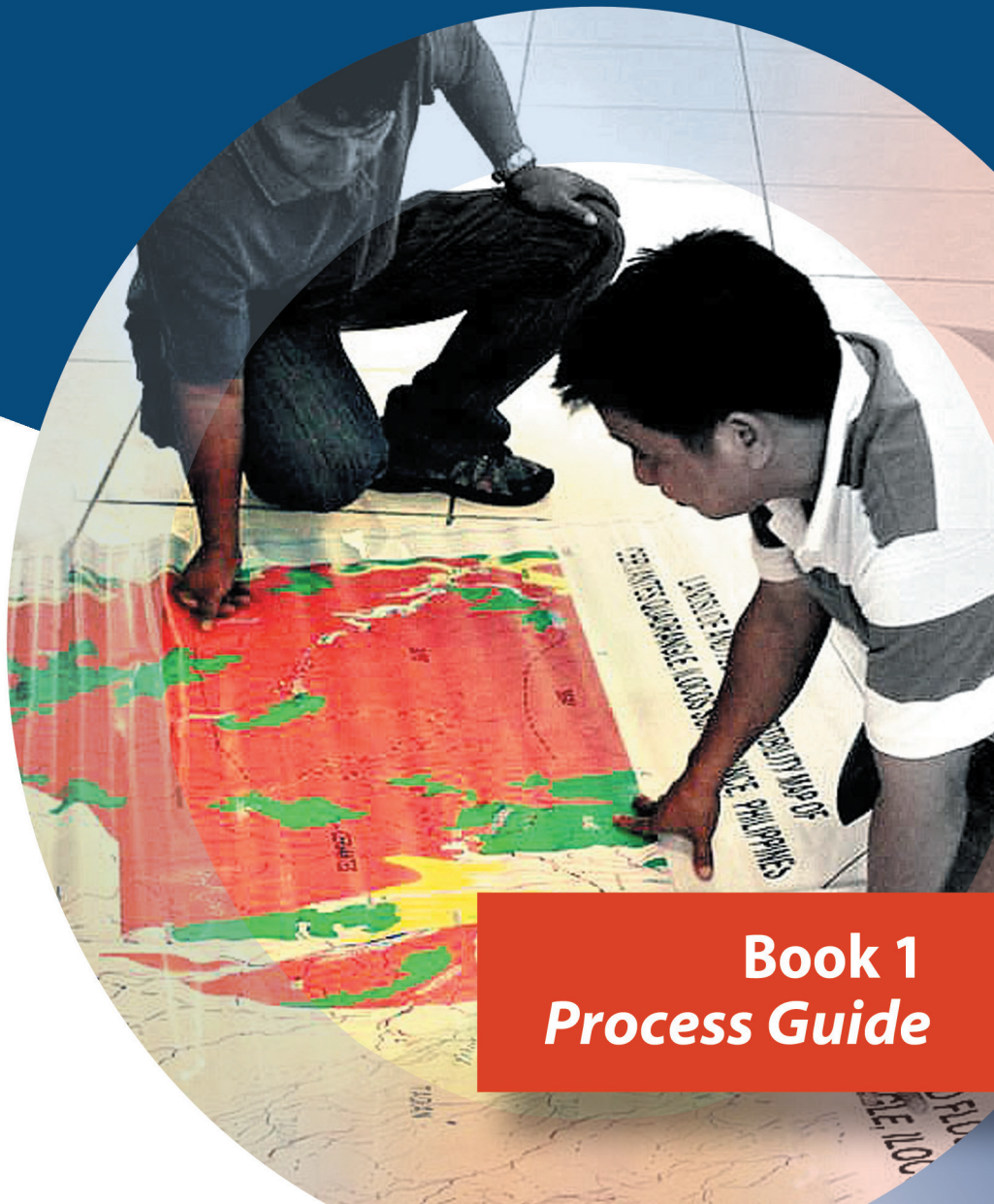
LGU GUIDEBOOK
on the Formulation of Local Climate Change Action Plan (LCCAP)



