning exercises. The trainer mayalso improvise or make use of other supplies available to them. Each part will also need resource persons to emphasize relevant information based on their field of expertise and/or represented institution. Parts3 and 4 intend to incorporate a "feedback/ consultation/critiquing session" that will enable exchanges of inputs between the workshop participants and the resource persons.

1.3 Elements of the Module

The Module follows a **session plan** format. Each starts with a table presenting an **Overview of the Module**. The overview has the following information:

Table I. Summary of the Elements of the Module

Duration of the Module/ Part/ Sessions	Estimated delivery time
Materials Needed	Materials, including the presentation materials needed for the module
Main References	List of references used in the module that the trainer can further study
Objectives of the Module	Main objectives that the module intends to achieve
Expected Outputs	Concrete documents or specific learnings targeted to be achieved at the end of the module
Overview of the Sessions	Title of the Sessions covered by the module

Each part is subdivided into Sessions which present the key concepts to be discussed. The trainer may also request other resource persons to deliver the presentations in some sessions, guided by the objectives of a particular Part. Some Sessions would have Exercises to demonstrate the concepts discussed, most of which are done by the LGU group. In each part, there are Instructions for the Trainer boxes that the trainer can refer to in conducting the proposed learning activities or exercises in different sessions. The trainers are also invited to think of other activities or exercises that they may deem appropriate for the session.

Key Messages conclude the part summarizing the highlights and key takeaways of the sessions.

Table 2. Summary of the Module's Learning Goals

Modules and Sessions	Learning Goals	
Part 1: Setting the tone: Climate Change and Disaster Risk Reduction in the Philippine Context		
Session 1: Overview of Climate Change and DRR in the Philippines	 Level off on the definition of key terms Establish the relationship of climate change adaptation and disaster risk reduction Familiarize with climate information and data relevant to local adaptation planning 	
Session 2: Enabling Policy Framework for CCA and DRR	 Understand the context of establishing the PSF Identify CC policies, programs of the different government agencies and establish the linkages and areas of complementation 	
Part 2: The Peoples' Survival Fund (PSF)		
 Understand the nature of the PSF and the key provisions the PSF Law Overview of the PSF Understand the niche of PSF (particularly as a "suppleto funding") among the other funding mechanisms of t government 		

Session 2: Governance Structure of the PSF	 Understand the roles of different agencies involved in the PSF operations 	
Session 3: Accessing the PSF	Appreciate the process and requirements to access the PSF and post approval processes including disturgement and	
Session 4: Post-approval Process of the PSF	monitoring	
Part 3: Understanding the Basis for Adaptation Projects: Climate and Disaster Risk and Vulnerability Assessment		
Session 1: Climate and Disaster Risk and Vulnerability Assessment (CDRVA) Framework	 Level off on the definition and relationship of the vulnerability and risk functions Understand CDRVA as the basis for CCA planning and in the PSF project preparation 	
Session 2: Impact Chain:An Illustration of CDRVA	 Demonstrate the use of the CDRVA framework through the impact chain/ influence diagram 	
Part 4: Developing Project Proposals for the PSF		
Session 1: Overview of the Project Development Cycle	 Understand the general steps in PSF project development based on the Project Development Cycle Comprehend sections of the proposal template and develop 	
Session 2: PSF Project Proposal Template	a preliminary outline based on the CDRVA impact chain	

Sample Workshop Program

The four module components are designed to run for three full days. The trainer may adjust the overall program and duration of the sessions to meet the learning objectives based on the background of the participants and their level of exposure in the topics covered in each module. A sample program is shown below:

Table 3. Sample flow of Workshop Program

DAY I	DAY 2	DAY 3
Introduction to the Workshop and Participants Expectation Setting	Module 3	Continuation of Module 4
Module I	Module 3/ 4	Continuation of Module 4 Planning Way Forward
Module 2		End of workshop

The LGUS are the target participants of the workshops. In general, however, local community organizations (LCOs), as eligible proponents to the PSF, and other stakeholders, may also find the materials useful for reference. Local LGU partners such as the academe or civil society organizations (CSOs) may also be invited as possible co-implementing partners or resource persons. At the end of the workshop, participants are not expected to have a completed PSF proposal but a working document of the proposal. On the last day, it will be good to have a planning session on what needs to be done to move forward.

Likewise, an evaluation form shall be administered by the trainers to the participants to gauge the effectiveness of the module, as well as consolidate feedback for the conduct of the writeshop (Annex B).

II. Module I: Climate Change and Disaster Risk Reduction in the Philippine Context

Objectives	 At the end of the module, participants will be able to: Understand the context of establishing the PSF; Familiarize with climate information and data relevant to local climate change adaptation planning; Provide the basic information on the relationship of climate change and disaster risk in relation to the PSF; and Establish the linkages and areas of complementation with other mandates of government on climate change adaptation. 	
Materials Needed	 Laptop LCD projector and screen Microphone Manila paper Meta-cards Markers Masking Tape 	
Timeframe	 Session 1: Overview of Climate Change and DRR in the Philippines Session 2: Enabling Policy Framework for CCA and DRR 	Estimated Total Duration: 2-3 hours
Methods	 Pre-test Audio-visual presentation Module I PowerPoint presentation Resource Speakers (i.e. DOST-PAGASA, NPTE, DILG) 	
Tools and Reference	 National Climate Change Action Plan 2011-2028 National Disaster Risk Reduction and Management Plan 2011-2028 Climate Change in the Philippines, PAGASA 2011 Working Group 1: Physical Science Basis of the Philippine Climate Change Assessment Vulnerability and Risk Assessment Module under the CORE module series Climate Change Budgeting under the CORE module series 	

2.1 Introduction

The PSF recognizes the global character of climate change and also the varying impacts at the local level. It aims to encourage LGUs to develop and implement local climate actions using scientific knowledge and available information on climate change. This part aims to provide the basic understanding on climate change and climate change adaptation which will be the foundation for local climate change action planning. Session I. Overview of Climate Change and Disaster Risk Reduction in the Philippines starts off with the definition of key terms. It also discusses the relationship of climate change adaptation and disaster risk reduction, which are often mistaken for one another. The session concludes with an overview of the Philippines' climate and the changes across the years to show the impact of climate change on the country. Session 2. Enabling Policy Framework for CCA and DRR presents how the Philippines responds to climate change and disaster risks. The session introduces how the People's Survival Fund (PSF) came about and how this relates to the existing mandates of government agencies and LGUs.

Box I. Instructions for the Trainer: Breaking the Ice

As an opening exercise, ask the participants to group themselves according to the following category. This exercise aims to acquaint the participants with one another and also to set the tone for the topics in this Module.

- According to high, medium, low risk to flooding of residence
- According to ecosystem classification: coastal, terrestrial, forest, agricultural
- According to yellow, orange, and red for the magnitude of earthquake in your area
- According to using climate lens in their work planning: low, medium, high (using their own judgment)

After the exercise, explain the objectives of the Module (see slide I):

- I. To understand the context of establishing the PSF
- 2. To provide the basic information on the relationship of climate change and disaster risk in relation to the PSF

Before proceeding with Session I, distribute the pre-test questionnaire. Participants shall be given around 15 minutes to answer the pre-test. Collect the questionnaires. Refer to the answer key and discuss the answers with the participants.

Annex C. Pretest and Answer Key

Session 1: Overview of Climate Change and Disaster Risk Reduction in the Philippines

Definition of Terms

Box 2. Instructions for the Trainer: Short Audio Visual Presentation (AVP) on Climate Change

After showing the AVP, refer to Module/ Part I Presentation. Encourage an open forum after the presentation to clarify terms.

Climate and Weather. **Weather** is the day-today conditions of the atmosphere at a particular place and time. **Climate** is the average weather condition at a particular place over a long period of time, ranging from months to thousands of years. The standard period of observation data used is three decades, as defined by the World Meteorological Organization (WMO). More rigorously, climate is defined as the statistical description in terms of the mean and variability of relevant variables such as temperature, precipitation, and wind.

Climate Variable and Climate Stimuli. **Climate** variable and climate stimuli can be used interchangeably and refer to the variables of climate such as temperature, precipitation, and wind. However, climate stimuli or climate-related stimuli often refer to all the elements of climate change, including mean climate characteristics, climate variability, and the frequency and magnitude of extremes.

Climate Change Adaptation and Climate Change Mitigation. **Climate Change** is defined as "change in the climate attributed directly or indirectly to human activities, in addition to natural climate variability observed, over comparable time periods". Climate Change Adaptation refers to the "adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harms or exploits beneficial opportunities". Adaptation initiatives are conducted in an effort to reduce harmful effects and benefit from beneficial opportunities. Table 4is a matrix containing some climate change adaptation options. **Climate Change Mitigation** refers to human intervention to address anthropogenic emissions by sources and removals by sinks of all greenhouse gases (GHG), including ozonedepleting substances and their substitutes. Sectors that contribute to emissions include energy, transportation, industry, urbanization (solid waste), agriculture, forestry and other land use (AFOLU). Table 5 is a matrix containing some climate change mitigation options:

Table 4.	Matrix	on Climate	Change	Adaptation	Options	per Sector
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Sector	Adaptation Options			
Freshwater Resources (Hydrological changes due to climate change and its impacts)	Adaptive water management techniques, including scenario planning, learning-based approaches and flexible and low-regret solutions			
Coastal systems and low- lying areas	Integrated coastal zone management, local community participation, ecosystems-based approaches and disaster risk reduction mainstreamed into relevant strategies and management plans			
Marine systems and oceans	Marine forecasting and early warning systems			
Food production system/ Rural areas	 Developing new crop varieties adapted to changes in carbon dioxide, temperature, and drought Enhancing smallholder access to credit and other critical production resources 			
	Strengthening institutions at local to regional levels			

Table	5	Matrix	on	Climate	Change	Mitigation	С	otions	Der	Sector
Table	┙.	I TAUTA		Cinnacc	Change	i incigacioni	\sim		PCI	JUCCION

Type of Intervention	Sector	Mitigation Option		
Reducing emissions by sources (preventing further the	Energy	Shifting to renewable energy sources (e.g. wind, solar, bioenergy, geothermal, hydro, etc.)		
production of emissions)	Agriculture	Livestock management and limiting fertilizer use (with nitrous oxide component)		
Increasing sinks for GHGs	Forestry	Forest conservation and management		

Climate Change Mitigation and Disaster Mitigation. The difference between these terms is in what is being addressed. **Climate Change Mitigation** addresses the GHG that causes climate change, which is either by reducing further the emissions/ greenhouse gases or enhancing the sinks that will absorb these greenhouse gases. **Disaster Mitigation**, on the other hand, addresses pro actively both natural and man-made hazards by reducing the vulnerabilities and exposure, and enhancing the adaptive capacities of communities.

From the National Disaster Risk Reduction and Management Plan 2011-2028, disaster prevention and mitigation include DRR and CCA mainstreaming into national and local plans and programs; LDRRMO institutionalization; hazard and risk mapping; and establishment of early warning systems.

Establishing the Link of Climate Change Adaptation and Disaster Risk Management

Climate change adaptation (CCA) and disaster risk management (DRM) are not the same but are regarded as complementary actions. With or without climate change, weather and climate-related hazards (ex. typhoons) can lead to disasters especially if communities are not prepared. Climate change is expected to increase the frequency and severity of these hazards and other long-term or slow-onset events such as sea-level rise, ocean acidification, rising temperatures (i.e. ground, ambient, sea surface), and disaster risk management (pertaining to response measures)may not be sufficient to address these. For example, imagine what can happen to a community that is located in a floodprone area with the forecast of heavier rains or extreme events (i.e. tropical cyclones, drought, flooding) in the future?

Both CCA and DRRM share a common interest in understanding and reducing the risk created by the interactions of human with physical and biological systems. In general, DRM can help those practicing climate change adaptation to learn from addressing current impacts. Incorporating future scenarios in assessing the risks brought about by climate change, and taking into consideration climate stimuli which is central to CCA, can help those practicing DRM to effectively address future conditions.

The Human Security Agenda of the National Climate Change Action Plan 2011-2028 (NCCAP) emphasizes this complementation and identifies strategies to reduce risks of men and women and other vulnerable groups (children, elderly and persons with disability, etc.) from climate change and disasters. The National **Disaster Risk Reduction and Management** Framework (NDRRMF) on the other hand also envisions a shift to more proactive disaster risk reduction management. The National Disaster Risk Reduction and Management Plan 2011-2028 reflects this vision and identifies four thematic areas, as defined in the figure below: Disaster Prevention and Mitigation, Disaster Preparedness, Disaster Response, and Disaster Rehabilitation and Recovery.



Figure 2. Four Thematic Areas of NDRRM Plan (NDRRMC)

In summary, while climate change adaptation and disaster risk management have differences, both have an end goal of reducing the vulnerability and increasing the resiliency of communities. Figure 2 below summarizes the differentiating characteristics of CCA and DRM and the direct and indirect connections where complementation is seen. Both CCA and DRM intends to address hazards that are associated with extreme events (i.e. hydrometeorological hazards).



Figure 3. Conceptual Linkages of Climate Change Adaptation and Disaster Risk Management (NCCAP)

Overview of the Philippine Weather and Climate Information

Methods

Box 3. Method: Resource Person from DOST-PAGASA A resource person from DOST-PAGASA can be invited to provide additional

(recent) information and inputs for this part.

The Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) is the main source of information on the Philippine weather and climate. In 2011, PAGASA published the report "Climate Change in the Philippines" which presents historical and projected values of relevant climate variables for 2020 and 2050. The projections were made on the regional and provincial level for:

- projected changes in seasonal and annual mean temperature;
- projected changes in minimum and maximum temperatures;
- projected changes in seasonal rainfall; and
- projected frequency of extreme events defined by:

(I) extreme temperature (assessed as number of days with maximum temperature greater than 35 °C, following the threshold values used in other countries in the Asia Pacific region);

(2) *dry days* (assessed as number of dry days or day with rainfall equal or less than 2.5mm/day, following the World Meteorological Organization standard definition of dry days used in a number of countries); and

(3) extreme rainfall (assessed as number of days

with daily rainfall greater than 300mm, which for wet tropical areas, like the Philippines, is considerably intense that could trigger disastrous projected events).

Box 4. Instructions for the Trainer: Accessing PAGASA's Climate Data and Information

Ask the participants to access the report "Climate Change in the Philippines" (and/ or other reports from PAGASA, such as data on Representative Concentration Pathways-RCPs) and ask them to look for the data applicable to their LGU, such as the climate type in their area and the projections for certain time periods.

Request the participants to note these down and think about: What do these climate data and forecast mean for my LGU and my community? Ask the participants to reflect if there are studies conducted that are specific to the LGU.

