Child-centered Participatory Capacity and Vulnerability Assessment Guide

CHILD CENTERED-COMMUNITY BASED CLIMATE CHANGE ADAPTATION IN THE PHILIPPINES PROJECT

This guide was prepared for the conduct of Child Centered – Participatory Capacity and Vulnerability Assessment to assist different project stakeholders in efficient collection, management and analysis of data generated from the community assessments for mainstreaming disaster risk reduction and climate change adaptation in local development plans.

This resource material is a work in progress. Actual output of this material was a generously produce and prepared thru the joint effort of the CC-CBA Project Consortium and Plan International CC-BA Visayas team in coordination with Save the Children CC-CBA Aurora team. Development of the assessment processes and tools was magnanimously provided by the Project Technical Working Group composed of the Climate Change Commission, Department of Education, Department of Environment and Natural Resources, Department of Interior and Local Government, National Disaster Risk Reduction and Management Council and Philippine Atmospheric, Geophysical and Astronomical Services Administration.

CC-PCVA processes, steps and tools reflected in this material is a product of series of pre-testing and pilot testing in the community of Bgy. San Isidro, Las Navas, North Samar.

This guide was prepared and designed by the CC-CBA Project Consortium. Some parts may not be necessary the same view and opinion of all the project stakeholders but purely of the author. Photos used in this material were taken from project activities of Plan International and Save the Children.

1st Draft version

CC-CBA Project Office Address:
Plan International, Inc. - Philippine Country Office
4/F Bloomingdale Bldg., 205 Salcedo St. Legaspi Village, Makati City 1229
Tel: (+632) 8130030 to 33

CC-CBA PROJECT BRIEF

The Child Centered – Community based Climate Change Adaptation in the Philippines is a 30 month project implemented by Plan International in cooperation with Save the Children and Institute for Sustainable Futures of University of Technology Sydney.

Through the support of Australian Agency for International Development under the Community-based Climate Change Action Grants Program, the project will be executed from June 2012 to December 2014 in forty barangays in the provinces of Aurora, Northern Samar, Eastern Samar and Southern Leyte.

Enhancing the resilience of children, youth and their communities to the unavoidable impacts of climate change is the main goal of the project to be performed in partnership with the Climate Change Commission, Department of Education, Department of Environment and Natural Resources, Department of Interior and Local Government, National Disaster Risk Reduction and Management Council and Philippine Atmospheric, Geophysical and Astronomical Services Administration. The project also aims to: 1) increase the resilience of children, youth and their communities to climate change impacts across forty Barangays; and 2) strengthen evidence-based child centered - community based climate change adaptation within the Philippines that informs policy and practice.

By the end of the project, the following beneficiaries should have been served in the covered areas:

- 40 barangays, 9 municipalities, and 4 provincial local governments;
- 54 primary and secondary schools;
- 15,098 children in Grades 5 -10; out of school, with disabilities and of indigenous people; and
- 4,015 households (20,078 direct beneficiaries and 135,239 indirect beneficiaries in nearby barangays).

CONTENTS

3 CC-CBA Project Brief

4 Contents

5 Acronyms

6 Key Terms and Definition

8 Section 1. Introduction
- Target Users
- User's Guide
- Guide development Background

12 Section 2. What is Child Centered-Participatory Capacity and Vulnerability Assessment?
- Definition and Pillars
- Assessment Design
  - *Methodology*
  - *Target Participants*
  - *Assessment Team*

17 Section 3. Steps in conducting Child Centered-Participatory Capacity and Vulnerability Assessment
- Step 1. Natural Resources Assessment
- Step 2. Hazard Assessment
- Step 3. Vulnerability and Impact Assessment
- Step 4. Capacity Assessment
- Step 5. Adaptation Assessment
- Step 6. Results Consolidation

32 Templates

44 Endnotes

ACRONMYS

CC-CBA	Child centred – Community based Climate Change Adaptation
CC-PCVA	Child centred – Participatory Capacity and Vulnerability Assessment
DRRM	Disaster Risk Reduction and Management
FGD	Focused Group Discussion
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
UNISDR	United Nation International Strategy for Disaster Reduction

KEY TERMS AND DEFINTION

Adaptive capacity	The ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages to take advantage of opportunities, or to cope with the consequences. One of the most important factors shaping the adaptive capacity of individuals, households and communities is their access to and control over natural, human, social, physical, and financial resources.
Climate variability	Refers to variations in the mean state and or other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate and of spatial and temporal scales beyond that of individual weather events. Variability maybe due to natural and internal processes within the climate system (internal variability), or to variations in the natural or anthropogenic external forcing (external variability).
Coping capacity	The means by which people or organization use available resources and abilities to face the adverse consequences that could lead to a disaster. In general, this involves managing resources, both in normal time as well as during crises or adverse conditions. The strengthening of coping capacities usually builds resilience to withstand the effect of natural and human-induced hazards (ISDR).
Exposure	Important climate events that affects a system. In practical terms, it is the extent to which a region, resource or community experiences changes in climate. It is characterized by the magnitude, frequency, duration and/or spatial extent of a climate event (IPCC 2007, IUCN 2010).
Hazard	A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage (United Nation International Strategy for Disaster Reduction or UNISDR).
Potential Impact	Potential effect of a climate change hazard on a system of interest . Can be positive or negative impacts on: • Biophysical - result from climate change factors, e.g. damaged infrastructures due to flooding or erosion of shoreline due to storm surge. • Socioeconomic - those impacts that (for bigger part) follow biophysical impacts and affect socio-economic development, e.g. declines in access to services due to damaged infrastructure or losses in tourism revenue due to shoreline erosion.
Resilience	Refers to the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions (UNISDR).

Sensitivity	Degree to which a system can be affected negatively or positively by change in climate.
System of Interest	The unit (i.e. Human, natural, economic) you chose to assess in respect to your question. You may determine your own system of interest at your own level (I.e. single crop system, an ecosystem, a region and etc.)
Vulnerability	The degree to which a system is susceptible to, and unable to cope with adverse effects of climate change, including climate variability and extremes (IPCC 4th Assessment Report).

1 Introduction

Philippines is extremely vulnerable to a wide range of climate change impacts including changing rainfall patterns and temperatures, and increased extreme weather events[1]. In 2011, the country ranked 3rd on the 2011 World Risk Index[1] and 122 out of 177 countries on the United Nations Human Development Index (HDI)[2]. Effects of the changing climate will exacerbate poverty situations and will affect mostly vulnerable sectors particularly women, children, persons with disabilities and indigenous people.