Book 1
Process Guide

LGU Guidebook on the Formulation of Local Climate Change Action Plan (LCCAP) Book 1

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A MESSAGE FROM THE SECRETARY OF THE INTERIOR AND LOCAL GOVERNMENT

No nation has been spared from the shifts in extreme weather that have brought death, damage and desolation in places affected by climate change. As we review our recent experiences in the Philippines, we are not only struck by the overwhelming impact such as events on the lives of our people, but the overriding imperative of perpetual readiness and vigilance.

RA 9729, otherwise known as Climate Change Act of 2009 and RA 10121, or the Philippine Disaster Risk Reduction Management Act both aim to instil in the public consciousness that meeting the challenges ahead demands organization, coordination and systematic responses at all levels of governance and community management.

The Department of Interior and Local Government and all allied national government agencies are working together to ensure the Philippines is ready for the future. The DILG, in particular, sees to it that relevant policies and programs are propagated, instilled and actually implemented among all local government units in the country.

It is in this context that I congratulate the Local Government Academy for coming up with the User's Manual for LGU's: Guidebook for the Formulation of Local Climate Change Action Plan. The manual is intended to be a reference material for all LGUs in the formulation of their LCCAPs, and is part of the DILG's efforts to empower and sustain communities to meet the growing threat of climate change.

We believe that robust local climate change action plans, implemented by dynamic and dedicated LGUs, are our way forward in building resilient local communities that would survive and thrive through the vagaries of climate change.

Using this material and a host of training programs on the LCCAP, the Department, through the Local Government Academy, seeks to empower the LGUs and enable them to find ways to learn how to live and sustain development despite climate change. There is no panacea for climate change as each LGU will face unique challenges as natural forces continue to shift overtime. We, however, believe that LCCAP formulation and implementation is the way forward to ensure that the country would not only be capable to survive climate change, rather it would continue to thrive into a prosperous nation that we are destined to be.

MAR ROXAS

Secretary and Chairperson,
LGA Board of Trustees

A MESSAGE FROM THE UNDERSECRETARY FOR LOCAL GOVERNMENT

In this day and age, there is a need for a particularly vulnerable country like ours to be more aware and steadfast in our efforts in learning to live with the unstoppable forces of nature overtime. And we must do so in a very scientific and practical manner.

The national government is looking to reinforce the country through various interventions across numerous agencies. However, we must translate all of these efforts on the ground effectively in order for it to have real impact on the adaptability of our countrymen as a whole. That is why it is imperative that the national efforts be channeled through the conduits closest to the people: the local government units.

The local government units are now given the task to be ready for Climate Change. They will have to formulate their Local Climate Change Action Plans and execute them. The question is how do they begin? What can they do to ensure that their LCCAP is realistic and potent overtime?

The Department, through the Local Government Academy, looks to answer that question with this USER'S MANUAL FOR LGUs: GUIDEBOOK FOR THE FORMULATION OF LOCAL CLIMATE CHANGE ACTION PLAN (LCCAP) along with the subsequent trainings on the formulation of the LCCAP nationwide.

Looking forward to a more Climate Change Adaptive Philippines means entails having LGUs that are well prepared for it. In adapting to Climate Change, we must have especially adaptive LGUs that can bridge the gap between science and action, between the national and the local, and between now and the future.

AUSTERE A. PANADERO

Undersecretary for Local Government
Department of the Interior and Local Government

A MESSAGE FROM THE LOCAL GOVERNMENT ACADEMY'S EXECUTIVE DIRECTOR

We are facing the deeply troubling reality of Climate Change. This inescapable phenomenon is one that is beyond our control but it does not prevent us from adapting to it and ultimately overcoming the effects it has on our daily lives. While Climate Change is all-encompassing and inevitable, man can still learn to live with it with the aid of scientific and practical planning and interventions.