In 2016, the Oscar M. Lopez Center and the CCC published the report of "Working Group I: Physical Science Basis of the Philippine Climate Change Assessment." In addition to the observed trends and projection on temperature, rainfall

and extreme events presented, the report also discussed the Observed Changes in OceanClimate and Sea Levelin the Philippines (Chapter 5), which is relatively an underexplored topic but a significant area of study for the country.

Box 5. Observed Changes in Ocean Climate and Sea Level in the Philippines (some excerpts from Chapter 5, Working Group I: Physical Science Basis of the Philippine Climate Change Assessment)

In a study by Salamante and Villanoy (2000), the spatial and temporal variations of sea surface temperature (SST) of the water surrounding the Philippines and its relationship with El Niño Southern Oscillation (ENSO) events were examined using an Empirical Orthogonal Function (EOF) analysis on satellite-based monthly SST. Three periods are considered: strong, weak, and non-ENSO events. Based on the satellite images, **SST in the Sulu Sea was estimated to reach 26°C to 30°C** during non-ENSO events, but may be warmer by 1°C during a weak ENSO year whilst maintaining the minimum temperature. On the other hand, temperature is estimated to be from 27°C to 31°C during a strong ENSO event. In the **Celebes Sea, SST ranges from 29°C to 30°C** during the year in all cases (Salamante&Villanoy, 2000). In the **Philippine Sea, SST variations tend to be similar in the winter during weak and non-ENSO events** but the minimum temperature can vary by 1.4°C in July (Salamante&Villanoy, 2000).

In a recent study, Comiso et al. (2015) estimated that monthly SST in the Western Pacific region, including the Philippine Sea, have been increasing by around 0.23°C ± 0.02°C per decade from 1981 to 2014 based on high resolution NOAA SST data provided by NOAA/OAR/ESRL/PSO. Observations also show a higher increasing trend in the annual minimum SST values compared with the annual maximum SST, which indicates a likely warmer ocean mixed layer. Furthermore, the correlation of SST in the Pacific with maximum winds associated with strong typhoons may have implications on the likelihood of intense typhoons in the future given warmer SST (Comiso et al., 2015).

Climate-induced sea level rise is mainly a result of (1) thermal expansion of seawater as it warms (related to warming ocean temperatures), and (2) the melting of land-based ice. Land-based ice is comprised of (a) small glaciers, (b) the Greenland Ice Sheet, and (c) the West Antarctic Ice Sheet (Nicholls, 2011; Perrette, Landerer, Riva, Frieler, &Meinshausen,2013). In its Fifth Assessment Report, the IPCC reports with high confidence that the sum of these contributions to the global mean SLR from 1993 to 2010 is 2.8 [2.3 to 3.4] mm per year. The contribution from ocean thermal expansion brought about by warming is 1.1 [0.8 to 1.4] mm per year, which is almost 40% of the total. There is a limitation in the availability of local sea level rise (SLR) data, which constrains information on sea level rise for the Philippines Satellite data are often coupled with tide gauge station data to provide context about local sea level rise.

Session 2: Enabling Policy Framework for CCA in the Philippines

Climate Change Act of 2009 (R.A. 9729)

The Climate Change Act of 2009 strengthened, integrated, consolidated and institutionalized sector-based government initiatives on climate change. It called for the formulation of the **National Framework Strategy on Climate Change (NFSCC)** which looks into ensuring adaptation of the communities and ecosystems to climate change and at the same time, charting a cleaner, low-carbon development path highlighting the mutually beneficial relationship of mitigation and adaptation. **The LGUs are identified as frontline agencies** in the formulation, planning and implementation of climate change action plans in their respective areas, and shall formulate their Local Climate Change Action Plan (LCCAP), consistent with the provisions of the Local Government Code, the NFSCC, and the National Climate Change Action Plan (NCCAP).

National Climate Change Action Plan

The National Climate Change Action Plan (NCCAP) was formulated outlining the Philippine agenda and specific programs and strategies for climate change adaptation and mitigation for the period 2011 to 2028. Consistent with the NFSCC, the ultimate goal of the NCCAP is to build the adaptive capacities of women and men in the communities; increase the resilience of vulnerable sectors and natural ecosystems to climate change; and optimize mitigation opportunities toward gender responsive and rights-based sustainable development.

The NCCAP identifies seven strategic priorities: (I) Food Security, (2) Water Sufficiency, (3) Ecosystems and Environmental Stability, (4) Human Security, (5) Climate-smart Industries and Services, (6) Sustainable Energy, and (7) Knowledge and Capacity Development.

Mainstreaming Climate Change Adaptation and Disaster Risk Reduction in Local Plans

In compliance to the landmark laws, such as the Local Government Code, the Climate Change Act of 2009, and Disaster Risk Reduction and Management Act of 2010, Supplemental Guidelines on Mainstreaming Climate Change and Disaster Risks in the Comprehensive Land Use Plan (CLUP)were developed in 2014. This supplemental guidebook aims to assist LGUs as frontline agencies in assessing the climate and disaster risks and vulnerabilities of their area and eventually embedding the identified risks and vulnerabilities in their local planning process. The primary information contained in the guidelines is the conduct of a climate and disaster risk and vulnerability assessment (CDRVA) which ensures that all risks and vulnerabilities are identified.

The Climate Change Act, as amended by RA 10174 in 2012, also requires LGUs to formulate and implement their LCCAP. The complementation and/or integration of the LCCAP with the CLUP and/or Comprehensive Development Plan (CDP) also needs to be undertaken to ensure alignment in terms of the initiatives that will be implemented in their areas.

A deeper appreciation of the CDRVA can be found under Part 3. Full information on CDRVA can be found inthe supplemental guidebook of HLURB <<u>http://projectclimatetwinphoenix.com/wp-content/</u> <u>uploads/2015/06/Supplemental-Guidelines.pdf></u> and the guidebook for the LCCAP formulation <<u>https://lga.gov.ph/media/uploads/2/Publications%20</u> PDF/Book/BOOK%201-LGU%20Guidebook%20 in%20LCCAP%20Formulation%20%20(Process).pdf>.

Box 6. Method: Resource Person from DILG/ HLURB

Resource Persons from DILG (Local Government Academy or Bureau of Local Government Development or Regional Offices) or Housing and Land Use Regulatory Board (and its regional offices) may be tapped.

Amended Climate Change Act and the People's Survival Fund

Methods

....

In 2012,the Climate Change Act of 2009 was amended through the Republic Act 10174. The amended Climate Change Act in 2012 established the People's Survival Fund (PSF) as a means to provide long term finance stream to address climate change. The PSF supports climate change adaptation activities of local government units and community organizations. The in-depth discussion on the PSF is covered in Part 2.

Climate Investment Programming through the Climate Change Expenditure Tagging (CCET) As part of the monitoring and evaluation system for climate change investments, DBM, CCC and DILG issued a Joint Memorandum Circular in August 2014 to encourage LGUs to track their climate expenditures in their Annual Investment Programs/Plans (AIPs). This tagging system helps LGUs to: I) identify, prioritize and tag climate change programs, projects and activities (PPAs); and 2) take stock of climate change PPAs, track and report climate change expenditures. Typologies are identified and classified into adaptation and mitigation, and are sorted according to the seven thematic areas of the NCCAP. Full information can be found under the CCET module of the CORE series.

Box 7. Key Messages for Part I

- Climate change takes places on a global scale, but impacts are sector and local-specific.
- The Philippines has a strong policy environment for CCA and DRR, starting from planning, to financing, to implementation down to monitoring, tracking and evaluation
- LGUs and communities are frontline actors in CCA and DRR planning and actions.
- In recognition of these, the Climate Change Act of 2009 was amended, through RA 10174, which established the People's Survival Fund. The Fund aims to strengthen local actions on climate change adaptation and disaster risk reduction that are informed by science, climate data and information

III. Module 2: The Peoples' Survival Fund

Objectives	 At the end of the module, participants will be able to: Understand the governance structure of the PSF, general process of submission, and evaluation of PSF proposals; Understand the post-approval processes upon access of the PSF; Understand the difference between monitoring and evaluation of business-as-usual and adaptation projects; and Understand and define the roles of the Project Management/Implementation Unit, and the other Implementing Partners. Participants will be able to come up with the following outputs: Identified eligibility/compliance with regard to the "prioritization criteria" or accreditation guidelines of the PSF; and Identified indicative Project Management/ Implementation Unit who will manage the project and possible institutions or agencies as implementing partners for the PSF project. 		
Materials Needed	 Laptop LCD projector and screen Microphone Handouts Meta-cards Markers Masking Tape 		
Timeframe	 Session 1: Overview of the PSF Session 2: Governance Structure of the PSF Session 3: Accessing the PSF Session4: Post-approval Processes of the PSF 	Estimated Total Duration: 2-3 hours	
Methods	 PSF Audio-visual presentation Module 2 PowerPoint presentation 		
Tools and Reference	 RA 10174 Revised Implementing Rules and Regulations (R amended by RA 10174 PSF Proponents' Handbook 	R-IRR) of RA 9729, as	

3.1 Introduction

This Part provides the overview of the Fund and the essential information on the processes and requirements in accessing the PSF. Session I: Overview of the PSF provides the context for establishing the PSF and the key provisions of the PSF Act. Session 2: Governance Structure of the PSF discusses the composition of the PSF Board and the roles of the different government agencies. Session 3: Accessing the PSF explains the requirements for accessing the fund and the preapproval process (review and appraisal). Session 3 also introduces the Project Development Grant Window under the PSF. Session 4: Postapproval Processes of the PSF describes what proponents can expect once the projects are approved, which include fund disbursement and project monitoring.

Box 8. Instructions for the Trainer: Opening the Session

As an opening exercise, ask "Who is familiar with the PSF?" The participants will have a show of hands. By group (could be per LGU or per table), ask the participants to briefly discuss:

- I. What do I know about PSF?
- 2. What do I want know about PSF?
- 3. What are their expectations on accessing the PSF (If there are participants who already know PSF)

Prepare a board with these headings and ask the participants to post their responses on the board. The trainer can group similar or related answers and proceed to discuss the objectives, target outputs, and outline of the module. Keep the board and revisit the answers after the Module and see if the expectations were met.

Session 1: Overview of the PSF

Box 9. Instructions for the Trainer: Short Audio Visual Presentation (AVP) on the PSF

After showing the AVP, refer to Module/ Part 2 Presentation. Encourage an open forum after the presentation to clarify terms.

The Philippine national government created the People's Survival Fund (PSF) through a law signed in 2012, which recognizes that the adaptation needs and local capacities of each community are unique. The vulnerability of local communities to climate change varies greatly; thus, determining the cost of protecting one's community from the impacts of climate change is a challenge.

PSF will fund adaptation projects such as, but not limited to the following:

• Adaptation activities in areas of water resources management, land management,

agriculture and fisheries, health, infrastructure development, natural ecosystems including mountainous and coastal ecosystems

- Monitoring, control, and prevention of vector-borne diseases triggered by climate change.
- Forecasting and early warning systems
- Supporting institutional development, for local governments, in partnership with local communities and civil society groups.
- Strengthening existing, and where needed, establish regional centers and information networks
- Serving as a guarantee for risk insurance needs for farmers, agricultural workers and other stakeholders.
- Community adaptation support programs by local organizations accredited by the Commission

Note that these indicative projects and activities are general. For a wide range of specific

adaptation activities, one reference that can be used is the typologies under the Climate Change Expenditure Tagging (Refer to DBM-CCC-DILG Joint Memorandum Circular, Revised Guidelines for Tagging/Tracking Climate Change Expenditures in the Local Budget). However, the identification of adaptation projects and activities shall be supported and determined by science and evidence-based vulnerability and risk assessments, or development plans which have mainstreamed climate change in the planning process.

Who can access the PSF?

LGUs and accredited Local Community Organizations (LCOs) can access the PSF by submitting a project proposal.

Table 6. Definitions of LGUs and LCOs who can access the PSF

LGUS

 LGUs refer to provinces, cities, municipalities up to barangays. (Note: barangays may access the fund through their respective municipal LGU counterparts).

LCOs

- LCOs, on the other hand, pertain to locallybased organizations that are accredited for the purpose of PSF based on the criteria of organizational independence, track record in the community and/or field expertise, financial management and participatory practices.
- LCOs are also limited to propose soft types of projects (i.e. researches, capacitybuilding programs). According to the law, the role of local organizations to provide community adaptation "support" programs is indicated, and therefore, they should be synchronized with the efforts of the LGUs to where they belong to.

defined non-government are as organizations (NGOs), civil society organizations (CSOs), people's (POs), organizations basic sector organizations, cooperatives, professional faith-based organizations, associations, indigenous peoples movements, foundations, and other citizen's groups, that has maintained a local scope of work and has established a provincial or municipal operational presence, nonprofit and are formed primarily for social and economic development to plan and monitor government programs and projects, engage in policy discussions, and participate in climate change adaptation efforts.

LGUs and LCOs are further encouraged to form partnerships among them and with other LGUs, national government agencies (NGAs), academe, private sector and other development partners in developing and implementing projects.

Where does the funding come from?

The government allocates a budget of at least Php I billion annually for the PSF through the General Appropriations Act (GAA). The fund may be augmented by donations, grants, contributions or endowments from the private sector or development agencies. The PSF is the first facility dedicated solely to climate change adaptation. It is one of the many resources that the LGU can tap for adaptation projects.

The PSF is supplementary in nature. This means that:

 PSF funding is ON TOP of the regularly-funded programs, projects and activities (PAPs) of the proponents. There are funds normally allocated under the General Fund and/or Budget of the LGUs/ LCOs which may be identified for climate change adaptation but has corresponding sources of fund. Some initiatives have specific funding allocation in the Internal Revenue Allotment (IRA), under the Local Disaster Risk Reduction and Management Fund (LDRRMF) of the particular LGU. Further, the DILG also has a Local Government Support Fund (LGSF) that can fund activities relating to these. Likewise, the procurement of disaster response vehicles, as a regular item under the Quick Response Fund of the LGU, shall be excluded for PSF funding.

In other cases, funding ONTOP of the regular PAPs may denote funding the ADDITIONAL COSTS of these PAPs that will further enhance their adaptability to climate change. An example would be adopting technologies or improving/changing designs of existing structures to be climate-resilient to address projected impacts of climate change in the next 30-50 years.

 PSF has no parallel funding with NGAs and other institutions or non-government organizations (NGOs). As climate change adaptation involves a whole-of-country approach with cross-cutting concerns among sectors, NGAs and other institutions may also have CCA initiatives implemented already in partnership with LGUs and/or organizations. "Reforestation-related" or "watershed management projects" should be checked for parallel funding with the National Greening Program (NGP) and other programs under the Department of Environment and Natural Resources (DENR).

The proponents shall ensure that the proposed PSF project has no parallel funding with other agencies, which can be further resolved by performing due diligence in the proposal development stage. This can be done by close coordination and consultations with concerned agency/institutions during the proposal development stages.