Climate change is expected to suppress achievement of children's rights to survival, development, protection and participation. It is estimated that by 2015, around 175 million children will be affected by natural disasters, majority of which will be climate-related. With this projection, increasing resilience of children, youth and community against adverse impact of climate change is a must priority to ensure that disaster risk reduction and climate adaptation measures are aligned to the efforts of reducing people's vulnerability to climate hazards and to achieve sustainable development.

The CC-PCVA guide attempts to stimulate people's understanding and analysis of the factors that affects their resiliency against climate change. It calls ones attention to critically and deeply understand our core vulnerabilities by examining community systems that are exposed and sensitive to climate change impacts. CC-PCVA is a jump start process that aims to build our defence system to adapt against climate change impacts.

[1] UNU-EHS (2011) *The World Risk Report 2011*. UNU-EHS.
[2] UNDP (2011). *Human Development Report: Sustainability and Equity: A better Future for All*. Palgrave Macmillan: New York.

Target Users

This guide is prepared for the project managers and staff, community assessment team and partners of the Child Centered – Community based Climate Change Adaptation project to assist and work with children in conducting the participatory capacity and vulnerability assessment. It was prepared to support the following:

- **Project managers and field staff** – engaged in managing and implementing CC-CBA projects to serve as guide in collecting, deepening and analyzing information from children, youth and their community, partner local governments and scientific institutions that can facilitate identification hazards, exposure, sensitivity and impact of climate change to provide technical input on possible child centred-community based climate change adaptation options and measures.

- **Community Assessment Team** - children, youth and their communities who were trained to use and facilitate conduct of the CC-PCVA tools to support their own process of collection investigation, analysis and learning on climate change adaptation. Results of this assessment are basis of identifying collective action on child centered adaptation, advocacy and lobbying with local government to mainstream child centred - community based climate change adaptation in local development plans, application to national government to access and avail People's Survival Fund to support climate change initiatives and partnership with donor agencies, private groups especially nongovernment organizations to appropriate interventions to support people's adaption on climate change impacts.

- **Local partners from government, schools and community-based organizations**- the tools and process of this guide are designed to be used and replicated by a wide range of local stakeholders especially partner from the local governments, schools and community-based organizations to help in using the assessment results as basis of integrating vulnerability and adaptation issues into local action plan and programs.

The Assessment Guide is intended to be used as a starting point for climate change adaptation. It can help different users or community stakeholders prepare a child centred-community based climate change adaptation plan that can be mainstreamed into local development plan of schools and local government units.

We encourage users of this guide to enrich the process and tools included herein by being innovate and creative in delivering the CC-PCVA tools and methodology. We do hope that users will also share their immediate feedback to the Project Consortium to help this document evolve and integrate their experiences to form part of future updates.

User's Guide

With the aim of increasing resilience of the children, youth and their communities, this assessment guide will equip the target users of step by step process in conducting the Child Centered – Participatory Capacity and Vulnerability assessment. It was designed to encourage community dialogue to allow different stakeholders collectively identify, discuss and analyze their vulnerability to potential climate change impacts.

This guide also contains set of tools and data needed to be collected to efficiently manage and analyze community exposure and sensitivity to climate change. With its participatory processes, the assessment guide will help wide range of stakeholders determine potential community-based climate change adaptation measures and options in general.

There are three sections in this guide. Two sections of this guide are essential to the target users in understanding and conducting Child centered – Participatory Capacity and Vulnerability Assessment. In particular:

- **Section 1** introduces the process how this Guide was prepared to help users understand and appreciate how this Guide evolved.
- **Section 2** provides overview on CC-CPVA approach by discussing key concepts, pillars and assessment design to prepare identification of possible community-based adaptation measures.
- **Section 3** defines the step by step process in conducting the CC-PCVA. Tools, guide questions and examples are included herein to guide data collector of needed information crucial to assist project beneficiaries develop child centered - community-based climate change adaptation options.

Templates for each assessment and mapping tools are also located at the last part of this guide to assist assessment team on proper documentation of data gathered and highlight of discussions generated from each assessment step.

However, this guide is not meant to instantly produce or design a project proposal or advocacy campaign plan for CC-CBA. Rather, it is prepared to guide the target users with process needed for data collection, management and analysis of climate change impact to the community. It is also important to remember that scientific data should be gathered along the conduct of CC-PCVA to better understand the characteristics of hazards that poses potential harm or threat to children and their community while affecting their resiliency and adaptive capacity against climate change impacts.

Guide Development Background

The lack of existing materials utilizing a child centered approach to community based climate change adaptation prompted the CC-CBA project to customize and develop a process and assessment tool relevant to children and community's needs to incorporate climate change adaptation. To come up with a harmonize user friendly tool operating on a child centered approach, two levels of materials review were performed by the project.

The first level of review compared similarities and differences of framework, approaches and tools used by different international organizations working on disaster risk reduction and climate change action. While the second round of review focused on comparative review of local or Philippine assessment toolkits on mainstreaming disaster risk reduction and climate change adaptation in planning processes. Among the materials reviewed during the second level were: (1) Community DRRM of CordAid, (2) Climate Proofing for Development of the Department of Environment and Natural Resources, and (3) Alternative pathways to Climate Change Adaptation and Disaster Risk Reduction of Aksyon Klima - Ateneo School of Governance, et al.

Basis of review used for abovementioned materials were strong support to convergence framework of disaster risk reduction and climate change adaptation, employment of participatory action and learning processes, utilization of climate science information in localizing development of climate change action plan, and compliance to standard definition of key terms in climate change adaptation particularly risks, exposure, sensitivity and vulnerability.

2

What is Child Centered-Participatory Capacity and Vulnerability Assessment?

The Child Centered-Community based Climate Change Adaptation is not just a stand-alone project implemented in the communities to address climate change vulnerability. It is both an approach and platform of convergence and empowerment to encourage children and different community stakeholders to collectively assess, plan, implement, advocate, and mainstream climate change adaptation for an evidence-based resiliency against climate change impacts[2].

Definition and Pillars

Child Centered - Participatory Capacity and Vulnerability Assessment (CC-PCVA) puts children at the heart of everything it does. It revolves its processes and methodologies around children to encourage their active participation in key areas where their voices and decision on community-based adaptation must be considered and heard.

CC-PCVA is a participatory action assessment. It is a method of collecting, consolidating, and analyzing children and community's situation given their resources and capacities to identify gaps and context specific adaptation option/s. It utilises indigenous knowledge alongside scientific data on climate-weather information to identify possible community-based adaptation option to climate change.

As a dialogue tool for children and their communities, CC-PCVA builds on children and community people's understanding about climate-weather hazards, vulnerabilities, impacts; and their existing capacities. It encourages children and their communities to think and work collectively between and among other stakeholders to support practical child centered and community-based and managed adaptation measures.