As the training arm of the Department of the Interior and Local Government (DILG), the Local Government Academy (LGA) looks to empower Local Government Units to be ready for the continuous onset of Climate Change through its numerous programs and projects.

This USER'S MANUAL FOR LGU'S GUIDEBOOK FOR THE FORMULATION OF LOCAL CLIMATE CHANGE ACTION PLAN (LCCAP) is part of an array of said efforts by the Academy and the Department, as a whole.

It serves as a guideline that will aid LGUs take all the necessary steps and actions in the formulation of their LCCAP. It takes into account Disaster Risk and Vulnerability Reduction (DRVR) options that LGUs can utilize for a sustained path to Climate Change Adaptation. It contains various tools that will help local governments develop a realistic and effective LCCAP that is applicable to their needs. With sound scientific and technological principles, there is hope that local policies become sensitive to the Climate Change and the challenges it brings.

In the end, this material will be stagnant if not put into action. Rest assured, however, that where the limits of this knowledge material end, the actions of the Department with the full support of the Academy begin for a more Climate Change Adaptive Philippines.

MARIVEL C. SACENDONCILLO, CESO III
Executive Director
Local Government Academy

PREFACE

Climate change will continuously affect the country for years and will have great impacts on the lives and properties of the present and future generations to come. The need to adapt to climate change is imperative and renewed efforts should be done regardless of what has been accomplished on the mitigation front. Because of our exposure and relative vulnerability to natural hazards, effects of climate change serve as serious threats in achieving sustainable development, attaining the Millennium Development Goals (MDGs), and improving our Human Development Index (HDI). These threats directly impinge on the capacity of our local governments especially in coping with risks, hazards and vulnerabilities.

According to the Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), challenges for vulnerability reduction and adaptation actions are particularly high in regions that have shown severe difficulties in governance. Thus, there is a need to capacitate LGUs and enhance local efforts and interventions to minimize the climate impacts. As an initial response, the Department of Interior and Local Government (DILG) issued a Memorandum Circular in 2008, urging all local chief executives and policy-making councils to implement climate change adaptation (CCA) and disaster risk reduction (DRR) measures using the powers given by the Local Government Code (RA 7160) to LGUs to secure general welfare. A year after, the Climate Change Act of 2009 (RA No. 9729) was passed by Congress, which aims to mainstream climate change into policy formulation, development planning and poverty reduction programs. RA 9729 was further strengthened in 2010 by the formulation of Disaster Risk Reduction and Management (DRRM) Act of 2010 (RA No. 10121), which acknowledges the policy of the State on the need for building capacity of LGUs to institutionalize arrangements and measures for reducing disaster risks, including projected climate risks, and enhancing disaster preparedness. Section 11 of RA 10121 directly states that “LGUs shall ensure the integration of DRR and CCA into local development plans, programs and budgets as a strategy in sustainable development and poverty reduction.”

To further strengthen the above-mentioned endeavors, the Local Government Academy with the help of key institutions and agencies, prepared this **LGU Guidebook on the Formulation of Local Climate Change Action Plan (LCCAP)** to integrate the goals and objectives of the said undertakings in addressing vulnerability and adaptation to climate change. It is set to help communities plan better, take actions and provide a suite of tools on how to prepare and adjust to adverse effects brought by climate change by mainstreaming it in their respective local development plans and budget. The **LCCAP Book 1** of this guidebook contains the framework and the step-by-step process for the formulation of the Local Climate Change Action Plan (LCCAP). Session guides for each step are also given as well as matrix template for the different assessment process. Some tips and reminders for important portions are also given for guidance. On the last part of Book 1, a simple matrix for monitoring and evaluation of the process of the LCCAP implementation could be found and sample evaluation tools for pre and post trainings are also included. The **LCCAP Book 2** on the other hand, is a compilation of paper presentations, discussion guides, articles and best practices related to climate change mitigation and adaptation and disaster risk reduction and management. These papers are presented during previous trainings and workshops conducted for LCCAP formulation organized by the Local Government Academy and its partner institutions.