An indicative list of funding sources with corresponding CCA initiatives by NGAs is provided further as a reference material.

Project proponents are highly encouraged to provide counterpart funding of at least 10% of the total project cost which can be either monetary or in-kind. In-kind can be in the form of personnel services relating to the project, office space and the utilities, equipment and/or transportation services that will be used in the project. This is to ensure the sustainability and the ownership of the proponent on the project proposal.

How does PSF prioritize?

The PSF is demand-driven. In the event that the demand exceeds the allocated budget for the PSF, for LGUs, there are three main criteria for project prioritization (PSF Manual of Operations, 2016):

- Poverty Incidence: (NEDA, PSA, provincial stats)
- Presence of multiple hazards: (NEDA, or through their CDRVAs)
- Presence of Key Biodiversity Areas (DENR-BMB)

Likewise, proposals are reviewed on how the following were considered:

- Strong Basis or Reference for Climate Change Adaptation
- Responsiveness and/or consistency with the development/sectoral plans and the accompanying investment programs (e.g., NCCAP, LCCAP, CDP, and CLUP)
- Potential social (and other positive) benefits (including co-benefits)
- Efficiency and Effectiveness on the Project Implementation
- Institutional mechanisms/ arrangements that facilitates multi-stakeholder consultation and participation
- Gender and PWD-responsiveness
- Risk/Mitigating measures for potential adverse effects (social/environmental)
- Sustainability
- Potential for replication and upscaling in other areas.
- Monitoring and Evaluation (M&E) arrangements

Box 10. Instructions for the Trainer: Alternative Brainstorming Matrix (Optional)

- Provide participants with metacards and ask them to write their ideas for a possible PSF project proposal. Post the responses on the board, then check if the said project conforms to the definition of climate change adaptation. Trainer may classify the answers/responses into I) CCA; 2) Climate Change Mitigation; 3) Disaster Response/ Mitigation, etc. A sharing on whether the project ideas can be applied to other agencies/institutions for funding can also be facilitated.
- 2. Ask 2-3 volunteers from the group to share their existing situation vis-à-vis the prioritization criteria of the PSF. For LGUs, ask them to share whether they conform to the three criteria. For LCOs, ask them if they are within the coverage of organizations specified by the PSF Board, as well as the accreditation criteria and guidelines.
- 3. Brainstorming matrix:

Vulnerability	Vulnerability Research supporting vulnerability		Research supporting adaptation measure

The brainstorming matrix aims to take stock of the current and available references to the LGUs on their vulnerability and possible adaptation measures, which will be useful in the next module.

Session 2: Governance Structure of the PSF

The **PSF Board** governs the PSF. The Board is composed of the Department of Finance (DOF) as Chair, the Climate Change Commission (CCC), National Economic and Development Authority (NEDA), Department of Budget and Management (DBM), Department of Interior and Local Government (DILG), Philippine Commission on Women (PCW), and sectoral representatives from the academe, business, and non-government organizations (NGOs).

Evaluation of project proposals is a core process in the application process of the PSF. The CCC engages the expertise of the **National Panel of Technical Experts (NPTE)** as well as the CCC Advisory Board in the review and evaluation of the project proposals. They can provide technical inputs to the project proposals. Depending on the nature of the project, members of the Advisory Board are also consulted to ensure non-duplication of the budget allocation.

The **PSF Secretariat** supports the PSF. It is a designated unit determined by the PSF Board. The

PSF Secretariat is in charge of all administrative arrangements with project proponents and presents the shortlisted proposals to CCC, for the Commissioners endorsement to the board.



Figure 4. Organizational Structure of the PSF

Session 3: Accessing the PSF The PSF Cycle

The PSF receives project proposals for two cycles per year, the schedules of which are announced by the PSF Board through the PSF Secretariat. These proposals are assumed to have already undergone consultations with relevant stakeholders and implementing partners to finalize the concept and implementation arrangements. conducted and coordinated by the PSF Secretariat along with the relevant agencies and institutions and CCC (with NPTE and/or its Advisory Board), as necessary. The process flow for LGUs is summarized in Figure 5.

In general, once the proponents submit project proposals, these undergo an evaluation process



Figure 5. Application and Approval Process of LGUs.

The process is also the same for LCO proponents. However, only LCOs who are accredited either through (I) DBM-DSWD-COA Joint Resolution 2014-01 or (2) DILG MC 2013-70, can readily submit proposals to the PSF upon submission of the copy of their accreditation. Figure 5 presents the process flow for LCOs.



Figure 6. Application and Approval Process for LCOs

Documentary Requirements and Evaluation Process

Proponents are required to duly accomplish the PSF Project Proposal Template. The Proposal Template includes the work and financial plan, results framework, sustainability plan, and monitoring and evaluation plan. This is further discussed in Part 4.

An initial set of documents are needed to be

submitted along with the accomplished Proposal Template in order to facilitate the processing of the application. These are summarized in Table 4. These documents are important in order to gauge whether the adaptation project being proposed has a sound basis based on the available climate information/data, and whether the project is in line with the development thrusts and priorities of the local government. For this reason, only proposals with complete submissions will be subject to the Pre-assessment and Review.

Table 7. Non-negotiable Initial Documentary Requirements

Initial Documentary Requirements	Why is it required?
Accomplished Project Proposal Template with the Work and Financial Plan	This elaborates the rationale for the project and the activities planned to meet the project goals. This also contains the cost of the activities and resources needed for the whole project. A monitoring and evaluation framework is also available.
Letter of Intent addressed to PSF Secretariat Head, signed by the local chief executive or president of the organization, for LGUs and LCOs respectively. Reference document for the basis of adaptation project proposed to the PSF	 Addressed to: PSF Secretariat Department of Finance (DOF)-International Finance Group, 5/F DOF Bldg. Roxas Blvd. Cor. Pablo Ocampo Street, Manila 1004, Metro Manila, Philippines This could be any of the following: Risk and Vulnerability Study/Assessment (RVA) or Climate and Disaster Risk and Vulnerability Assessment (CDRVA); Climate Change Studies specific to the locality; Enhanced CLUP/CDP; LCCAP. These documents provide the identified risks and vulnerabilities of the area. With this, the evaluators will be able to have a view of how the proposed project responds to the vulnerabilities and identified climate change impacts in their area. Further, the plans will indicate how the proposed project is aligned to the development goals, as well as how the project is prioritized in the plan. If none of the following is available, the LGU can propose the formulation of these studies and/or assessments through the Project Development Grant (PDG).
[For LGU proponents] Annual Investment Plan (AIP)	This ensures that the proposed project was embedded in the plans, and is considered a priority by the LGU. In cases however that the proposed project has not been programmed yet in the AIP, this has to be elaborated in the proposal template, under the Project Application Effectiveness section. This has to be further considered in the succeeding year's AIP.

During the course of the project evaluation, proponents may be requested to submit additional documents depending on the nature of the project and the results of Initial Review and Evaluation. The PSF Secretariat formally communicates the consolidated comments and/ or recommendations by relevant agencies and institutions on the project proposal and schedules Clarification/Validation meetings/Field Appraisal with proponents. The objective is to clarify and resolve some of the unclear components of the projects, and negotiate as well the project implementation and fund disbursement schedules.

Project Development Grant Window

In 2016, the Board approved the creation of a sub-financial window under the PSF called the **Project Development Grant (PDG)**. The grant recognizes the need for resources to put forward quality and sound project proposals to the PSF. Initially, Php 60 million pesos of the I-billion appropriation will be allotted to this window. All eligible projects may request funding from the PDG subject to a cap of PHP 2 Million per request or as may be determined by the PSF Board. The Board, however may opt to approve requests beyond PHP 2 Million in exceptional and

justifiable cases, upon the endorsement of the PSF Secretariat and other technical reviewers.

The PDG is open to local governments and local community organizations seeking to develop concepts or full project proposals for funding under the PSF.

The scope of funding shall include, but not be limited to, the preparation or development of project concepts or full project proposals, as well as assist qualified proponents to comply with PSF documentary requirements such as:

- Preparation of climate and disaster risk & vulnerability assessments.
- Pre-Feasibility or Feasibility studies including initial engineering studies, e.g. ground water assessment, soil tests, Geographic Information Systems (GIS) mapping of proposed project sites, BUT based on projects prioritized in already approved local climate change action plans.
- Full feasibility studies including detailed engineering and structural studies especially for infrastructure projects, e.g. erosion control measures, water systems, climate resilient technologies, and other highly technical studies (the proposed feasibility studies must be based on projects listed as priority under the approved local climate change action plans of the LGU).
- Cost-Benefit analysis of priority adaptation proposals based on the local climate change action plan or other climate-proofed plans.
- Studies, surveys, consultations leading to the preparation of an Environmental Impact statements (EIA) or statements (EIA).The EIA/EIS must be done by certified individuals or groups.
- Technical advisory services and/or other professional services to structure/prepare a proposal (provided that such services are not available at the level of the proponent)

Proponents accessing the PDG directly will still be required to submit a Letter of Intent to the PSF Secretariat. The following are minimum data/information that shall be included in the letter:

- Project Title
- Project Description (e.g. background,

objectives, significance, components, scope and limitation, main activities, stakeholders and, target beneficiaries of the proposed project)

- Reason(s) for Request
- Location
- Contact Details (e.g. contact person, telephone/mobile number, email address)

Session 4: Post-approval Process of the PSF

Fund Disbursement Procedure

At this point, it is assumed that all requirements requested from the proponents are already submitted and the components of the projects are finalized based on the evaluation. Once the PSF Board approved the project, the PSF Secretariat closely coordinates with the LGU or LCO recipient for the finalization of the Memorandum of Agreement (MOA). The MOA elaborates the project implementation, financial management, and monitoring, reporting and evaluation arrangements, including provisions on property rights, proposal modifications and risk management.

The disbursement of the fund will follow the existing government procedures related to LGUs. The fund release will depend on the milestones of the project as indicated in the M&E plan and WFP. The PSF Board designates the fund conduit, the Development Bank of the Philippines (DBP), which will facilitate the fund disbursement process through milestone releases.

Recipients will be requested to have a bank account (trust fund) designated solely for the PSF. Based on the agreement stipulated in the MOA, release of funds will only be facilitated upon compliance of the liquidation reports and accomplishment of milestones. Liquidation reports and other requirements negotiated per tranche are submitted to the PSF Secretariat for the milestone releases/disbursement schedule.

Box II. Instructions for the Trainer: Quick Application (Optional)

The trainer will ask each of the groups to enumerate possible members (within their LGU/ LCO) of their Project Implementation and Management Unit. Define roles of each member. They may as well determine what organizations or NGAs can be tapped to assist in the formulation/ development of the proposal.

Project Monitoring and Evaluation

The recipient must be able to track the progress of each of the activities in line with the approved M&E plan of the project. **Monthly/Quarterly progress accomplishment** reports shall be submitted to the PSF Secretariat, which shall include the following details at the minimum:

• Updates on the Approved Work and Financial Plan with separate column on status of implementation (with dates) • Pictures during implementation/ documentation of activity implementation

Quarterly or Semi-annual field validation will be conducted by the designated agency of the PSF Board. Upon project completion, a completion report shall be submitted to the PSF Board. An Impact Evaluation will also be employed by the PSF Secretariat 3-5 years after the project completion to assess impact and effectiveness of the adaptation measure and its contribution to climate resiliency of the community.

Cost of items procured

Box 12. Key Messages for Part 2

- The PSF is created to fund climate change adaptation projects of LGUs and LCOs. It is governed by the PSF Board chaired by the DOF.
- There are requirements to access the PSF, including submitting a project proposal and work and financial plan. There are templates and guidelines available for reference. These may be accessed through: http://www.psf.climate.gov.ph/
- Proponents will be prioritized based on a set of criteria set by the PSF Board.
- Projects for PSF funding must be community-driven and aligned with the overall development goal of the LGUs. Project proposals are reviewed and evaluated by different stakeholders, notable of which are the PSF Secretariat, CCC (through its NPTE and Advisory Board), and eventually by the PSF Board.
- Fund disbursement will be administered in a milestone release scheme through the designated fund conduit (in this case, the DBP). Monitoring and reporting mechanisms shall be strongly established.
- As climate change transcends a long planning horizon, the project shall be ensured to extend implementation beyond its project duration under PSF funding, as it further intends to contribute to long-term climate resiliency. The PSF Board will employ impact evaluation to monitor the said overall goal of the PSF.
IV. Module 3: Understanding Climate And Disaster Risk And Vulnerability Assessment (CDRVA)

Objectives	 At the end of the module, participants will be able to: Understand Climate and Disaster Risk and Vulnerability Assessment as the basis of adaptation planning and PSF project identification Identify priority adaptation measures based from their CDRVA (using the impact chain/influence diagram) Participants will be able to come up with the following outputs: Impact chain analysis/ Influence diagram and corresponding list of adaptation measures 			
Materials Needed	 Laptop LCD projector and screen Microphone Manila paper Meta-cards Markers Masking Tape Hand-outs (Impact Chain Analysis Template) 			
Timeframe	 Session I: Climate and Disaster Risk and Vulnerability Assessment (CDRVA): Conceptual Framework Session 2: Impact Chain - An Illustration of CDRVA 			
Methods	 Module 3PowerPoint presentation Hands-on Application (Impact Chain) Sectoral Experts as Resource Persons 			
Tools and Reference	 Vulnerability and Risk Assessment Module under the CORE series HLURB Supplemental Guidelines on Mainstreaming CCA and DRR in CLUP IPCC SREX CLUP Resource Book 			

4.1 Introduction

Adapting to climate change impacts requires an assessment of the climate and disaster risks and vulnerabilities. It is from this assessment that adaptation measures are identified and prioritized. While there are different tools and approaches in conducting climate and disaster risks and vulnerability assessments (CDRVA), there are common elements and questions that these tools and approaches aim to define and answer, which will be covered in this session. This session will guide proponents in identifying their adaptation projects for the PSF and will also provide a general overview of CDRVA that can also be proposed under the PSF. It is important to note that the PSF does not prescribe a particular tool or approach in CDRVA for the projects being proposed.

Before starting this module, it is important to gauge the status of the participating LGUs in terms of their local development plan preparation (i.e. LCCAP, E-CLUP, E-CDP).Participating LGUs/ LCOs may have different levels of comprehension on CDRVA, and thus will have different expectations from this part:

- Some LGUs may already have finished their CDRVAs and are in the process of completing their CCA-DRR mainstreamed CLUPs or have already *Sanggunian* approved CLUP, thus, this part will be a refresher. The exercise on the impact chain will need to refer to their conducted CDRVA and their approved plans.
- Some LGUs are still new to CDRVA and/ or are still being trained by DILG/HLURB and other relevant agencies and institutions. For this session, the exercise will serve as an introductory activity for the conduct of their CDRVA (which can potentially be identified as the project for PSF funding, thru PDG). The impact chain prepared by the participants will still need additional inputs involving stakeholder consultations and review of available references. If the LGU/ LCO wishes to undertake the full-blown CDRVA, they can refer to the Vulnerability and Risk Assessment module of the CORE series, or to the Guidebooks of HLURB and DILG.