The CC-PCVA is based on three pillars[3] to ensure that disaster risk reduction and climate change adaptation are discussed with various stakeholders in the community and that critical measures for building climate resilience is established. These are:

Pillar 1 – Discusses disaster risk and climate change uncertainties.

- It builds on local and scientific knowledge using participatory child-centred approaches.
- It assesses the effects of climate change on current and future disaster risks and uncertainties.
- It develops evidence base of adaptation by sharing lessons, case studies and regular reviews.
- It follows principle of triangulation to ensure accurate data are collected.
- It increases access of stakeholders to information and support services on disaster risks, uncertainties and broader impacts of climate change.

Pillar 2- Builds and enhances adaptive capacity.

- It builds a knowledge base through engaging and processing children and community's experiences on climate change.
- It facilitates access to child centred - community based action fund or facility.
- It enhances stakeholder's capacity by performing training of trainors, peer to peer learning, and exchange-visits.

Pillar 3 – Address underlying issues of climate change vulnerability.

- It works with existing structure of LGUs and schools to mainstream climate change adaptation in their local programs, plans and policies.
- It integrates gender and inclusive development.
- It promotes partnership to ensure all rights are achievement, uphold and protected.
- It encourages sustainable development and low carbon development.

CC-PCVA Design

The CC-PCVA process can be undertaken by the trained facilitators, assessment team and children in the community desiring to understand their own vulnerability and discuss possible measure to adapt to climate change. To do this, they will be guided by Table 1 below to collect key information needed as basis for establishing adaptation measures. Table 1 summarizes the areas being assessed to meet objectives of CC-PCVA.

Table 1: CC-PCVA Design

ASSESSMENT TYPE	DATA NEEDED	METHOD FOR DATA COLLECTION
Natural Resource	• Base map - geographical and political boundaries of the barangay or community and household locations. • Resource map - types, state, and sources of community resources related to their use, access and control over these resources. • Transect Map –land use issues and opportunities per major section of the community covering ridge to reef sections.	• FGD • Review of secondary data (existing hazard maps / base map) • Mapping exercises • Transect walk • Poimapper (selected areas only)

ASSESSMENT TYPE	DATA NEEDED	METHOD FOR DATA COLLECTION
Natural Resource	• Historical Resource Calendar Map – changes in the biophysical, economic and socio-political state of the community and effects of specific hazards on people, resources and environment.	
Hazard	• Types of hazard • Characteristics of hazard • Analytical description of hazard	• FGD • Review of secondary data (existing hazard maps / base map) • Data extraction from PAGASA • Plenary discussion • Poimapper (selected areas only)
Vulnerability and Impact	• Exposure, sensitivity and potential impacts of hazards to specific location and system of interest.	• FGD • Plenary discussion
Capacity	• Coping and adaptive capacity • Gaps capacity based on resiliency elements	• FGD • Plenary discussion
Adaptation	• Adaptation measures based on the priority and needs of the people and system of interest	• FGD • Plenary discussion

Methodology

Similar to any type of participatory action research, CC-PCVA should be participatory, fun and be rigorous in collecting the needed data shown above. Separate sessions lead and facilitated by the children will also be ensured in the CC-PCVA to reflect and highlight children's views and voices in the assessment. To efficiently gather data, the following methods will be applied in this assessment.

- **Focused Group discussion (FGD)** - primary data will be gathered by an assessment team, lead by a facilitator thru a set of guide questions. Ideal number of respondents or assessment participants in every FGD is 15-20 persons.

- **Review of Secondary Data** – secondary data will be collected in target local agencies or offices of the government, school and other relevant institutions to validate target data reflected in table 1 particularly on natural resources and hazards types. This should be done prior to actual conduct of FDGs with target assessment participants.

- **Mapping** – to creatively gather data needed for CC-PCVA, mapping will be performed. Mapping is an effective approach to allow target participants appreciate and visualize complex data sets being gathered. It

allows participants retain and reflect data relevant applicable to their geographical location or based on their need.

- **Plenary discussion** – discussion, presentation or validation of data can be done in plenary discussion. The advantage of this method is that is allows all participants submit data, provide direct feedback and correction on the data gathered.

- **Poimapper** – a form of mapping technology that captures and tags data coordinates. Data collected are directly stored in a "cloud" and information collected are directly converted to digital map/s using google base maps. Digital maps are aimed to be turn-over to the LGU for easy benchmark of data collected in the community.

Target Respondents/ Assessment Participants

Depending on the availability of the participants, the following respondents should be part of the CC-PCVA to ensure different perspectives and experiences are incorporated during data collection and analysis of vulnerability and adaptation measures on climate change.

- Children – in school from Grades 5-10, out of school children/youth, children with disabilities, Sanguniang Kabataan, barangay or school based children's association
- Local government units - MENRO, MPDC, MDRRMO, BLGUs
- Sectoral leaders-farmers, elderly, PWDs, Community informal leaders
- Health workers-RHW, BHW, RHM, RHN
- School-teachers , teacher in charge and administrators

Community Assessment Team

The CC-PCVA process is an ideal venue to gather relevant information for the community to set parameters for community-based adaptation. It is also an opportunity to create an enabling environment where community stakeholders identify and learn new and/or unsurfaced concerns and issues related to their vulnerability and adaptation. In is therefore crucial that data collected by the community assessment team should stimulate critical thinking and analysis among and between multi-stakeholders and within the community to enable them to capture the essence of the assessment and help replicate the same process and exercise for future references and learning purposes.

To effectively collect, manage and analyse data, the community assessment team (CAT will be performing a research capacity based on the following roles and tasks.

- **Technical Working Group** - brought together for fixed, short periods of time to work on very specific tasks. Individuals performing this task are expected to have the time, interest, and commitment to participate in the production of deliverables assigned to the group. They lead and supervise direction and implementation of the target research plan.

- **Facilitators Team** - one that facilitates or lead data collection especially through the focused group and plenary discussion. Facilitator helps in creating dialogue or open communication to encourage participation, revealing of perspectives, opinions, including learning. Facilitator also helps in bringing the target outcome (i.e. learning, productivity, or communication) by providing indirect assistance, guidance, or supervision to the group facilitated.

- **Documenters Team** – composed on persons that are assigned to record highlights of discussion, agreements, observations, processes and outputs during the assessment. A documenter performs the following duties: (1) gets the important information regarding the activity, participants and facilitator; (2) ensures complete attendance of the PCVA participants; (3) secures a copy of the outputs of the FGD, workshops and mapping activities during PCVA; and (4) keep the documents in a safe and accessible place where it can be easily found.