The LCCAP of LGUs will be science-and risk-based, since its formulation will consider the assessment of climate change impacts on the most vulnerable communities and areas, and the ecosystems and other resources within their territories. This natural scientific planning and operationalization will help reduce vulnerability and prevent loss of lives and livelihood, and damages to shelters and infrastructures. In so doing, this publication will seek to contribute in building climate change-adaptive and disaster-resilient communities in the country.

ACKNOWLEDGEMENT

The preparation of the LGU Guidebook on the Formulation of Local Climate Change Action Plan (LCCAP) has involved many individuals and organizations. The Department of Interior and Local Government- Local Government Academy (DILG-LGA) wishes to express their gratitude to contributors and sources that have made this endeavor possible.

We also recognize that the scope and examples contained in this guidebook are products of learning excerpts from a series of training programs conducted for regional and provincial CDP focal persons and DRRMOs and coaches from DILG Regions.

The LGA gratefully acknowledges the contributions and assistance of Climate Change Commission (CCC), Tanggol Kalikasan Inc., UN-HABITAT Philippines, Local Climate Change Adaptation for Development (LCCAD) and University of the Philippines-Los Banos that were involved in supporting climate change adaptation initiatives as incorporated in this knowledge product.

We are also thankful to the support extended by the Bureau of Local Government Development (BLGD) of the DILG and the Manila Observatory for allowing their materials and related publications to be used in developing this guidebook.

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INTRODUCTION

"The LGUs shall be the frontline agencies in the formulation, planning and implementation of climate change action plans in their respective areas..."

(R.A.9729, Sec. 14)

Planning is an integral part of governance and rationalizing local planning will enhance the LGU's capability in the performance of its dual functions - as a political subdivision and as a corporate entity.

The local planning structure is composed of both the political and technical components. The political component covers the local development council and the local legislative body while the technical component covers the sectoral and functional committees and local special bodies. The Local Climate Change Action Plan (LCCAP) of LGUs will be science and risk-based, as its formulation will consider the assessment of climate change impacts on the most vulnerable communities, areas, the ecosystems and other resources within their territories. The process must be participatory and consultative to ensure ownership and cooperation of the constituents in its implementation.

There are different approaches to mainstream LCCAP in the mandated LGU plans. The conventional approach involves integration of a finished plan into another finished plan document, or Sanggunian adoption through resolution. The alternative approach involves the integration into all the components of the local planning system. These include the Comprehensive Land Use Plan (CLUP) and the Comprehensive Development Plan (CDP) as stipulated in the Local Government Code. CLUP is the plan for the management of local territories, pursuant to the LGU's status as a political unit. CDP is the plan that the LGU prepares in its capacity as a corporate body. The term "comprehensive" in the CDP has to be understood in the sense of "multi-sectoral" development, i.e., social, economic, infrastructure, environmental, and institutional.

It becomes part of day to day governance systems and processes. In CLUP, integration may be detailed master plans area system, or thematic area. Regulatory measures, activities, programs / projects, non-projects / services to integrate CCA/DRM may be done in both CDP and CLUP. Integrating DRRM/CCA in the LGU-mandated CDP may include implementation instruments such as the Local Development Investment Plan (LDIP) and Annual Investment Plan (AIP). They should also be given sufficient budgetary allocation.

Lastly, as local plans include objectively verifiable success indicators, its implementation must be monitored and evaluated so that necessary improvement, adjustment and revisions must be incorporated to ensure its relevance over time.

This Guidebook contains the steps in the LCCAP formulation, the session guides, tips and reminders for proper guidance and the reference notes that would link this book to other sourcebooks and the family of LGU mandated planning tools and templates.