This Module/Part aims to provide the general framework of CDRVA. Session I. Climate and Disaster Risk and Vulnerability Assessment: Conceptual Framework introduces the key elements of risk and vulnerability function and their relation to one another. This session also presents the general steps and data requirements to conduct CDRVA leading to the identification of possible adaptation measures for PSF.

Session 2. Steps in CDRVA introduces the impact chain and/or influence diagram as one of the tools that the LGU can use in presenting their CDRVA. This tool, among many others, is a visual summary of the risk and vulnerability assessment. The session provides guidance in developing the impact chain by defining its elements and steps. A hands-on exercise concludes the session. It should be noted, however, that the output of this module/part aims not to formulate a fullblown CDRVA, but rather, come up with a basic framework (through the impact chain) that can be used initially as a basis in identifying potential adaptation measures for PSF funding. In case the LGU already has identified priority PPAs, this section will ensure that the measures address the identified risks and vulnerabilities.

Session 1: Climate and Disaster Risk and Vulnerability Assessment (CDRVA): Conceptual Framework

To ensure that a certain initiative will be responsive to the impacts brought about by climate change, a climate lens will be an important component. A climate lens is an analytical tool to examine the extent to which a strategy, policy, plan, program or regulation has:

- Factored in climate change risks and the resulting vulnerabilities, which are existing or which may come in the near future.
- Considered how the measure or set of measures could lead to increased or decreased vulnerability or lead to maladaptation
- Determined, if any, how opportunities arising from climate change can be utilized (remember that climate change adaptation may also mean positive impacts)
- Identified existing strategies and policies needed to be revised to address current and future climate risks (Zoning Ordinance may need to be reviewed and revised; Coastal Resource Management Plans to address climate change effect in marine resources)

Climate lens is applied in the conduct of CDRVA. CDRVA enables the analysis of how a system is susceptible to risks brought about by disasters and climate change. Overtime, the terminologies and approach to conducting risk and vulnerabilities have evolved. However, the conceptual framework behind it remains.

In general, climate and disaster risk and vulnerability assessments look at:

- I. Stressors (these are climate and climaterelated stressors)
- 2. State of the system (e.g., LGU)
- 3. Harm/impacts to the system



Figure 7. Generic Framework of Risk and Vulnerability Assessment (Vulnerability Sourcebook, GIZ)

Figure 7 shows the generic concept of risk and vulnerability assessment. In general, a risk and vulnerability assessment looks at the stressors to a system and how this system is affected based on its current state or situation. The scope of the CDRVA is usually confined to a system of interest. System of interest is a general term for a sector, a project, policy, a physical area or location that will be the focus of the CDRVA. In identifying systems of interest, one can start by looking at the sectoral or development goals. This is especially relevant to the PSF to ensure that projects identified and submitted for funding are in line with the priorities and contributes to the overall development and adaptation agenda of the LGU.

Box 13. Instructions for the Trainer: Mini-exercise on Determining Systems of Interest/ Exposure Unit

As a short exercise, ask the participants to review their sectoral or development (CLUP/CDP) goals, choose 1-2 and think about how these goals can be affected by climate change. For example,

Goal: Provide safe and affordable water supply to all households

Possible Effect of Climate Change: The water system depends on ground water supply (shallow well) which is affected by changes in temperature and deficiency in rainfall (i.e. occurrence during drought).

Ask two to three LGUs to share their discussion in the plenary.

Understanding the Concept of Risk and Vulnerability

The concepts of risk, vulnerability, and their link have evolved over time and were influenced by different schools of thought. In this session, the reconciled concept of risk and vulnerability function stems from how these are viewed from the disaster risk management and climate change adaptation perspectives and how they change over time.

The IPCC Fourth Assessment Report describes vulnerability as a function (or the outcome) of exposure, sensitivity, and adaptive capacity. At the same time, vulnerability is also a factor contributing to (disaster) risk, as socio-economic characteristics, along with hazard and exposure, as defined by United Nations International Strategy for Disaster Reduction (UNISDR).Table 8shows a summary of these definitions.

Table 8. Definition of Vulnerability

	UNISDR-DRR	IPCC (4 th AR)
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.	The degree to which a system is susceptible to and unable to cope with adverse effects of climate change, including climate variability and extremes. Vulnerability is therefore a function of the character, magnitude, and rate of climate change (exposure) and variation to which a system is exposed (sensitivity), and its adaptive capacity (which is determined by physical, social, economic and environment factors)
Formula	Risk= Hazard* Exposure* Vulnerability	Vulnerability = (Exposure*Sensitivity) / Adaptive Capacity

The two definitions of vulnerability maybe summarized as; 1) resulting from the outcomes of changes in climate; or 2) as a factor contributing to risk (non-climate factors) in CDRVA. The most recent definition from the IPCC 5th Assessment provides somehow a reconciled concept of risk and vulnerability. Compared to the 4th IPCC framework, the framework is more risk-focused, aligned with the risk function of UNISDR. Consistent with the 4th IPCC Assessment Report, vulnerability is qualified as the function of the system's sensitivity and coping and adaptive capacity. Figure 4 illustrates the risk and vulnerability function. This function will be adopted in this module.



Figure 8. Risk Formula based on Vulnerability Sourcebook (GIZ, 2014); adapted to IPCC AR5 definition

The IPCC 5^{th} Assessment Report defines these as follows:

Hazard: The potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems and environmental resources. Hazard usually refers to climaterelated physical events or trends or their physical impacts.

To what are they exposed/vulnerable/at high risk?

• Example: Changes in average precipitation (occurrence of tropical cyclones) bringing flooding, riverine or coastal erosion

Exposure: The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.

Who/What are exposed/vulnerable/at high risk?

- Hectares of land exposed to coastal flooding
- Households affected by typhoons or storm surges

Vulnerability: The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

Vulnerability = Sensitivity (S), Adaptive Capacity (AC)

Sensitivity: The degree to which a system or species is affected, either adversely or beneficially, by climate variability or change, or directly or indirectly. In general, the higher the sensitivity of a system, the more vulnerable it is to climate change.

Why are they exposed/vulnerable/high risk?

• For human system: age, gender, biological constitution and socio-economic conditions affect one's sensitivity to climate change.

• For ecosystems: location, slope, geographic characteristics. Take for example, extreme heat, who is likely to be affected, the working age group or the senior citizens?

Adaptive Capacity: The ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences . Adaptive Capacity may be drawn from the presence or absence of skills, resources, technology and access to information, organizational support and/ or available funds to the LGU or community. In general, the higher the adaptive capacity of the system of interest, the less vulnerable it is to climate change.

What are available (and not) that lessen/aggravate their exposure/vulnerability/risk?

- Forest degradation
- No land/assets
- Literacy Rate/ Educational Attainment



Figure 9. Risk as a result of the interactions between Hazards, Exposures and Vulnerability of the System





Data Needs for the CDRVA

There are a number of tools available to conduct and present results of CDRVA—some are qualitative, others are quantitative using weights and indexes, and some use maps or tables. It is important to note that the PSF does not prescribe a particular tool or approach in CDRVA for projects proposed.

In all of these, the generic framework for risk and vulnerability assessment can be observed.

Conducting a CDRVA may be data intensive and often challenged by the availability of these data and information. This session presents the basic information needed and their possible sources. Recall from Module I the discussion on the climate data and information available from PAGASA. Making use of these information may entail technical support from sectoral experts at the national, regional or provincial agencies and local expertise from the academe. Expert judgment by the community members who have observed and experienced changes in the climate and its impact especially for a long or historical period should not be discounted.

Box 14. Data Needs for CDRVA

What data and information do the LGUs need? Which data already exist and what other sources can be tapped?

LGU DATA:

- Environmental and demographic profile
- Community-based Monitoring System (CBMS)
- Comprehensive Land Use Plan
- Ecological Profile
- Comprehensive Development Plan
- LCCAP
- LDRRM Plan and other Sectoral Plans

OTHER SOURCES:

- Local weather and climate data: PAGASA, DOST
- GeoHazard Maps, Multiple Hazard Maps: MGB, NAMRIA, PHIVOLCS, Google Maps, Project NOAH
- News clippings of climate and disaster related events (if available, for a span of 20-30 years)
- Literature/published researches
- Climate Change Commission

Decisions about climate change are complex, costly and have long-term implications. The risk and vulnerability assessment provides the information for policy makers and local planners to develop adaptation measures that respond to these risks and vulnerabilities.

Session 2: General Steps in the CDRVA process leading to identification of CCA options

In the formulation of enhanced CLUPs, CDPs and LCCAPs, CDRVA involves immense number of tasks and processes, as shown in Figure II.



Figure 11. Climate and Disaster Risk Assessment (Source: HLURB, 2014)

CDRVA/ CDRA is the integration of two distinct assessment tools: climate change vulnerability assessment (CCVA) and disaster risk assessment (DRA). According to HLURB (2014), DRA is a methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment to which they depend. CCVA on the other hand, is the key component of climate change adaptation which seeks to establish the elements exposed, describe their intrinsic characteristics that make them sensitive to the climate stimulus, estimate possible direct and indirect impacts, and determine the level of adaptive capacities to cope with the potential impacts.

For this session, terminologies under CCVA will be dominantly used, but note that DRA will not be discounted from the analysis. The linkages between the concepts of risk and vulnerability will be established using local experiences.

This session presents a different visualization/ matrix from the HLURB and LCCAP guidebooks, but still with the basic concepts aligned from the same guidebooks.

1. Take stock of the current situation in your system of interest

• Identify the natural and social assets (e.g.

crops, equipment, community institutions) and relevant actors (e.g. farmers, laborers, traders) within the system.

- List climatic changes already experienced, such as changing precipitation patterns, temperature extremes, etc.
- Consider if and how the system of interest's actors and assets are currently sensitive to climate variability
- Elaborate the system's current coping and adaptive capacity

This information may be summarized in the table below:

	А	В	С
System of Interest	Current Climate Variability/ Stimuli	Current Sensitivity	Current Coping & Adaptive Capacity2
Forests and Forest lands Primary forests Secondary forests Brush lands Open lands/ grasslands	 Annual Temperature is increasing Annual Rainfall decreases Change in timing of seasons 	 Threats of Deforestation and Forest Degradation Expansion of Farming activities in forest lands 	 Presence of local institutions 2,000 hectares of forest lands CBFM - covered Absence of settlements near fault zones
 Forest Plantations Agroforestry areas Timberlands A&D lands Area and location of production 	 Increase in typhoon frequency Increase in extreme events, flooding and drought Increase in min. & max temperature 	• Current scarcity of timber in the region	

Source: Patterns of Vulnerability in the Forestry, Agriculture, Water, And Coastal Sectors Of Silago, Southern Leyte, Philippines. (2011)

2. **Deal with the future**

After recognizing the current situation, the future impacts would also have to be looked into.

- Identify the hazards or climate change signals the system of interest will be exposed to. These are climate-related physical events or trends or their physical impacts.
- Define the exposure of the elements

(assets, actors) of your system of interest the presence of people, livelihoods, infrastructure etc. in places and settings that could be adversely affected.

- Assess the vulnerability based on sensitivity and coping
- Define the risk and rate the need for action.

	D	E	F	G	н
System of Interest	Hazard that the system of interest will be exposed to	Exposure	Vulnerability Assessment Based on sensitivity & capacity [B] and [C] in the previous table	Risk level and need for action	Adaptation Options
Forests and Forest lands Primary forests Secondary forests Brushlands Open lands/ grasslands Forest Plantations Agroforestry areas Timberlands A&D lands Area and location of production	 Loss of biodiversity Landslides triggered by excessive rains Flooding due to reduced forest cover Forest fires due to prolonged drought periods Pests and diseases Soil erosion 	 Upland farmers Migrants CBFM program beneficiaries Protected areas Forest-based production activities Communities in downstream/ low-lying areas 	• Vulnerable		 Use of early maturing crops Total logging ban Promotion of better watershed management Soil and water conservation practices Agroforestry management system

Source: Patterns of Vulnerability in the Forestry, Agriculture, Water, And Coastal Sectors Of Silago, Southern Leyte, Philippines. (2011)

Column G, which pertains to Risk Level, may be simply rated as high-low or scored. HLURB scoring for degree of impact may be applied:

Table 9. Degree of Impact Scoring

Degree of Impact	Score	Description
High	3	Estimated direct impacts in terms of number of fatalities, injuries and value of property damage will be disastrous given the extent of exposure and current sensitivity of the system. Medium- to long-term indirect impacts which may affect development processes will also be experienced. Significant costs needed to return to pre-impact levels.
Moderate	2	Moderate direct impacts in terms of number of fatalities, injuries and value of property damage are expected given the extent of exposure and current sensitivities of the system. Short- to medium-term indirect impacts which may affect development processes will also be experienced. Medium to low cost needed to return to pre-impact levels within a short to medium time period.
Low	I	Estimated direct and indirect impacts are low to negligible which can be felt within a short-term period. Minimal impacts to development processes and no significant cost needed to return to pre-impact levels.

For a full grasp and appreciation of the whole CDRVA process, following are some of the reference materials that can be used:

- HLURB's Supplemental Guidelines in Mainstreaming CC and DR in the CLUP
- DILG's Guidebooks in the Formulation of the LCCAP
- CLUP Resource Book (HLURB)

The **impact chain** is one way to illustrate and present CDRVA. A climate impact chain or simply, an impact chain, is a general representation of how a given climate stimulus propagates through a system of interest via the direct and indirect impacts it entails. It brings together all the elements of the vulnerability and risk function in a diagram that shows how one relate to another. Impact chains are used in the CLUP and CDP mainstreaming of climate change. This chain is especially useful for LGUs to ensure that the proposed measures for adaptation effectively address potential impacts or positively contribute to the adaptive capacity.

Convert the previous matrix into a diagram:

 Define the system of interest. Use the information identified in the previous exercise on determining systems of interest (from development goals) and classify what sector these system/s of interest belong to. Write them down on the metacards. Each sector identified will qualify as one (I) impact chain diagram.

- 2. Using as reference the climate information derived from the previous exercise (Accessing PAGASA's Climate Data and Information) in Part I, list down all the climate stimuli relevant to the LGU for the sector identified.
- 3. Identify the potential direct and indirect impacts to the system of interest/sector. List them on the metacards and draw lines connecting the identified climate stimuli to the impacts.

4. Also identify the vulnerability (adaptive capacity and sensitivity) of the sector/ system of interest/exposure unit identified.