- **Process Observers** – assist the whole community assessment team particularly the facilitator to efficiently manage data collection. Individuals assigned in this group must ensure that close communication and coordination with both facilitators and documenters are established to guide them in improving and enhancing data collection processes thru provision of balanced and constructive (good and limitation) feedback after each session.

Data Management, Consolidation and Analysis

After all primary and secondary data were gathered; these will be consolidated and disaggregated according to sector, age and gender. Community assessment team must be also prepared on this process to continuously ensure that all data will be validated and analyzed according to its cluster sets.

Data analysis must be also participatory to provide venue with the community multi-stakeholders including climate change experts provision of a well balanced and positioned conclusions. Children's analysis on data gathered must also be secured to ensure that their perspectives, needs and concerns were properly considered in the assessment.

3

Steps in Conducting Child Centered-Participatory Capacity and Vulnerability Assessment

Child centered PCVA Steps and Processes

Impacts of climate change are one of the most challenging situations confronted by poor and vulnerable communities. To reduce vulnerability, climate change adaptation must be part of an integrated and holistic response to build community resilience to withstand ranges of hazards, drivers, and stresses the community are exposed and sensitive to. Figure 1 below illustrates the process in performing CC-PCVA. Step by step process including specific data required and FGD guide questions (in Filipino) are provided below for easy reference.

The CC-PCVA process, step and tool present herein can be adapted or innovated based on a specific climate change assessment context. The tool design was build on rigorous collaboration with multi community stakeholders to facilitate data collection and ensure that assessment results can be mainstreamed in local planning processes for climate change adaptation. High involvement, dedication and commitment of all stakeholders, especially key decision makers are crucial to ensure success of mainstreaming climate change adaptation.

Step 1. Natural Resource Assessment

The preparatory step to understand impacts of hazards to the system of interest – human and non human elements is by conducting a natural resource assessment. This assessment assist in better comprehending the changes, trends and current state of community's natural resources to establish link of climate – weather hazards on the exposure and sensitive units of the community.

The following mapping tools helps in building data needed for natural resource assessment.

1. Transect Mapping

Data needed

- Current community resources
- Topography and soil types
- Land use issues
- Opportunities per major section of the community covering ridge to reef sections.

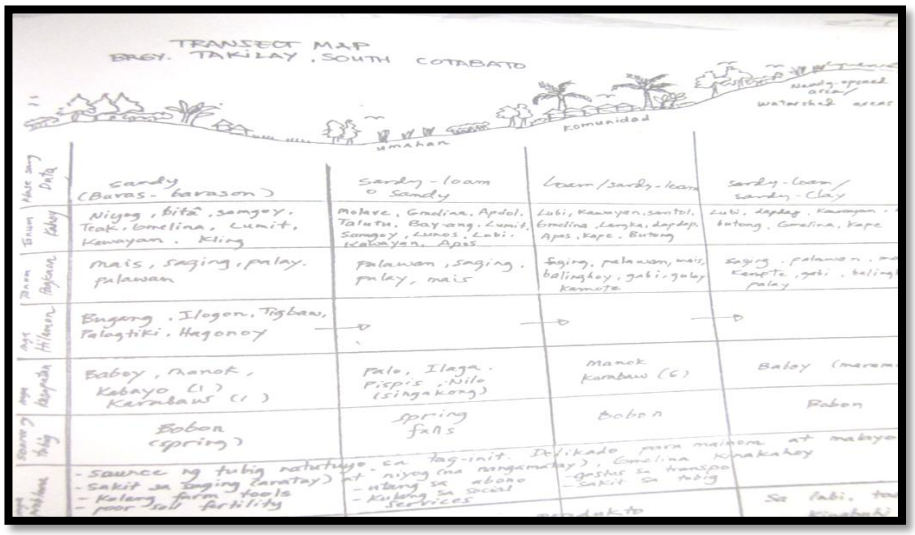
Mechanics

1. Identify community members who are knowledgeable, able, willing to work and participate in the activity.
2. Discuss aspects to be noted (i.e. soils, trees, crops, etc.) and approximate route to be traversed.
3. Assign specific tasks in the team for the transect walk.
4. Walk the transect, including diverse conditions.
5. Observe, ask and listen (don't lecture).
6. Ask and discuss problems and opportunities.
7. Note contrasts and changes, and identify zones.
8. Make a transect diagram.

Guide Questions

1. Anu-ano ang inyong mga nakita ninyong:
    a. Resources/likas na yaman:
        - Agrikultura
        - Forestry
        - Water
        - Edukasyon
        - Kalusugan
        - Lupa (klase-mabato,maputik at kulay)
    b. Imprastraktura
        - Bahay
        - Kalsada
        - Water System
2. Ano ang gamit o halaga ng mga ito sa inyo ayon sa kanilang lokasyon?
3. Anong uri ng lupa ang makikta sa lokasyon nabanggit?
4. Ano ang inyong mga napansin ninyong problema sa gamit ng lupa o resources ayon sa kanilang lokasyon?
5. Ano ang nakita ninyong oportunidad o maari pang gamit ng lupa o likas na yaman (Halimbawa: lupa, at iba pa)?
6. Mayroon pa ba kayong nakita o dagdag na impormasyon importanteng mapasama sa pag-unawa ng resources ng inyong komunidad?

Sample Map



2. Historical Resource Mapping

Data Needed

Changes in the biophysical, economic and socio-political state of the community and effects of specific hazards on people, resources and environment.

Mechanics

1. Paghambingin/ikumpara ang kalagayan noon at ngayon. Simulan ang panahong sa 30 taon pataas.
2. Simulan ang pagtatanong at pagasagot ayon sa table form na nasa itaas.
3. Isulat ang nakikita ninyong mga dahilan ng pagbabagong ito ayon sa:.
   - Tubig
   - Gubat/Hayop
   - Pinagkukunan ng Kabuhayan
   - Populasyon
   - Imprastruktura
   - Pamunuan (Governance)
   - Social Services
   - Lupa (Use, Ownership, Access and Control)

Guide Questions

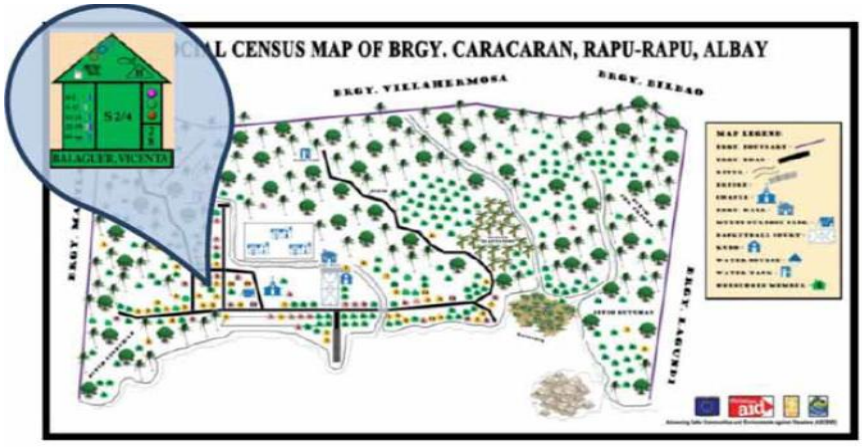
1. Kamusta ang ating Barangay? Paano niyo ito isasalarawan sa ngayon?
2. Anu-anong aspeto/bahagi o sektor sa inyong komunidad ang mahalaga sa inyo?
3. Bakit ninyo nasabing ito ay mahalaga para sa inyo?
4. May mga nakita ba kayong mga pagbabago sa mga ito ngayon KUNG ikukumpara sa sitwasyon nito NOON?
5. Maari niyo bang maibahagi ang mga kadahilanan BAKIT nangyayari ang mga nakitang pagbabago?
6. Masasabi niyo bang may mga dahilan na possibleng may kinalaman sa panahon o klima? Bakit?
7. Ayon doon sa ating pinag-usapan, mayroon pa ba kayong gustong liwanagin?
8. Mayroon pa ba kayong gustong ibahagi o idagdag?

Sample Map

3. Base and Spot Mapping

Data Needed	Changes in the biophysical, economic and socio-political state of the community and effects of specific hazards on people, resources and environment.
Mechanics	1. Discuss the objectives of map-making. 2. Provide participants with materials in making a map and ensure they are representation of the community per sitio and sector. 3. Ask some members to draw picture of their community and determine boundaries, political subdivision, location of houses, and infrastructures. 4. Based on the map, validate results and initiate discussion of specific issues and problems, such as water supply, sanitation and particular concerns of children, women, etc. 5. Summarize the results of the discussion.
Guide Questions	1. How is your community look like ? 2. What and where are your adjoining barangays from North, East, west and southern part)? Where are the boundaries in between your purok or sitios ? 3. What kind of legend would you like to use in the map that symbolizes our Houses, churches, schools, health center, barangay hall, sports facilities, irrigation, canals, river, creek, road, bridges, waiting shed, ports, farm lots, forested areas, etc. 4. What are the major land marks of your barangay (road, bridges, creeks, river, evacuation center, government facilities? 5. How many houses are there in every purok or sitios ? 6. Where are location of the higher portion or elevated and low lying areas of your barangay ? 7. How many hectares are approximately devoted to agriculture ? forest and grassland ? 8. What are the different crops grown in the community ? 9. How many children and persons with disability are living in a particular sitio or purok? How many men and women, girls and boys are presently , living in your community ?

Sample Map



4. Resource Mapping

Data Needed

Types, state, and sources of community resources related to their use, access and control over these resources.

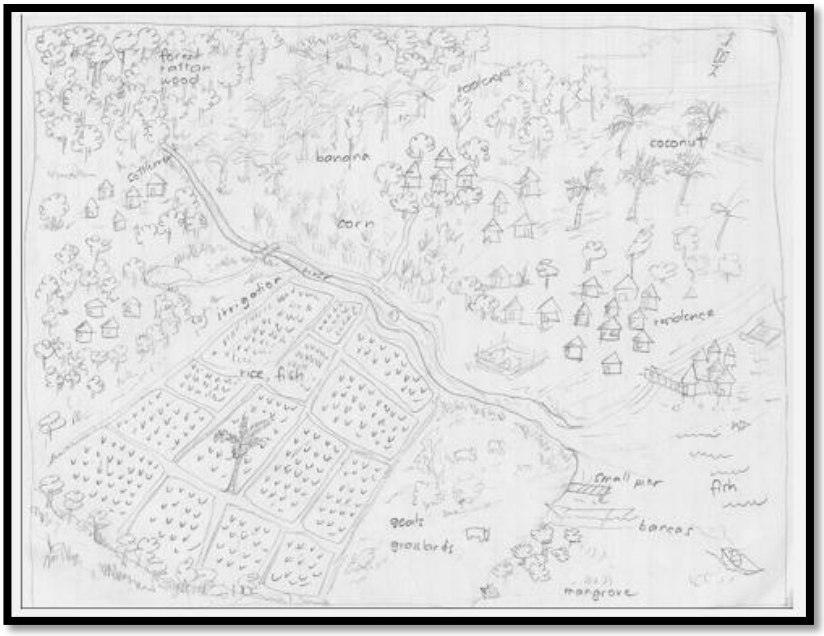
Mechanics

1. Discuss the objectives of map-making.
2. Provide participants with materials in making a map and ensure they are representation of the community per sitio and sector.
3. Ask some members to draw picture of their community and determine types, state, and sources of community resources related to their use, access and control over these resources.
4. Based on the map, validate results and initiate discussion of specific issues and problems.
5. Summarize the results of the discussion.

Guide Questions

1. What are the existing resources in the community? Where can this be found?
2. How many hectares are approximately devoted to agriculture ? forest and grassland ?
3. What are the different crops grown in the community ?
4. Who owns a sari-sari store, groceries, bakery, warehouse, transportation vehicles, boats, poultry, piggery, vast tract of agricultural lands in the community, etc.
5. Who are the professionals or experts (doctor, nurses, midwife, agri-technicians, teachers, engineers, etc. living in the community ?
6. Who are the children and persons with disability living in a particular sitio or purok?
7. How many men and women, girls and boys are presently , living in your community ?

Sample Map



Step 2. Hazard Assessment

Hazard assessment is the next building step to determine levels of vulnerability of the human and non-human elements after natural resource assessment. This step helps in identifying types and historical impact of hazards to a specific location and system of interest (i.e. individual, sector) in the community.

Hazard characterization is an important factor needed to be determined during this step. Different hazards act and behave differently and profiling the hazard according to its source, force and impact are essential information that must be accounted in hazard assessment.

1. Climate-Weather Calendar Mapping

Data Needed

- Weather duration and frequency including community activities or occasions practiced during a particular season
- Periods of stress, hazards, diseases, hunger, debt, vulnerability, etc.
- Livelihoods, coping strategies and changes in seasonal activities

Mechanics

1. Ask the participants when their year starts and how they divide their year (i.e. according to months, quarters, etc).
2. Use local calendars of activities to assist the participants in determining community occasions, religious festivals, agricultural operation, etc.)
3. Have the participants mark the occasion on the ground/floor or a paper.
4. Probe their responses and compare to other answers.
5. Ask the participant to mark which month/s are the most extremely affected by the weather condition.
6. Continue comparing responses per month with extreme climate-weather conditions until the whole year is completed.