5. Synthesize the findings of the CDRVA in the impact chain.



Figure 12. Impact Chain for Forestry Sector of Silago, Southern Leyte



Figure 13. Influence diagram for the forestry sector of Silago, Southern Leyte



Figure 14. Sample Impact Chain for Agriculture lifted from HLURB supplemental guidelines (also the case of Silago, Southern Leyte)

The end of the chain will identify the adaptation measures possible. Recall from Module I the definition of adaptation as the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adaptation measures can range from "soft" (example: policy, research, assessment, capacity-building trainings) to "hard" projects (infrastructure, retrofitting) or combination of both. These are context-specific and unlikely to be one-size fits all. There are however, good practices documented by other LGUs, or sectoral agencies (such as the DENR and DA) that would be a good reference for identifying adaptation measures. The NCCAP, introduced in Module I, which identifies initiatives for the 7 thematic priorities, can also be localized to address specific vulnerabilities of the LGU. LGUs can also consult local experts, such as the academe for possible measures or further studies.

Some guide questions in identifying adaptation measures :

I. What are the existing strategies for managing climate risks and addressing climate-related

hazards (for example, water conservation, integrated coastal zone management, or early warning systems for extreme weather events)?

- 2. Are these viable in the future, can these be built upon, for example, by increasing robustness of infrastructure design of roads or buildings through climate-proofing?
- 3. What other adaptation options that can be utilized to reduce impacts and improve resilience, for example, different legislative, regulatory, and juridical instruments (e.g. regulations and standards), financial and market instruments (e.g. licenses, user fees or labeling) or education and informational instruments (e.g. public awareness campaigns)?

From the same sample impact diagrams, below are the adaptation options generated after the VRA in Silago, Southern Leyte:

- Agroforestry technologies that considers the following:
 - Deep root systems that are able to explore larger soil volume for water and nutrients (helpful during droughts)

- Increased soil porosity, reduced runoff and increased soil cover lead to increased water infiltration and retention in the soil profile that reduces moisture stress during low rainfall years
- Higher evaporation rates than row crops or pastures can maintain aerated soil conditions by pumping excess water out of the soil profile more rapidly than other production systems
- Of ten produce crops of higher value than (annual) row crops
- Pairing of coconut and banana
- Development of rubber tree industry which grows in all soil types with year-round rainfall (subject to further suitability tests)

Box 15. Instructions for the Trainer: Exercise on Developing an Impact Chain

- Before proceeding with the exercise, ask if there are any questions or clarifications from the participants. Sample impact chain diagrams (Figures 13-14) are provided as reference.
- •The goal of the exercise is to emphasize the relationship of the different elements of the impact chain to each other and aid in framing adaptation measures.
- There are various diagrams to demonstrate the impact chain. The Supplemental Guidelines of the HLURB also present an impact chain (Figure 15). The main difference of the impact chain used in this Module is the addition of the identification of adaptive capacity and adaptation measures. The steps however are still consistent with HLURB's CDRA. If any, the CDRA is more detailed given its spatial considerations and mapping.

Provide the LGUs the template of the matrix above and ask them to develop their own impact chains. Depending on the time, ask 2-3 LGUs to share their outputs in plenary. Resource persons (sectoral, local experts) may be invited to provide inputs in checking the participants' impact chains. Encourage the other LGUs to also give comments or suggestions. This way it becomes a peer-to-peer learning activity. Some LGUs and other resource persons may have suggestions on adaptation measures, some may have comments on the way adaptive capacity were assessed or on the impact analysis.

Box 16. Method: Sectoral Experts

Sectoral experts (i.e. national/regional government agencies, academe, development partners) should be invited for a panel discussion to provide inputs and suggestions in the feedback session, upon presentation of the participants of their output. Suggested sectors are on coastal, marine, health, agriculture, water/watershed, forestry and urban.

Box 17. Key Messages for Part 3

Methods

- Climate change adaptation planning is not business-as-usual planning. In designing a CCA initiative, a climate lens is necessary. Conducting a CDRVA is the way to ensure the application of climate lens.
- Undertaking a CDRVA is data intensive. There are data available from the LGU themselves, some need to be coordinated with national or regional agencies, such as PAGASA, and some data gaps can provided with the help of local academic partners or expert judgment.
- The impact chain is also a tool that can be used to illustrate and understand the relationship of climate stimuli to a particular system of interest which will inform the decision-makers in developing policies and CCA programs, and in relation developing project proposals to access the PSF.

V. Module 4: Developing Project Proposals for the PSF

Objectives	 At the end of the module, participants will be able to: Understand the general steps in PSF project development based on the Project Development Cycle Familiarize themselves with tools that can be used to develop adaptation projects; and Comprehend sections of the proposal template Develop a preliminary outline based on the CDRVA impact chain 		
Materials Needed	 Laptop LCD Projector and screen Microphone Manila paper Hand-outs (PSF Project Concept Note/Proposal Template) 		
Timeframe	 Session I: Overview of the Project Development Cycle Session 2: Components of an Adaptation Project 	Estimated Total Duration: I day	
Methods	 PSF Audio-visual presentation Module 4 PowerPoint presentation Hands-on Application (PSF Project Proposal Template) Sectoral Experts as Resource Persons 		
Tools and Reference	• PSF Proponents' Handbook		

5.1 Introduction

This Part discusses in detail the PSF proposal template and the necessary preparations and considerations in developing the proposals to the PSF. The Part begins with Session I.Overview of the Project Development Cycle. The session aims to provide the general framework used in project management which covers the stages that PSF proponents will undertake. For this Module, the session only focuses on the 1st and 2nd Stages of the Project Development Cycle: Preparatory and Project Identification and Development. Session 2. PSF Proposal Template discusses the different sections of the template and presents guide questions in the writing these sections.

Box 18. Instructions for the Trainer: Stock-taking on the participants' experience on project development

By show of hands, ask the participants how many have been involved in developing project proposals, not necessarily for the PSF. Ask the participants what were their challenges then and the challenges they perceive in developing a proposal to the PSF.

Before proceeding with Session I, show the diagram (no labels) of the project management cycle and ask the participants if they can guess the four stages.

Session 1: Overview of the Project Development Cycle

Project Development Cycle refers to the way of managing projects which spells out the phases of the project from preparation to monitoring and reporting. It is a process that allows management and implementers to define, review and revise specific actions and approaches to be taken within these phases. Figure 16 shows an diagram of the Project Development Cycle and its phases.



Figure 15. Project Management Cycle

The project cycle provides a mechanism for stakeholders to be consulted and generates relevant information to assist decision making at key stages in the life of a project. The cycle has 4 stages:

- I. Preparatory Stage
- 2. Project Identification and Development
- 3. Project Implementation
- 4. Project Monitoring and Evaluation

This Session will not cover the entire cycle. Session I is limited only to the specific steps for the Preparatory and Project Identification and Development stages. While this session will not cover Project Implementation and Monitoring and Evaluation, these are covered in Session 2 as requirements in accomplishing the PSF Project Proposal template. General guidance on how these can be designed are provided for consideration in Session 2.

Preparatory Stage

Step I. It is important to identify the project management team and get the members on board from the very start. This will ensure not only ownership of the project, but also effective and efficient implementation. A Team Leader, or the Focal Person has to be identified among the team members, who will play an important role in steering and managing the proposal development, and eventually, once approved, the implementation of the project (Project Management Unit).

The suggested composition of the team is as follows:

- Planning and Development Office
- Health Office
- Engineering Office
- Environment and Natural Resources Office
- Agriculture Office
- Social Welfare and Development Office
- DRRM Office
- Budget Office
- SB Member Representative
- CSO Representative
- Private Sector Representative

It can be noted that these agencies or sector representatives are almost always the same agencies involved in the development of local plans (CLUP, CDP, LCCAP etc.). Existing teams within the LGU can be utilized (i.e. LCCAP core team, other project management teams). The local chief executive (governor or mayor) or the head of the organization will have a large stake on steering and setting the directions on the tasks that will be undertaken for the proposal identification and development phase. Through the executive and legislative agenda (ELA), the local chief executive has the prerogative to set priority concerns under his/her administration. In this sense, the project team shall further ensure that coordination mechanisms will be put in place and reinforced, so that amidst administration and priority changes, the established initiatives relating to PSF and climate change (in general) will be sustained.

Step 2. The PSF gives importance to communitydriven projects. Stakeholder consultations ensure that relevant actors are informed and participate in key decision-making related to the project. Consultations are conducted to:

- Solicit inputs both on the technical and financial design of the proposed project
- Discuss and decide on the prioritization of the measures proposed
- Ensure that the relevant actors are informed of the project and their respective roles in the project cycle management
- Validate or enhance the analysis used in identifying adaptation measures (example with local experts and direct beneficiaries of the project being proposed).
- Ensure there will be non-duplication of funds to better leverage the PSF funding (example with relevant regional offices of national agencies).

Stakeholders' consultation may be embedded in the entire cycle and not exclusive in the Preparatory Phase.

Project Identification and Development

Three Possible Scenarios

Before delving into the specific steps of this stage for the PSF, it should be clear what differentiates the PSF from other funding facilities. The PSF is created to finance climate change adaptation projects. Parts I and 2 provided the basic definition and framework in understanding climate change and climate change adaptation. As a recap:

- Adaptation is defined as the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. (Part 1)
- Climate and disaster risk and vulnerability assessment (CDRVA) informs the design of appropriate climate change adaptation projects. (Part3)
- The Impact Chain is one tool to demonstrate the use of CDRVA to identify possible adaptation measures. (Part 3)

At the minimum, proponents are required to have a CDRVA as basis for their adaptation projects. Proponents, especially LGUs, may find themselves in one of the three scenarios illustrated below:

Table 10. Description of Scenarios

SCENARIO I	SCENARIO 2	SCENARIO 3		
LGU already has updated and CCA-DRR - enhanced Comprehensive Land Use Plan (CLUP), Comprehensive Development Plan (CDP) and/ or Local Climate Change Action Plan (LCCAP).	The LGU does not have their updated CLUP nor CDP but has existing data, studies, and/ or assessments on climate and disaster risks (possibly a partial LCCAP).	The LGU does not have any updated plans nor risk and vulnerability assessments.		

Note that for three scenarios, LGUs are required to accomplish and submit the PSF project proposal template.

Scenario I is the ideal scenario in the sense that it complies with the planning requirements of the LGU. In this case, the LGU may review these plans and identify and prioritize which adaptation measure/s will be submitted to the PSF for funding. LGUs who find themselves under Scenario 2 has two options: (I) LGUs can tap the Project Development Grant (PDG) of the PSF for the conduct of CDRVAs to update their respective CLUPs and CDPs and derive their LCCAP in the process (or vice versa), (2) based on their existing CDRVA, identify adaptation measures for PSF funding.

LGUs in Scenario 3 can tap the PDG Window of the PSF to fund their CDRVA and updating of plans.

Prioritizing Adaptation Projects for PSF Funding: Overview of Tools

LGUs submitting a full adaptation proposal may need to also prioritize which measures are submitted to the PSF for funding. The LGU may already have a long list of adaptation measures based on their CDRVA, LCCAP or CLUP or CDP. Though this is not explicitly required in the project proposal template, LGUs may find prioritizing useful in having a transparent and systematic way of selecting the projects submitted to the PSF. As an investment, adaptation projects have costs and benefits. In the context of adaptation, these are framed as follows:

- Cost: costs of planning, preparing for, facilitating, and implementing adaptation measures, including transactions cost
- Benefit: avoided damage costs or accrued benefits following the adoption and implementation of adaptation measures.

There are three common approaches in assessing the cost and benefits of adaptation measures. These are: (1) Cost-Benefit Analysis (CBA), (2) Cost-Effectiveness Analysis (CEA) and (3) Multi-criteria Analysis (MCA) ^{xxlv}. Each has their own strengths and weaknesses. CBA focuses more on the efficiency of the adaptation measure, CEA focuses more on identifying the least cost option, and MCA considers a number of criteria not limited to cost or efficiency. Quantifying costs and benefits against may pose a great uncertainty especially if data are not readily available. Figure II, shows the decision tree of choosing which approach to use.



Figure 16. Decision tree of possible approaches for assessing the costs and benefits of adaptation options (UNFCCC, Assessing the Costs and Benefits of Adaptation Options)

MCA is ideal for cases when costs and benefits of adaptation measures are difficult to quantify and therefore uses qualitative assessments. While conducting an MCA may be subjective, it can be made transparent by using simple scoring (ex. 1-5) and weights that have been agreed upon by stakeholders. A simple excel tool can be used to conduct an MCA. (Reference: GIZ_MCA_IMACC_2012). Usually, criteria used in prioritization includes: feasibility, costeffectiveness, co-benefits (or additional benefits), social acceptability. The LCCAP Book Iof DILG

Table 11. Subsections of Section B

also identified 3 criteria for prioritization of actions: urgency, resource requirement, and feasibility or effectiveness.

Session 2: PSF Project Proposal Template

PSF projects will have a number of considerations aside from the science-based risk and vulnerability assessments (Refer to Session I of Part 2). In addition, Table II below outlines the basic information in the proposal template.

Subsection	Overview
General Information	Summary table of project title, cost, duration, implementers, partners and type of project
Project Background and Rationale	Illustrate current climate variability, challenges and impacts to the LGU, and project's relation to addressing these
Project Goals and Objectives	Illustrate project's results framework
Project Application Effectiveness	Discuss inputs of stakeholders and partners to the project development and implementation;Alignment with national and/or local plans and policies
Safeguards	Discuss relevant co-benefits and/or externalities
Project Sustainability Plan	Discuss follow-up pans, maintenance plans, and possible upscaling or replication in other areas
Monitoring and Evaluation Plan	Discuss proposed M&E Framework for the project building on existing M&E System of the LGU.

The Project Proposal template is on Annex D.

Project Background and Rationale

This section provides the context under which the project is being proposed. It describes the specific problem and issues which are affected by climate change. The challenge in writing the project background and rationale is being concise. It is therefore important that the proponents focus on essential information related to the project being proposed. Referring to the impact chain can further guide the write-up for this section.

Table	12.	Essential	Questions	and	Information	for	Background	and	Rationale	e
						-				-

Subsection	Overview
	This should explain the effects and impacts of climate change being experienced in your locality. Note the effects are brought by climate change, hence it talks about hydro-meteorological hazards. Geological hazards may be briefly described as it may have relationship with climate change and variability (such as extreme rainfall and landslides).
What are the relevant climate change conditions and scenarios/ projections?	Reference: • Historical and Current Observed Conditions of the Affected Areas (Historical Data)
	Climate Projections
	• E-CLUP
	• E-CDP
	• LCCAP
	Risk and Vulnerability Assessments/Studies
What are the impacts of climate variability and potential impacts of climate change?	This relates to the question above, given your observed conditions attributed to climate change, it is to further discuss the impacts of the hazards and risks to your municipality. Cite concrete examples of some alterations in the bio–physical attributes, socioeconomic and environmental aspects of your municipality. It will be helpful if quantitative changes can be provided.
	Reference: Impact Chain CDRVA Existing Observed Conditions of the Affected Areas
How does the proposed project address these impacts and increase adaptive capacity?	Since the existing conditions and impacts were already described as answered in the previous questions, it is time to explain why the project is needed in order to provide solutions in the above said challenges.