Guide Questions

1. What are list of seasons, events, conditions, etc. that are usually observe in the community? (i.e. Holidays and festivals, planting and harvest seasons, periods of food scarcity, times of migration, timing of hazards/disasters such as storms, droughts and floods, common seasonal illnesses occurrence, etc.).
2. When these events usually happen?
3. How frequent these events occur in a period mentioned (i.e. month, quarter, etc.)?
4. Do you observed any changes in the weather/activity patterns?
5. How these affect your community activities?
6. How do you cope to these changes?

Sample Map

2. Hazard Mapping

Data Needed

- Types of hazard
- Hazard reach or coverage in terms of location

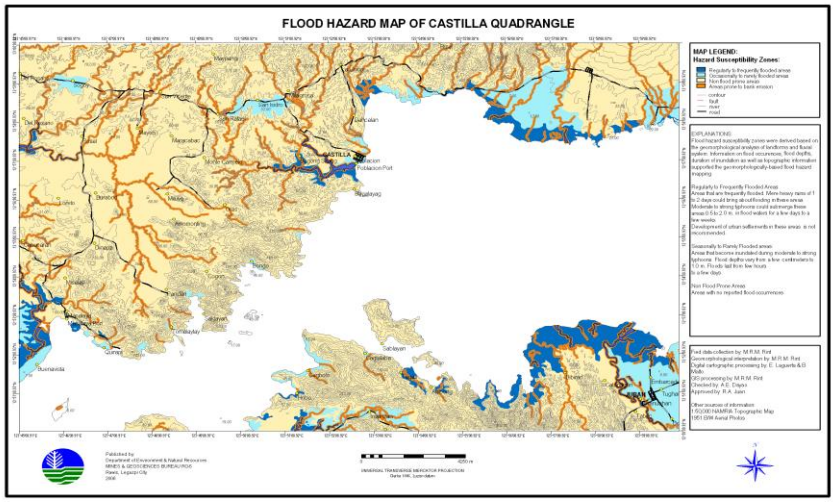
Mechanics

1. Use and refer to the results of the natural resource assessment, especially the spot map.
2. Provide participants with materials in making a map and ensure they are representation of the community per sitio and sector.
3. Ask some members to identify what hazards (climate and weather related and human induced) are potentially threatening or usual prevalent in their community.
4. Identify locations in the community at risk of these hazards based on the spot map.
5. Validate results and initiate discussion of specific issues and problems related to the hazards.
6. Summarize the results of the discussion.

Guide Questions

1. Anu-ano uri ng hazard ang inyong nararanasan?
2. Sa mag nasabing hazard, ano ang mga pangunahing hazard?
3. Saang lugar ang mah hazards na ito madalas tumatama o nakakaapekto?
4. Gaano kadalas nangyayari ang nabanggit na panganib?
5. Ilang beses ba ito nangyayari sa inyong o komunidad sa loob ng isang taon?

Sample Map



3. Hazard Assessment

Data Needed	• Hazard characteristics • Historical impact of hazard to a specific location and system of interest (i.e. individual, community, sector)
Mechanics	1. Use and refer to the results of the natural resource assessment, especially the spot map. 2. Provide participants with materials in making a map and ensure they are representation of the community per sitio and sector. 3. Ask some members to identify what hazards (climate and weather related and human induced) are potentially threatening or usual prevalent in their community. 4. Locate these hazards in the base map. 5. Validate results and initiate discussion of specific issues and problems related to the hazards. 6. Summarize the results of the discussion.
Guide Questions	1. Saan nanggaling ang nasabing hazard ?Ano ang dahilan? 2. Gaano kalakas? 3. Paano ninyo nalalaman na may paparating na hazards? 4. May natatanggap ba kayong impormasyon o babala tungkol sa paparating na panganib (hal. barangay, balita radyo o tv)? 5. Meron ba kayong mga sinaunang paniniwala o pamahiin tungkol dito ? (magbigay ng halimbawa) 6. Gaano ba ito katagal/kabilis bago dumating sa inyong komunidad o barangay ? 7. Gaano kadalas nangyayari ang nabanggit na panganib? 8. Ilang beses ba itong nangyayari sa inyong o komunidad sa loob ng isang taon ? 9. Gaano nagtatagal ang epekto ng nasabing panganib sa inyong komunidad?

Step 3. Vulnerability and Impact Assessment

Progressing on the next step of CC-PCVA is the Vulnerability and Impact Assessment. This step banks on the accomplished task of collective identification of hazard types and its characteristics, which is essential to better understand climate trends and projections.

To facilitate this process, hazard behaviour were analyzed to examine vulnerability of each exposed units and sensitive systems of community both in terms of human and non-human elements. Step by step assessment of the *likelihood* of a unit and its *interaction* with every exposed and sensitive elements of the community to the effect of a changing climate or extreme weather event are assessed in this step to predict and anticipate possible direct and indirect impacts of hazards to each systems of interest. This is done to relate how "exposure" of human and non- human systems can be attributed to their innate physiological and biological factors. This also causes them to be more sensitive to different physical, ecological and human related stressors.

Results of this assessment helps decision makers in the community and stakeholders determine options for addressing and prioritizing high and medium risks they are confronted with.

Exposure, Sensitivity and Impact Assessment

Data Needed

- Exposure of system of interest (human and non-human) to hazards
- Sensitivity of system of interest (human and non-human) to hazards
- Potential impacts of hazards of system of interest (human and non-human).

Mechanics

1. Use and refer to the results of the hazard assessment, especially the hazard map.
2. Ask the participants to look toward the future. Ask them to analyze their exposure, sensitivity and potential impacts of climate change to human and non-human elements in their community.
3. Start this process by looking into the hazard map and asking participants to identify the key climate change signals or stimulus to which their system is likely to be exposed, then sensitive to.
4. Given the exposure and sensitivity their systems are, ask them what will be the potential impact of climate – weather hazards to their community and the people.
5. Validate results of discussion.
6. Summarize the results of the discussion.

Guide Questions

Exposure

1. Human Elements
   - 1.1. Hanggang saan ang inaabot nga ganitong klase peligro?
   - 1.2. Sinu-sino ang mga indibidwal na inaabot nito? (Isalarawan).

2. Non-human Elements

   - 2.1. Social Services
     - 2.1.1. Anu-ano pang ma bagay ang naabot nito? (Hal. palayan, eskwelahan)
     - 2.1.2. Gaano ka-lawak o kalaki ang inaabot?
     - 2.1.3. Sa paaralan, ilang silid aralan ang naabot? Anu-anong mga gamit sa paaralan ang maaring abutin?