Goals and Objectives

Defining the Results Framework and its Importance

A results framework is an explicit articulation (graphic display, matrix, or summary) of the different levels, or chains, of results expected from a particular intervention—project, program, or development strategy .Similar conceptual tools, also designed to organize information regarding intended outcomes and results, such as: logical frameworks, logic models, theories of change, results chains, and outcome mapping, all capture the essential elements of the logical and expected cause-effect relationships among inputs, outputs,intermediate results or outcomes, and impact. In the process, it also reveals how and under what assumptions results are achieved. Table I3 shows a sample of a condensed form of the results framework.

RESULTS FRAMEWORK						
Goal/ Outcome	Outcome Indicator	Outputs	Key Output/s Indicators and Activities			
Increase resiliency of ecosystems to climate change	X (number) Watersheds well-managed, rehabilitated & protected for sustained water supply, water runoff and reduced erosion; (100% forest cover of the baseline year will be maintained)	 Forest Cover Recovery and Protection Project Capacity-building activities for the communities on the following topics: Species identification Soil and water conservation practices Agroforestry systems Reforestation Activities Forest Surveillance and Protection Activities 	 1.1 Regular consultation meetings and training workshops for communities 1.2 Formation/ institutionalization of watershed management groups 2.1 Regular conduct of tree planting activities (using endemic species) 3.1 Establishment of early warning and information system 3.2 Regular workshops and meetings for the Forest Guards 			

Table I3a. Sample PSF Results Framework (Forestry sector, using Silago, Southern Leyte case)

Table 13b. Sample PSF Results Framework (Agriculture sector, using Silago, Southern Leyte case)

Goal/ Outcome	Outcome Indicator	Outputs	Key Output/s Indicators and Activities			
I. Sustain productivity of agricultural areas amidst impacts of climate variability/ climate change	1.1 Sustain productivity of agricultural areas amidst impacts of climate variability/ climate change	Climate Field School that aims to capacitate farmer beneficiaries of crop/farm adaptation measures	 Establishment of the building Training Modules and other IEC materials General assemblies for farmers (with their regular participation) Monitoring logbook of farmers using varieties from seed bank 			
	I.2 All farmers able to yield/harvest after disaster/ climate extreme events	Community seed bank that will collect and propagate cc-resilient varieties; Provision of the varieties	 Monitoring logbook of farmers using varieties from seed bank 			

The results framework tells the story of how the measures contribute to the desired outcomes, in the case of the PSF, to adaptation. Adaptation in itself is difficult to assess as it may overlap with other fields such as disaster risk management, sustainable agriculture and management of natural resources. It is also important to keep in mind that the results framework guides the work and financial plan of the project, which is also the basis for monitoring and evaluation. In the case of the PSF, this will also inform the tranche release of the funding. To address these challenges and accomplish the results framework, further guidance are presented below:

Framing the Project Goal/ Outcome

The Goal states what the project aims to achieve at the end of the project and even beyond the project implementation. Given that PSF projects are adaptation projects, it may be helpful to think of these long-term goals as describing the changes in the vulnerabilities and/or adaptive capacities that the project envisions.

Identifying Outputs to Meet the Goal/Outcome

Outputs to achieve the goals are defined in the results framework. These outputs or activities can be the conduct of trainings or workshops, procurement of supplies, hiring of consultants, building of infrastructures and others. These outputs and corresponding activities are included in the work and financial plan with their corresponding costs and timeline.

Defining the Indicators: Goal/Outcome: Outcome Indicator and Output: Key Output Indicators/ Activities

Indicators define what to measure to gauge the project's success in terms of implementation and achieving results. Outcome Indicators are intended to measure the uptake, adoption, and use of outputs, which are achieved through the conduct of activities, by the target group within the project period. Key Output Indicators measure progress by tracking the outputs from activities.

Two guiding principles in coming up with indicators:

- I. Formulate S.M.A.R.T indicators:
- Specific(i.e. defined in a precise way),
- Measurable(i.e. quantitative measures or description of qualitative conditions),
- Attainable(i.e. it should be possible to reach the target value of the indicator with the available resources), also Agreed (accepted by project partners)
- Relevant and,
- Time bound(i.e. timeframe is provided)
- 2. Set a baseline for each indicator (this also forms part of the monitoring)
 - Record baseline values for the chosen indicators
 - Choose target values to be achieved by the end of the project.

Box 19. Instructions for the Trainer: Exercise-Working on the Results Framework

In order to grasp the concepts of the results framework, participants can either:

Option I: Prepare their own results framework based on the measures identified in their CDRVA.

Option 2: Work on a case study and prepare the results framework (if CDRVA is not available).

Refer to Annex D for the case studies.

Project Application and Effectiveness

It is essential to provide a narrative of how the project came about. As PSF values stakeholder engagement in the design and implementation of the project, this section describes how the stakeholders were involved in the project preparation. If there are supporting documents (documentation reports) of these consultations, these may be included as annexes. This section also reiterates how the project is aligned with local or national plans and policies (Table14).

Table 14. Questions and Reference Material for	r Project Application Effectiveness
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Questions	Reference Material
What are the inputs of the beneficiaries in the development of the project and to ensure the success of the project?	Get the list of beneficiaries that have been identified. Mention the involvement and contribution of the beneficiaries in coming up with the project (i.e. meetings conducted, partnerships in previous projects, etc.)
What are the inputs of the Stakeholders?	Stakeholder consultation reports.
How does the project contribute to the local development plans, national development plan in addressing climate change?	Explain the relationship of the project to the plans and frameworks of the LGU, identify which goals it answers or addresses.
What enabling policies will the project contribute, if any and at which level? (Local or national)	State the existing policies such as ordinances, circulars or administrative orders in your municipality which the project responds to

Project Implementation

It is also important to provide details on how the project will be executed. This section outlines the roles of each implementing entities, including the project implementation and/or management team, the implementing partners, and other involved stakeholder groups. This section will also detail instruments, binding documents, and other mechanisms that will ensure implementation success. Table 15 shows a summary of the necessary considerations for this section of the proposal template.

Table 15. Questions and Reference Material for Project Implementation

Questions	Reference Material
What are the strategies you will use to attain the major output?	Revisit Section 1.1 of this Part. Provide a matrix of the internal project management team, and the implementing partners, with
Who among the LGU/LCO will be involved in the project implementation?	the corresponding roles in the project implementation. it may also be best to indicate what resolutions or other legal documents will be put in place to institutionalize
Are there implementing partners? What are their roles and contribution?	the project management team, ensure accountability and sustainability of their involvement.

Safeguards

This section addresses cross-cutting issues or themes that may be applicable in the project implementation and may require additional documentary compliance and procedures to ensure that the project will not entail negative externalities (or side effects) or possibilities for mal-adaptation. Table 16 summarizes the necessary considerations and reference materials to use. Table 16. Questions and Reference Material for Safeguards

Questions	Reference Material
Will the project involve Indigenous Peoples (IPs)? Describe their roles and the impact of the project to their group?	If applicable, indicate the roles and the impact of the project to these groups, as well as conducted consultations with them.
Will the project involve equally men and women/ and or contribute to gender equality (SDG 5)?	If applicable describe how the project ensures gender equality and how gender concerns were in incorporated in the development of the project.
Will the project involve land issues or other conflict issues? Describe the relevant land issue.	Provide the target coverage of the project (esp. for those involving establishment of structures—will it involve leasing lots? It may be advisable to prepare land titles/ deed of sale/ usufruct agreement).
Will the project have direct / indirect environmental impacts?	Describe the relevant environmental impact. It may be necessary to mention regulatory requirements that need to be secured (i.e. ECC, EIA, or CNC). This section can also contain information on the expected co-benefits of the project (e.g. mitigation benefits). Further, this section requires the enumeration of the measures on how such project impacts will be avoided/mitigated.

Project Sustainability Plan

Since climate change is set in a long-term planning horizon, sustainability will be a major consideration in the proposal—how climate resiliency is achieved. The PSF values projects that can be sustained even beyond the project duration. Proponents will be required to narrate in this section follow-up and operations and maintenance plan. As the PSF also aims to build the knowledge database on local CCA, possible replicability of the project in other LGUs are also presented in Table 17.

Table 17. Questions and Reference Material for Project Implementation

Questions	Reference Material
Are there follow–up plans after the proposed project	Mention plans on the operations and maintenance of the project after its completion This shall include the agencies
Is there an operations and maintenance plan?	involved and their roles, as well as possible funding sources.
Describe the O & M plan and indicate responsible agency or organization.	Further, the sustainability plan shall identify propose areas for project extension/
Is there a possibility that your project can also be done in other areas?	expansion in terms of areas/beneficiaries.

Monitoring and Evaluation Plan

The system for Monitoring and Evaluation is guided by the Results Framework. Monitoring is guided by the baseline values, timeframe, and frequency of monitoring of the indicators. The PSF Secretariat requires monthly/quarterly progress monitoring which includes reporting both on the activities conducted and the project spending.

A sample monitoring and evaluation template is

shown in Table 18. Consistent with the project's results framework, the following information are supplied in the monitoring and evaluation plan:

- How will the monitoring be conducted? Can refer to the means of verification for the indicator.
- Who is in charge in monitoring?
- When or how often will monitoring be conducted?

Pr	oject Component Go	oal/Objective: [Refer	to Results Framewor	⁻ k]
Project Baseline	Available data/Existing conditions related to the projectGoal (e.g. number of households-at-risk to flooding/climate-related hazards)			
Midterm	Establish targets/fig implementation (ba	ures that the project sed on the project ba	wants to achieve hal aseline)	fway of project
Terminal	Establish targets/fig project (based on t	ures that the project he project baseline)	wants to achieve upo	on completion of
Activity	Objectively Verifiable Indicators/ Means of Verification What to monitor?	M&E Methodology How to monitor?	Responsible Person/ Unit Who will monitor?	Frequency/ Target Date When to monitor?
I.I [Refer to Activities in Results Framework]	[Refer to Key Output Indicators in Results Framework]			
I.2 [Refer to Activities in Results Framework]	[Refer to Key Output Indicators in Results Framework]			

 Table 18. Project Monitoring and Evaluation Plan

Work and Financial Plan

As discussed in Session 2.2, activities identified in the results framework are presented in the Work and Financial Plan (WFP) with costs and duration. The WFP also tracks the proponent's counterpart in the project implementation. [Trainer can do a walkthrough of the Work and Financial Plan template.]

Box 20. Instructions for the Trainer: Feedback Session/ Consultation with the Experts

Participants will be requested to present their results framework. A panel of sectoral experts shall be present. They will be requested to provide clarificatory comments and other suggestions on the outputs of the participants that should be considered.

Sectoral experts (i.e. national/regional government agencies, academe, development partners) should be invited for a panel discussion to provide inputs and suggestions in the feedback session, upon presentation of the participants of their output. Suggested sectors are on coastal, marine, health, agriculture, water/watershed, forestry and urban.

Box 21. Instructions for the Trainer: Synthesis: Strategic Planning (Optional)

With the learnings throughout the workshop, it is necessary that the participants will be able to determine the next steps to be undertaken. The Strategic Plan, at the minimum, can include details on:

- Next Activities (such as scoping of available data and reference materials, meetings to be conducted)
- Resource Persons/ Stakeholders to consult
- Timelines/ Target dates

Box 22. Key Messages for Part 4

- Accessing the PSF requires submission of the PSF Project Proposal Template, which narrates the 4 steps of the of the project development cycle: from project preparation, identification and development, implementation, and monitoring and evaluation. The proposal will be the basis for the project review and evaluation.
- If the LGU does not have a CDRVA, the LGU may tap the PDG Window of the PSF for funding.
- The results framework is an important component of the Proposal template. As PSF funds adaptation projects, the results framework builds on the analysis of CDRVA. The results framework guides the monitoring plan and evaluation as well as the work and financial template.

VI. Endnotes

¹IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

" IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

III NDRRM Act

iv https://stats.oecd.org/glossary/detail.asp?ID=2919

^v https://stats.oecd.org/glossary/detail.asp?ID=2919

^{wi} IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

vii IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

viii UNFCCC,https://unfccc.int/files/essential_background/background_publications_htmlpdf/ application/pdf/conveng.pdf

^{ix} IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

× OML-CCC report

^{xi} IPCC, 2014, http://ar5-syr.ipcc.ch/ipcc/ipcc/resources/pdf/IPCC_SynthesisReport.pdf

xii IPCC, http://www.ipcc.ch/ipccreports/tar/wg2/index.php?idp=689

xiii NDRRM Act

xiv IPCC SREX, http://www.ipcc.ch/pdf/special-reports/srex/SREX-Chap1_FINAL.pdf

^{xv} NDRRMC, http://www.ndrrmc.gov.ph/attachments/article/41/NDRRM_Plan_2011-2028.pdf

xvi http://dilg.gov.ph/PDF_File/reports_resources/DILG-Resources-2012130-2ef223f591.pdf

^{xvii} http://www.omlopezcenter.org/the-philippine-climate-change-assessment/

^{xviii} More often, these "additional costs" also involve potential co-benefits (esp. of mitigation).

xix PSF Manual of Operations, 2016

^{xx} 8th PSF Board Meeting last 22 November 2016

^{xxi} IPCC SREX is a good reference to see the evolution

xxii IPCC AR4, TAR WG2

xxiii http://unfccc.int/resource/docs/publications/pub_nwp_costs_benefits_adaptation.pdf

xxiv For further information and case studies, check: http://unfccc.int/resource/docs/publications/pub_ nwp_costs_benefits_adaptation.pdf and http://www.adaptationcommunity.net/?wpfb_dl=144

xxv http://siteresources.worldbank.org/EXTEVACAPDEV/Resources/designing_results_framework.pdf

xxvi GIZ, Adaptation Made to Measure http://www.adaptationcommunity.net/?wpfb_dl=52

^{xxvii} GIZ, Adaptation Made to Measure 2nd Edition: http://www.adaptationcommunity.net/?wpfb_ dl=52

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Republic Act No. 10121: Philippine Disaster Risk Reduction and Management Act of 2010

Republic Act No. 10174: An Act establishing the People's Survival Fund, amending for the purpose RA No. 9729, otherwise known as the Climate Change Act of 2009.

Annexes

Annex A. Frequently Asked Question

• Who manages the fund?