Guide Questions

2.Non-human Elements

2.2. Livelihood

2.2.1.Anu-ano ang kasalukuyang mga hanapbuhay na nakadepende sa dagat o pagsasaka?

2.2.2.Ilan ang kabuuang bilang ng mga pamilyang nakadepende dito?

2.2.3.Anu-anong mga kahayopan o pananim ang naabot nito?

2.2.4.Gaano kalawak ang inyong latian/bakawan?

2.3. Ecosystem

2.3.1.Gaano kalawak ang kagubatan sa inyong barangay?

2.3.2.Saang banda ang kadalasang inaabot at gaano ito kalawak?

2.3.3.Mayroon ba ditong mga bukal, ilog, sapa at iba pa?

2.3.4.Saan kayo dito kumuha ng tubig inumin? Ito rin ba ay inaabot?

2.4. Institutions

2.4.1.Ano ang ibinibigay na tulong ng gobyerno o pribadong institusyon para makasuporta sa epekto o pangangailan ng tao para makaiwas sa mga panganib?

2.4.2.Anong mga polisiya, programa o plano ang ipinapatupad para makaiwas sa mga panganib?

2.5. Infrastructure

2.5.1.Ilang bahay ang naabot? Ilan ang gawa sa light materials, semi-concrete o concrete?

2.5.2.Anu-anong mga pasilidad ang naabot? (hal. Brgy. Hall, kalsada etc.)

Sensitivity

1. Gaano kalala at karami ang maaring maapektuhan sa mga tao at hindi tao?
2. Sa mga inabot ano kaya ang maaring mangyari?

Impact

1. Ano kaya ang magiging resulta ng mga panganib na ito pag ito ay direktang tumama sa tao at agrikultura, pangkabuhayan, ekosistema, serbisyong panlipunan, pamahaalan at imprakstuktura?
2. Ano ang magiging ikalawang bunga o di dirketang eekto nito kapag tumama sa tao at agrikultura, pangkabuhayan, ekosistema, serbisyong panlipunan, pamahaalan at imprakstuktura?

Step 4. Capacity Assessment

This assessment step involves checking of existing capacity against the adaptive or required capacity to measure the capacity gaps for both human and non-human system. After studying vulnerability of systems of interest to changes brought by climate and weather, checking pre-existing condition helps to project needed capacities to cope and adjust to climate change impacts. Understanding the capacity gaps of a system of interest will help in preparing a logical adaptation plan.

As a rule of thumb, it is given that when a system has high exposure and sensitivity to climate change impacts, their adaptive capacity is low making them even more highly vulnerable to climate change conditions. Thus, modifying our coping and adaptive capacities is our best way to achieve our goal of becoming resilient to climate change impacts.

Data Needed

- Coping capacity of system of interest (human and non-human) to hazards
- Adaptive capacity of system of interest (human and non-human) to hazards
- Capacity gap of system of interest (human and non-human)

Mechanics

1. Use and refer to the results of the vulnerability and impact assessment.
2. Ask the participants to look toward the future again. Ask them determine existing and required capacity of their human and non-human system to adapt to climate change impacts.
3. Ask them to identify capacity gaps and prioritize it according to the most important capacity they must have.
4. Validate results of discussion.
5. Summarize the results of the discussion.

Guide Questions

Coping (Existing) Capacity

1. Sa kasalukuyan, anong programa, sistema, gamit, pasilidad o kakayahan meron ang komunidad / barangay na makakatulong sa mga tao , serbisyo at kabuhayan na maka-recover o makabangon mula sa epekto ng climate driven hazard, at makakapag-plano sila upang makabangon?

Adaptive (Required) Capacity

1. Batay sa mga na-identify na hazard at mga epekto nito, anong, sistema, programa, gamit, pasilidad at kakayanan na dapat meron ang barangay upang mabilis maka-bangon ang komunidad mula sa epekto ng climate-driven hazards?

Capacity Gaps

1. Mula sa kasalukuyang kakayahan at sa kailangan kakayahan, ano ang mga kulang na kapasidad mayroon ang bata at komunidad upang maka-adapt sa pagbabago ng klima at panahon?
2. Ano ang pinaka-importanteng kakayahan dapat mayroon ang bata at komunidad upang maka-adapt sa pagbabago ng klima at panahon?

Step 5. Adaptation Assessment

The heart of the whole assessment is dependent on good analysis of the results of steps 1-4 to come up with a good adaptation measure. The gaps identified from the capacity assessment tool will be the basis on what to do for adaptation. Not all gaps can be used as an adaptive measure[4].

Adaptation measure as defined should consider "the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages to take advantage of opportunities, or to cope with the consequences". Important factors shaping individuals, households and communities adaptive capacity is dependent on their access to and control over natural, human, social, physical, and financial resources. Several examples of adaptive measures and strategies we look for as output assessment includes but not limited to adjusting planting dates in agriculture, using bio-spray in organic farming, establishing early warning systems, using catch basins for water, and relocation to safer locations.

"No-regret" measure should also be considered when preparing an adaptation assessment. This measure considers addressing political barriers to effective local governance, ensuring financial feasibility and security, and undertaking cost-benefit analysis of identified community-based adaptation strategies to increase likelihood of resiliency against climate change.

Data Needed

- Adaptation strategies and measures
- Adaptation options and priority

Mechanics

1. Use and refer to the results of the capacity assessment.
2. Again, ask the participants to look toward the future. Based on the gap on the capacity assessment, ask them to determine adaptation strategies and measures.
3. Probe and validate their responses on these adaptation measures.
4. Ask them to prioritize the identified adaptation measures based on the set criteria.
5. Validate and summarize results of discussion.

Guide Questions

Adaptation Measures

1. Anong mga adapatation measures ang inyong gagawin, gamit ang mga kasalukuyang programa, serbisyo, pasilidad, gamit at kakayahan?
2. Kung sakaling matugunan ang kakulagan sa kasalukuyan kakayanan ng barangay, paano mapapalakas ang mga adapation measures na unang nailista?
3. Ano pang ibang adaptation measure ang magagawa, sakaling matugunan lahat ng kailanganb upang maka-sabay o maka-akma sa patuloy na pagbabago ng panahon?

Adaptation Prority

1. Given the current capacity of the community, which adaptive measures are readily doable and should be prioritized?

Step 6. Vulnerability Level Identification

The last step of this assessment requires to consolidate and summarize all information gathered from steps 1 to 5. A template below is provided to ensure that all data will be properly accounted and documented for.

Information available on this step will be ultimately be used as basis of children, community decision makers and stakeholder's preparation of a child centered- community based climate change adaptation plan.