The PSF is managed by a People's Survival Fund Board (PSFB), which is composed of five national government agencies chaired by the Department of Finance (DOF), Department of Budget and Management (DBM), National Economic and Development Authority (NEDA), Department of Interior and Local Government (DILG), Climate Change Commission (CCC) and Philippine Commission on Women (PCW), and three non-government representatives from the civil society, the academe, and the business sector.

• Can it be used for DDR projects?

The fund can be used for DRR initiatives that address hazards (directly or indirectly) brought by climate change (i.e. extreme weather events, long droughts, flooding, sea-level rise, rain-induced landslides, etc.). Interface with DRR's 4 thematic priorities will be on disaster prevention and mitigation and disaster recovery and rehabilitation, usually those with longer planning period/ horizon. It should be noted though that before determining projects relating to this, a science-based risk assessment has supported and recommended these adaptation options.

• Can it be used for researches or studies?

Yes, as long as applications can demonstrate that the primary goal is to provide more science-based, evidence-driven climate change adaptation plans for the locality. It can be submitted as a proposal to Project Development Grant (PDG).

• Can risk and vulnerability assessments be funded?

Yes, the proponent can propose it through the PDG.

• Can the formulation of LCCAP and other mandated plans be funded?

This depends on the target goal of the plans, which should incorporate climate change risks and vulnerabilities. With this, it is also vital that CDRVAs be included as a component.

It should also be noted that there are mandated agencies which can provide technical and financial assistance in the formulation of the plan.

• Can the proponents partner with an implementing entity in the implementation of the project?

Yes, the PSF encourages multi-sectoral partnerships among other government institutions academe, business, and non-government organizations.

• Can state colleges and universities (SUCS) access the fund?

The Board has been particular that SUCs cannot access the Fund. The organizations within them can, but should qualify under the accreditation guidelines for Local/ Community Organizations (LCOs).

• Can barangay LGUs access the fund?

Technically, they are defined as LGUs but it is encouraged that they coordinate with their municipal LGU to ensure that the planned actions will have larger scale in terms of the benefits.

• Why can't local organizations propose hard types of projects?

Local organizations are seen to support their communities, their local government unit. Initiatives also should be synchronized to ensure effectiveness. Local government units are also more permanent institutions to implement hard types of projects (infrastructure).

• Is there a ceiling amount for the cost of a project?

None. Each application, however, will be subjected to the evaluation and approval of the Board. It is therefore vital that the amounts and cost items of the project are justifiable.

• Is there a required project duration?

None, but it is suggested that a manageable project duration of at most 2-3 years will be proposed.

• Is there a counterpart contribution?

In order to ensure commitment towards effective project implementation, project proponents are encouraged to provide counterpart contributions (financial and/or in-kind) equivalent to at least 10% of the total project cost. In kind may be in the form of personnel services, equipment, office space and utilities. The higher the counterpart, the greater the weight the Board may give to the proposal.

• How will the project proposals be evaluated?

Submitted proposals will be appraised according to the following (in accordance with Section 24 of RA 10174:

- I. Level of risk and vulnerability to climate change;
- 2. Participation of affected communities in the design of the project;
- 3. Poverty reduction potential;
- 4. Cost effectiveness and attainability of the proposal;
- 5. Identification of potential co-benefits extending beyond LGU territory;
- 6. Maximization of multi-sectoral or cross-sectoral benefits;
- 7. Responsiveness to gender-differentiated vulnerabilities; and
- 8. Availability of climate change adaptation action plan
- How many days will it take before a project gets approved?

According to the Manual of Operations, it will take about 2-3 months before the projects get approved. However, this also depends on the responsiveness of the proponent to the comments of the technical reviewers.

• How will the funds be disbursed to local government units?

Fund disbursement will be according to existing government rules and regulations. It will be facilitated on a per tranche basis, depending on the agreed terms and conditions, and milestones under the Memorandum of Agreement between the proponent and the PSF Board.

• Should the proponent set up a new bank account to receive funds from the psf?

Yes, the local government unit should open a separate bank account for the PSF.

• How many days will it take before the funds will be disbursed?

It will take I-3 months before a peso reaches the accounts of the recipients. This is because after approval, negotiations with the proponents will be done to craft the terms and conditions in the MOA.

• Suppose a project has been approved, and upon implementation of the project, some of the costings changed. How will this be resolved?

The risks and other contingencies are stipulated in the MOA for the project. These will be duly noted by the PSF Secretariat and will be raised for decision by the PSF Board.

• What if the project being proposed is not covered under the annual investment plan?

Indicate in the Project Proposal that should the project be approved; it will be programmed in the supplemental AIP or in the succeeding AIP.

Annex B. Evaluation Form

PEOPLE'S SURVIVAL FUND (PSF) TRAINING WORKSHOP

Date

Venue

EVALUATION FORM

Name of Participant (Optional):

Organization/Office: _____

Contact No.: _____E-mail address: _____

Kindly answer the questions honestly and legibly by placing check on the answer corresponding to your point of view.

		5	4	3	2	I
		(Strongly Agree)	(Agree)	(Neutral)	(Disagree)	(Strongly Disagree)
OŁ	ectives and Targets					
١.	The activity achieved its objectives					
2.	The knowledge and information from the activity met my expectations					
3.	The information I acquired from participating in the activity are applicable and/or relevant in my work					
Program and Presentations						
١.	The content was organized and easy to follow					
2.	The resource persons exhibited broad knowledge and understanding of the topics presented					
3.	The resource persons used effective visual aids that are clear and easy to read					
4.	The resource persons encouraged participations and interactions					
5.	Resource materials were adequate and available					

Ev	ent Organization and Facilities			
١.	The venue and facilities were conducive for the orientation and participants			
2.	The facilitator was able to effectively encourage effective participation among the participants			
3.	The facilitator was able to guide and manage the expectations of the participants with the presentations delivered by the resource persons			
4.	The event was well managed and coordinated			

What is your overall evaluation of the orientation? (Please encircle):

5	Excellent
4	Very Good
3	Average
2	Below Average
I	Poor

What is the most valuable lesson you have learned from the orientation?

What topic would you like to learn and understand further?

Other Comments / Suggestions:

Annex C. Guide Questions for Pre- and Post-Evaluation

SAMPLE SET A

Rapid Training Needs Assessment

Please indicate if the Statement is True or False.

- I. Climate change is any change in climate over time, whether due to natural variability or as a result of human activity.
- 2. Weather is the condition at one particular time and place, including temperature and rainfall.
- 3. Greenhouse gases is the presence of carbon dioxide in the atmosphere.
- 4. The main human source of GHG is emission from agriculture.
- 5. Adaptation means increase resilience and coping capacity considering current and future changes in climate.
- 6. Vulnerability is the same as risk.
- 7. DRR is always a response to negative events.
- 8. There is a difference between climate mitigation and disaster mitigation.
- 9. Climate change refers to environmental impact of climate variability.
- 10. The impact of climate change will only come after a long period of time.

POST TEST

Please indicate if the Statement is True or False.

- I. The main human source of Ghg is emission from agriculture.
- 2. Weather is the condition at one particular time and place, including temperature and rainfall.
- 3. The impact of climate change will only come after a long period of time.
- 4. There is a difference between climate mitigation and disaster mitigation.
- 5. Adaptation means increase resilience and coping capacity considering current and future changes in climate.
- 6. Climate change refers to environmental impact of climate variability.
- 7. Vulnerability is the same as risk.
- 8. DRR is always a response to negative events.
- 9. Greenhouse gases is the presence of carbon dioxide in the atmosphere.
- 10. Climate change is any change in climate over time, whether due to natural variability or as a result of human activity.

ANSWER KEY

Rapid TNA		Post	Test
١.	True	١.	False
2.	True	2.	True
3.	True	3.	False
4.	False	4.	True
5.	True	5.	True
6.	False	6.	True
7.	True	7.	False
8.	True	8.	True
9.	True	9.	True
10.	False	10.	True

SAMPLE SET B

Pre-evaluation questions

	Question	Yes	No
١.	Do you know what is Climate Change?		
2.	Do you know the difference between Climate Change Adaptation and Climate Change Mitigation?		
3.	Do you know the different climate change hazards that might affect your municipality?		
4.	Do you know how to conduct a climate and disaster vulnerability risk assessment?		
5.	Do you know the requirements to access the People's Survival Fund?		
6.	Do you have a particular project proposal in mind, to be submitted for PSF funding?		
7.	Have you heard of the Project Development Grant?		
8.	Does your municipality have any civil organization partners?		

Please indicate if the Statement is True or False.

- I. Climate change requires a planning horizon of about 3-5 years.
- 2. Adjusting variants to drought-resilient crops is both a climate change adaptation and mitigation measure.
- 3. Flooding is a type of climate change hazard.
- 4. Every project proposal is limited to I Billion pesos.
- 5. PSF only funds climate change mitigation projects.
- 6. The proponent needs to submit a proposal template to access the fund.
- 7. A science-based climate and disaster risk and vulnerability assessment is required for a sound basis in developing your PSF project proposal.
- 8. Project Development Grant (PDG) can fund early warning systems.
- 9. A monetary counterpart funding is required from the proponents in accessing the Fund.
- 10. State Universities and Colleges (SUCs) and other Higher Education Institutes (HEIs) can be implementing partners for the PSF project.

Annex D. People Survival Fund (PSF) Proposal Template

SECTION A. BASIC INFORMATION OF THE PROPONENT		
Province/City/Municipality		
Name of Organization		
Income Class		
Authorized Signatory		
Contact Person		
Email		
Telephone		
Proposal Number	Filled by PSF Secretariat	
Date of Submission	Filled by PSF Secretariat	
Date of Receipt	Filled by PSF Secretariat	

SECTION B: INFORMATION O	ON THE PROJECT PROPOSAL
I. General Information on the F	Project
Project Title	
Project Timeline/Duration	
Project Site/ Project location	
Project Focus Area (Please check)	AGRICULTURE AND FISHERIES
	Introduction of climate-adaptive technologies in farming and fishing practices
	Monitoring and forecasting system for pest and disease outbreaks triggered by climate change
	Improving pest and disease control and prevention and health
	Monitoring of vector-borne diseases
	Risk insurance needs for farmers, agricultural workers and other stakeholders
	Others(Please specify)
	INFRASTRUCTURE DEVELOPMENT
	Establishment/Improvement of forecasting and early warning systems as part of preparedness for climate-related hazards
	Postharvest (storage, processing, other related facilities)
	Irrigation system (SWIP, ponds, runoff diversion canals and other) using climate-adaptive technologies
	Water harvesting systems; shallow tube wells, etc.)
	Climate change adaptive transport systems

	Others(Please specify)
	NATURAL ECOSYSTEMS (INCLUDING MOUNTAINOUS AND COASTAL ECOSYSTEMS)
	Watershed management
	Monitoring & Risk assessment
	Resource inventory
	Forest cover improvement
	Land use management
	Livelihood and capacity development for IPs and local communities (watershed management)
	Ecosystem management (particularly terrestrial and aquatic critical habitats, and protected areas in general)
	Restoration of Degraded Areas
	Others(Please specify)
	INSTITUTIONAL/CAPACITY DEVELOPMENT
	Establishment/Support/Strengthening of regional and local research/ information centers and networks
	Preventive measures, integrative and comprehensive local land use/ development planning, preparedness and management of impacts relating to climate change
	Contingency planning for droughts and floods in areas prone to extreme climate events.
	Conduct of assessment of impacts, vulnerabilities and adaptation to climate change impacts
	and capability building
	Advocacy, networking and communication activities in the conduct of climate change
	information campaigns
	Others (Please specify)
Project Beneficiaries	
Implementing Partner/s (If any)	
Amount of Financing Requested from PSF	
Amount of Counterpart Contribution	
Amount of Other Sources of Fund (If applicable)	

2. Project Background and Rationale (maximum of 750 words)

State relevant climate change scenarios in the local level and describe the challenges.

What is the present impact of climate variability (Describe the impact on the biophysical and social dimensions)?

Describe how the project will address climate variability and increase resilience.

3. Project Goals and Objectives

State your goals.(Describe the major outcome of the project, emphasizing the adaptation goal as it relate to the risks and vulnerability.)

State your objectives.(Indicate the objectives of the project that will help to achieve the major output in increasing resiliency.)

3. Project Goals and Objectives					
Goal (Long-term objective that reflects changes in the risk and vulnerability. Not more than 50 words and not more than 2 goals)	Outcome Indicator (Measurable indicators that address identified vulnerabilities)	Outputs (Defined based on the problems and challenges identified in #2)	Key Output/s Indicators/ Activities (Measurable indicators which can measure results of activities and progress towards outcomes)		
Ι.	1.1				
	1.2				
2.	2.1				
	2.2				

4. Project Application Effectiveness

What are the inputs of your beneficiaries in the development and success of the project?

What are the inputs of other stakeholders in the development and success of the project?

How does the project contribute to local development plans/national development plans in relation to addressing the impact of climate change?

What enabling policies will the project contribute, if any and at which level (local or national)?

5. Project Implementation

What are the strategies you will use to attain the major output?

Are there implementing partners? What are their roles and contribution?

6. Safeguards

Will the project involve Indigenous Peoples (IPs)? Describe their roles and the impact of the project to their group, if any.

Will the project involve land issues? Describe the relevant land issue.

Will the project have direct/indirect environmental impacts? Describe the relevant environmental impact and the relevant regulatory requirements (ECC, EIA or CNC, for example).

7. Project Sustainability Plan

Are there follow- up plans after the proposed project? (Please indicate)

Is there an operations and maintenance plan? Describe the O&M plan and indicate responsible agency or organization.

Is there a possibility that your project can also be done in other areas? (Please indicate how)

8. Project Monitoring and Evaluation Program

Project Component Goal/Objective:				
Project Baseline	Available data/Existing conditions related to your goal/objective (e.g. number of households-at-risk to flooding/climate-related hazards)			
Midterm	Establish targets/figures that the project wants to achieve halfway of project implementation (based on the project baseline)			
Terminal	Establish targets/figures that the project wants to achieve upon completion of project (based on the project baseline)			
Activity	Objectively Verifiable Indicators/ Means of Verification What to monitor?	M&E Methodology How to monitor?	Responsible Person/ Unit Who will monitor?	Frequency/ Target Date When to monitor?
1.1				
1.2				

(Source: Small Grants Program, DENR-BMB, 2015)

Section C: Information of the Implementing Partner/s

Name of LGU/ Office/ Organization/ Group	Contact Details (Postal Address, Contact Numbers Telephone, Facsimile, Email)	Indicative Roles/ Commitment
Reference (Institution or individual that can give more information about your institution)

Reference	Name	Institution	Telephone	Email
Ι.				
2.				

Section D: Attachments

- Letter of Intent
- Work and Financial Plan (See next Annex)
- Risk or Vulnerability Assessment OR Local Climate Change Action Plan OR Enhanced Comprehensive Land Use Plan/Comprehensive Development Plan
- Annual Investment Plan

Annex E. Case Studies

I. Disaster Risk Reduction and Management (Ridge to Reef) as an Adaptation Mechanism to Resiliency: PSF Proposal of the Municipality of Lanuza, Surigao del Sur

Profile

Lanuza is a coastal municipality situated along the eastern seaboard facing the wide Pacific Ocean. It has a total land area of 290.60 square-kilometers and populated by around 11,857 people both lowland settlers and indigenous peoples clustered into 13 barangays. The land area of Lanuza has been classified into Alienable and Disposable and Forest lands. 85% or 33,592 hectares comprised the Forestland &A& D is 6,143 has. These are further classified into two (2) specific category which are protection forest and production forest.



Based on GIS generated data, the municipality has an old Growth forest of 1,731 ha. designated for protection and a designated production forest of 31,850 ha of the remaining are of 6,143 ha classified as A&D, 75% of these areas are located in the lowland portion of the Municipality and a total of 1,808.20 ha of A&D lands are located in the uplands

Results of the Vulnerability Assessment/ CCA-DRR Plan

The climate projection of the Municipality expressed a 2.6 degrees increase in year 2050, at most during the months of June to August from its mean temperatures of 27.9 degrees, while there will be a 33.2% decline of rainfall in year 2065 from its observed baseline of 534.6 mm year 1971 to 2000. In records, heavy rainfall, flooding the river outflows occurred year 2010 where the water is very slow to subside. There storm surge and rain induced landslide are also expected to occur in highly exposed barangays. This also transcends to the low lying areas of the municipality where flooding is being experienced. The municipality also faces drought in the years to come given the above said climate projection. Flooding is the most prevalent disaster that affected particularly the low-lying barangays. From 1949 to 2011, there were sixteen (16) major flooding that affected these communities. Biggest casualty was recorded in 1975 where twelve (12) residents died. Biophysically, these affected areas are within the downstream portions of three (3) major river systems that naturally serve as discharge areas of flood waters.

Meanwhile, in the upland areas, based on the recollection of the community (the past 30 years), they started to experience extreme events in the early 90's (1994). These events happened within an interval of 5-6 years but only up to the early part of 2000. However, in 2008, consistently they have noticed a totally different extreme condition compared to what they used to experience since the early 90's. From 1994 until 2005, heavy rainfall coupled with strong winds have affected mainly their farm yields. On the other hand, in 2008, they started to notice rising temperature and declining rainfall.

Background and Rationale of the Project Proposal

These concerns will be addressed through the establishment of a climate field school, as crop and livestock productivity will be more sustainable amidst climate change and can provide viable income for farmers and fisherfolks in the municipality.

Components of the Project

 Watershed Management. An adaptation strategy that will help address flooding due to intense rain falls, dry season and denudation of watershed areas and forest covers. The rapid rate of denudation of forest covers leads to insufficient water supply, during dry season and overflowing of the water during rainfall, causing flooding in the low land area. Being a 4th class municipality, there is no existing comprehensive detailing of the watershed area for it to be managed. Profiling and demarcation of the forest and watershed area will also be supported by agro – forestry and rehabilitation.

- Eco-System(River&Mangrove)Management. 2. An adaptation strategy that aims to restore and nurture essential natural ecosystem components. This includes the conduct of river bank assessment and mapping of major rivers and restoration of mangrove plantation. River banks recommended for natural protection and rehabilitation will be planted with bamboos & other endemic trees species. For the Mangrove ecosystem component, activities include assessment, inventory, delineation survey and mapping of the 177 hectares of mangrove. Collection, propagation and planting of 10,000 Nipa and Bakhawpropagules in identified areas will also be part of this implementation.
- 3. Forest Cover Management. A strategy that will address forest degradation and deforestation while increasing direct benefits to people and the environment. Project activities involve are survey, delineation and demarcation of Community Protected Area, establishment and construction of nurseries within the recommended CADT areas and collection, propagation and production of endemic tree and fruit tree seedlings. Moreover, nurturing of endemic and fruit trees in aforementioned areas will be done including the periodic maintenance until such time the seedlings are capable to adapt in its environment. At the social level, it contributes to livelihood, income generation and employment since the project aims to capacitate nursery caretakers and propagators through nursery management training.
- 4. Livelihood and Capacity Development. The project contributes to the local economy of flood-vulnerable farmers, SIWA and communities living near the catchment basin. The activities include the construction of Nipa Wine and Sugar Facility and capability development training on Organizational Development, Marketing, Simple Book Keeping and Formulation of Operation's Manual.

Anticipated Socio-economic Benefits

- I. Increase in annual agricultural production;
- 2. Increase in production in Nipa wine and sugar; and
- 3. Savings from infrastructurere pair expense
- 4. Potential New Market for Bamboo, Nipa Wine, and Nipa Sugar Industry
- 5. Potential Increase in Forest Cover for Other Municipalities
- 6. Potential mitigation/ co-benefits (due to reforestation efforts)
- 7. Provision of opportunities to the women group of the municipality.

Implementation Arrangements

During the project appraisal, the LGU from the Local Chief Executive down to the Barangay Officials, agencies involved and indigenous people (IPs) expressed their interest, support and commitment to the project provided by different resolutions, the said will be likewise submitted by the LGU.

The LGU also released an executive order creating the technical working group composed of MENRO, MEO, MPDO, MAO, MDRRMO, MLGOO. Implementing partners include NGAs such as NCIP & DENR who will be complementing the project implementation.

Sustainability

An executive order creating the Project Implementation Unit has been issued, which will oversee and monitor the project. Further, the Municipal Government will also include in the amendment of their Sangguniang Bayan (SB) Resolution the allocation of budget in their AIP with regards to operations of the project after the exit of funding.

With regards to the involvement of the agencies, the municipality will also be having a Memorandum of Agreement with the agencies for their technical and manpower support after the exit of fund.

Environmental and other Risks

The projects will be solely implemented in the protected areas only, whereas the Department of Environment and Natural Resources (DENR) has an existing Co–Management Agreement with the municipality in terms of conservation, and overseeing of the forest area. The project will also be supported and institutionalized through resolutions from the CADT Tribal Council and the Association of Barangay Council which will be provided by the LGU.

Regarding the construction of the Nipa wine and sugar facility, the municipality have coordinated with the DENR to issue either the Environmental Compliance Certificate(ECC) or Certificate of Non- Compliance (CNC) whichever is the fitting instrument for the covered area.

II. Siargao Climate Field School for Farmers and Fisherfolks: PSF Proposal of the Municipality of Del Carmen, Surigao del Norte

Profile

Del Carmen is one of the nine municipalities in Siargao Island which is the second municipality west of Dapa. The municipality has a total land area of 201.79 square kilometers (DENR Region XIII-GIS Generated Land Area latest update as of 2000). The Del Carmen is made up of twenty (20) barangays. It is a fifth income class municipality and is considered a small town in terms of development, primarily being an agricultural and fishery area.



Based on the CBMS Survey on Population in 2010, Del Carmen has a total population of 15,420. This is 3.48% of the total provincial population of 442,588 in the same census year. The average annual population growth rate of the municipality from 2007-2010 is 0.96%.

The area utilized for agriculture accounts for 37.96 square kilometer (18.8%) of the total municipal land area. Over three quarters of the agricultural land area (78.195%) is assigned to coconut production, thus making copra the dominant agricultural produce of the municipality. 14.042% is devoted to rice production (both irrigated and non-irrigated).

Del Carmen municipality falls under Type II climate of the Coronas Climate Classification System of the Philippine Atmospheric, Geophysical and Astronomical Sciences Administration (PAGASA). This climate type is characterized by no pronounce dry season but a very maximum rainfall from November-December. The hottest months are April and May, which recorded a mean maximum temperature of 28.6°C. Meanwhile, the coldest months are January and February, which recorded the lowest mean minimum temperature of 27.1 and 27.3 °C, respectively.

Results of the Vulnerability Assessment

A vulnerability and adaptation assessment was conducted in the municipality in November 2012, which has been the basis for the formulation of the Local Climate Change Action Plan (LCCAP). The following were the findings for the priority adaptation strategies:

Adaptation options	Criteria						
	Effectivity	Ease of implementation	Acceptability to stakeholders	Institutional capacity	Adequacy to address current vulnerability	Adequacy to address future vulnerability	Total score
Agriculture							
-Organic farming	5	5	5	5	5	5	30
Coastal							
-Establish & protect marine sanctuary	5	5	5	5	5	5	30
-Rehabilitate &protect existing marine sanctuary	5	5	5	5	5	5	30
Socioeconomic							
-Siargao Island Integrated Solid Waste Facility	5	5	5	5	5	5	30
-Siargao Island Warer & Sewerage Facility	5	5	5	5	5	5	30
-Construction of Potable Water System (20 barangays)	3	5	5	4	3	5	25
Health							
-Improvement of existing health facilities	5	5	5	5	5	5	30
Repair/construction of health facilities							
Provision of basic medical equipments							
Manpower training (disease surveillance & referral system)							

Priority adaptation measures for agriculture, coastal, solid waste management and health sectors were suggested.

Background and Rationale of the Project Proposal

The monsoons bring in drought during the Habagat season, while increase in rainfall resulting to flooding and abrupt landslides occurs during the Amihan. Considering other climate scenarios such as El Niño and La Niña, it is predicted that such conditions will continue to arise and/or worsen. Most groups of people whose livelihood depends on agriculture and fisheries are those directly affected by the abrupt change of weather condition.

The common problems related to agricultural production are increase of pest and disease infestation and irregular water supply that results to low crop and livestock production. Accounts by participants of some Focused-Group Discussion (FGDs) reveal that the seasons are somewhat disrupted hence their planting and harvest are also affected. A sample seasonal calendar for agricultural crops is provided in their LCCAP.

One of the practices done already in the LGU in response to this is the Climate Adaptive Support Services (CASS) covering climate resilient agriculture techniques and practices. The CASS beneficiaries reflected the inadequacy of farmers on the knowledge on the type of plants fit to the type of soil on their farms, climate and weather forecasting, knowledge on livestock, food processing, and alternative livelihood, and addressing problems caused by changes in weather conditions.

These concerns will be addressed through the establishment of a climate field school, as crop and livestock productivity will be more sustainable amidst climate change and can provide viable income for farmers and fisherfolks in the municipality.

Components of the Project

 Capability Building. In preparation of the establishment of a Climate Field School, the Surigao State College of Technology (SSCT), with guidance from various stakeholders (SARAI, MODECERA, etc.) will develop training modules essential not only for the proposed beneficiaries, but will be targeted for the trainers and facilitators who will operationalize and maintain the school. 2. Construction of Climate Field School building. The building intends to house the capacity-building sessions for the farmers. The building, aside from common school facilities, will have facilities for agriculture and livestock, food processing, aquaculture, weather monitoring, climate modeling, and other services that are research-oriented. Demo Farms will also be provided by the province that will enable the farmers to apply the knowledge and techniques the school has developed, while obtaining the harvest for their own.

The design of the building is pursuant to the Green Building Code. Some features include solar panels as source for electricity, and solid waste management facilities.

3. Conduct of Classes and Weather Monitoring. Weather monitoring component within the school will also be operational throughout the year and will provide daily weather and climate data which will be shown on the SCFS sites and broadcasted on the radio station.

Anticipated Socio-economic Benefits

- I. Savings in Education Cost
- 2. Increase in Agriculture and Aquaculture Annual Production Value
- 3. Increase in Annual Income Through Laboratory Fees
- 4. Savings in Transportation Cost
- 5. Reduction in Health-Related Risk
- 6. Potential Industry for Animal Husbandry and Livestock Breeding
- 7. Potential mitigation/co-benefits

Implementation Arrangements

The LGU-Del Carmen and SurigaoState College and Technology (SSCT) – Del Carmen have already initiated the start of the SCFS by aligning its funds and programs with the needs of the SCFS. During the pre-implementation period, a Memorandum of Agreement (MOA) will be made between the Local Government of Del Carmen and Surigao State College of Technology where terms will be defined. A separate Memorandum of Understanding (MOU) with other partner agencies who are involved in specific components will be forged. These agencies include:

- I. Rural Health Unit (RHU)
- 2. RadyoKabakhawan
- 3. SentrosalkauunlandngAgham at Teknolohiya (SIKAT)
- 4. Department of Environment and Natural Resources (DENR)
- 5. Bureau of Fisheries and Aquatic Resources
- 6. Metro Siargao Alliance for Sustainable Development (MSASD)
- 7. Provincial Government of Surigao del Norte (PGSDN)
- 8. Bureau of Water and Soils Management

Consultations with other projects for further inputs were solicited, which include:

- Project SARAI (Smarter Approaches to Reinvigorate Agriculture as an Industry in the Philippines)
- Monitoring and Detection of Ecosystems Changes for Enhancing Resilience and Adaptation in the Philippines (MODECERA) Project

The project will be implemented in partnership of LGU, SSCT and people's organization based on the activities stated on the work and financial plan.

Sustainability

To ensure the financial sustainability of the project after PSF funding, the LGU and the SSCT will be including the maintenance and operations of the project in their Annual Investment Plan. The first batch of the beneficiaries will be covered by the project with a target of 360 trained farmers and fisherfolks, the succeeding target should be supported by the LGU and SSCT. To secure this, the creation of another SB resolution for allocating maintenance, trainings and operation expenses for the SCFSFF yearly in the AIP of the LGU will be put in place.

The LGU has adopted an Executive Order (EO) for the Project Implementation Unit, which is tasked to monitor (Annex 19) the implementation of the project. The said EO, in anticipation of other important stakeholders, will be amended to further include other institutions such as the SSCT and SIKAT.

As the project also includes agencies that will be coordinated in terms of the construction, training of farmers and fisherfolks and establishment of the demonstration farms and areas for fishing, there will also be agreements or understanding between the Municipal Government and the said agencies, which include the Provincial Government, the regional offices of DOST, DA, DAR, BFAR and DENR and Metro Siargao Alliance for Sustainable Development (MSASD) that will aide in smooth implementation of the proposed project. These instruments and institutional arrangements will also clarify functions, mechanism and contributions of the parties in order to sustain the project.

Environmental and other Risks

The LGU has already applied with DENR for the issuance of Certificate of Non-Coverage (CNC) whichever is the fitting instrument for the covered area. The project team also had secured clearance from the Siargao Island Protected Landscapes and Seascapes – Protected Areas and Management Board (SIPLAS-PAMB) for the project.



On behalf of

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Global Green Growth Institute



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany

Bulwagan Ninoy, Ninoy Aquino Parksand Wildlife Center, North Avenue, Quezon City, Philippines

> Tel/Fax No.: (02) 925-8954 Website: www.climate.gov.ph