TEMPLATES

PCVA SUMMARY FORM 1

HAZARD ASSESSMENT

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

Elements of Characteristic of Hazard	Characteristic of Hazard	Analytical Description of Hazard
Cause / Origin		
Force		
Warning Signs & Signals		
Forewarning		
Speed of Onset		
Frequency		
Period of Occurrence		
Duration		
Remarks		

PCVA SUMMARY FORM 2

VULNERABILITY AND IMPACT ASSESSMENT

Activity Title				**Date**	
Venue				**Barangay**	**Municipality**	**Province**
Participants Number		**Male**		**Female**		**Group Present**	
Name of Facilitator						**Name of Documenter**	

HAZARD	SYSTEM OF INTEREST	EXPOSURE	SENSITIVITY	IMPACT
	HUMAN ELEMENTS			
	1. Children 0-5 years old			
	2. Children 6-12 years old			
	3. Children 13-17 years old			
	4. 18 and above			
	5. Elderly			
	6. CWD/PWD			
	7. Indigenous People (IP)			
	NON-HUMAN ELEMENTS			
	1. **Social Services**			
	1.1. Education			
	1.2. Health			
	1.3. Water			
	2. Livelihood			
	2.1. Coastal			
	2.2. Agriculture			
	3. Ecosystem			
	3.1. Forestry			
	3.2. Water			
	4. Institution			
	4.1. Government			
	4.2. Private			
	5. Infrastructure			
REMARKS				

PCVA SUMMARY FORM 3

CAPACITY ASSESSMENT

Activity Title				**Date**	
Venue				**Barangay**	**Municipality** / **Province**
Participants Number		**Male**		**Female**	
Name of Facilitator				**Group Present**	
				Name of Documenter	

SYSTEM OF INTEREST	EXISTING CAPACITY (COPING)	REQUIRED CAPACITY (ADAPTIVE CAPACITY)	GAPS*
HUMAN ELEMENTS			
1. Children 0-5 years old			
2. Children 6-12 years old			
3. Children 13-17 years old			
4. 18 and above			
5. Elderly			
6. CWD/PWD			
7. Indigenous People (IP)			
NON-HUMAN ELEMENTS			
1. **Social Services**			
1.1. Education			
1.2. Health			
1.3. Water			
2. Livelihood			
2.1. Coastal			
2.2. Agriculture			
3. Ecosystem			
3.1. Forestry			
3.2. Water			
4. Institution			
4.1. Government			
4.2. Private			
5. Infrastructure			
Remarks			

*Focused on adaptive capacity

PCVA SUMMARY FORM 4

ADAPTATION ASSESSMENT

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

SYSTEM OF INTEREST	ADAPTATION MEASURES	ADAPTIVE OR NOT	PRIORITY RANK
Remarks			

PCVA SUMMARY FORM 5

SUMMARY ASSESSMENT TABLE

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

HAZARD DESCRIPTION								
SYSTEM OF INTEREST	**EXPOSURE**	**SENSITIVITY**	**IMPACT**	**CAPACITY**		**CAPACITY GAP**	**LEVEL OF VULNERABILITY**	**ADAPTATION MEASURE**
				COPING	**ADAPTIVE**			
Remarks								

MAPPING DATA FORM 1

FOCUSED GROUP DISCUSSION

Activity Title				**Date**			
Venue							
				Barangay	**Municipality**	**Province**	
Participants Number		**Male**		**Female**		**Group Present**	
Name of Facilitator						**Name of Documenter**	

AGENDA/TOPICS DISCUSSED / QUESTIONS	RESPONSE	AGREEMENTS/CORRECTIONS

Remarks	

MAPPING DATA FORM 2

Base Map (Spot Map)

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

	LOCATION	AGREED LEGEND/ICON
Geographical Boundaries		
Landmark		
Density and distance of Houses to each other (Per purok)		
Map Scale/ Orientation		
Remarks		

MAPPING DATA FORM 3

Resource Map

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

	LOCATION	LEGEND/ICON	USE OF RESOURCES
NATURAL RESOURCES			
Trees/crops/plants			
Animals/livestock			
Land forms			
Body of water/Sources of potable water			
SERVICES/INFRASTRUCTURES			
School			
Health Centers			
Others			
Remarks			

MAPPING DATA FORM 4

Transect Map

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

LOCATION	RESOURCES	TOPOGRAPHY & SOIL TYPES	LAND USE	OBSERVED PROBLEMS	POTENTIAL OPPORTUNITY
Remarks					

MAPPING DATA FORM 5

Climate-Weather Hazard Map

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

HAZARDS	**LOCATION/SYTEM AFFCETED**			
	Residential Areas	**Infrastructure**	**Services**	**Resources**
Remarks				

MAPPING DATA FORM 6

Historical Resource Map

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay	**Municipality**	**Province**	
Group Present			
Name of Documenter			

PANAHON	TUBIG	GUBAT	PINAGKUKUNAN NG KABUHAYAN	POPULASYON	IMPRASTRUKTURA	PAMUNUAN (GOVERNANCE)	SOCIAL SERVICES	LUPA			
								USE	OWNERSHIP	ACCESS	CONTROL
NOON											
NGAYON											
Gamit ng reources											
Dahilan ng mga pagbabago sa bawat resources											
Remarks											

MAPPING DATA FORM 7

Climate-Weather Seasonal Calendar

Activity Title					
Venue					
Participants Number		**Male**		**Female**	
Name of Facilitator					

Date			
Barangay		**Municipality**	**Province**
Group Present			
Name of Documenter			

CLIMATE VARIABLES/ OCCASSIONS/ MAJOR COMMUNITY ACTIVITY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

END NOTES AND REFERENCES

[1] CC-CBA Project Design, Plan International, 2012.

[2] Abogado, CC-CBA Project Consortium Monitoring and Evaluation Officer, CC-CBA Project Consortium, 2013.

[3] Based on CC-CBA Project Design, Plan International, 2012 and CSDRM.

[4] Mc Donough, CC-CBA Visayas Project Manager, Plan International, CC-PCVA Training of Trainors, 2013.

Aksyon Klima, Ateneo School of Governance, et al., Alternative pathways to Climate Change Adaptation and Disaster Risk Reduction.

CARE CVC Handbook.

CC-CBA Project, Modules on CC-PCVA.

Climate Proofing for Development of the Department of Environment and Natural Resources.

CordAid, Community DRRM Manual.

Plan International, Child Centered DRR Toolkit.

Partners for Resilience Philippines, Tools for Community Risk Assessments. How to integrate: Climate Change Adaptation and Ecosystem Management & Restoration.

Strengthening Climate Resilience, A Child Centered Approach to Climate Smart Disaster Risk Management.