GUIDING PRINCIPLES IN THE FORMULATION OF THE LOCAL CLIMATE CHANGE ACTION PLAN

Specifically, to support local governments in dealing with the challenges of adapting to climate change and provide a common basis for adaptation planning, the following suggested guiding principles should be considered:

1. **Increase knowledge and understanding of the hazard and climate change impacts.**

   Because of complexity of climate change and its potential impacts, particular attention needs to be given to knowledge and awareness building. Identification and understanding of past, current and future projections of hazard occurrence, climate extremes and the range of effects of climate change on the development sectors and population concerned should support any decision or actions to build disaster and climate resilience. Beginning the adaptation planning with a solid foundation of community awareness and support can be beneficial to the success of the adaptation process and implementation.

2. **Increase understanding of exposure, vulnerability and adaptive capacity.**

   The Local Climate Change Action Plan (LCCAP) of LGUs will be science-and risk-based, which means making full use of the latest climate study, research, data and practical experience so that decision-making is well supported and informed. This can be done through the conduct of vulnerability and risk assessment. The process should include risk analysis of the projected effects of climate change as well as of those currently observed. The assessment should also increase appreciation among all stakeholders of the causes of exposure, vulnerability and capacity, both as a result of a participatory process, and through sharing of results. Information from these exercises will input into identifying “no regret” options and priority measures for local resiliency.

Through the conduct of vulnerability assessment, the barangay provides science- and risk-based information for the planning process of cities and municipalities, opening up opportunities to calibrate their existing annual investment plans, comprehensive development plans and comprehensive land use plans. Likewise, this becomes an opportunity for the provinces to calibrate and integrate their plans in the provincial development investment plans, the provincial physical framework and development, the regional development, and the national development planning processes

3. Identify and engage relevant stakeholders.

Climate change adaptation planning often requires cross-sectoral coordination and cooperation between different sectors at the local level. Preferably, all people at risk shall be invited to take part in the adaptation planning process. Their actual knowledge about the issues affecting them is critical in ensuring that analysis and subsequent actions are based on practical evidence. The goal of multi-sectoral and multi-stakeholder engagement is to make the LGU's effort of building disaster and climate resilience central to development planning. In addition, the sustainability of whatever adaptation options depends on their ownership and clear commitment.

4. Build on existing policies, tools, processes and good practices.

Development of local climate change action plan should be done using existing planning tools and approaches. Relevant assessment instruments and methodologies that are in place should be reviewed and adapted to be able to deal with current and future negative impacts of climate change. The Rationalized Planning System (RPS) process serves as entry point in mainstreaming DRR and CCA in local development plans. For vulnerability assessment, build on the local data, CBMS data, updated hazard maps, national data and PAGASA climate projections and use them for risk analysis of your LGU-wide vulnerability and exposure to hazards and the effects of climate change. Other tools like participatory rapid appraisal (PRA) tools may be used to facilitate the smooth conduct of vulnerability assessment. LGUs may refer to available adaptation options that encourage community participation, promote replication of effective practices. and introduce innovative approaches to help address new challenges. It is also imperative that the Local Climate Change Action Plan of the LGU is anchored on the National Climate Change Action Plan created by the Climate Change Commission.

5. **Work with uncertainties.**

The effects and impacts of climate change remain uncertain, particularly at the local level and predominant factors (like rapid urbanization, industrialization and environment degradation) influence exposure and vulnerability, analysis of disaster and climate change risk should therefore be responsive to emerging knowledge. Likewise, strategies and programs to build disaster and climate resilience should be flexible, to accommodate new inputs. Although there is still uncertainty over the future, we should consider options now and make decisions that maximise future flexibility.

6. **Prioritize adaptation options.**

The result of vulnerability assessment provides LGUs an idea of what adaptation options they will pursue. Select the best options based on adaptation objectives and criteria. Usually a multi-criteria analysis of adaptation options will be required. Aside from commonly used tools, LGU may opt to use criteria for prioritizing adaptation strategies as described in the RPS Sourcebook which include criteria categorized as urgent, essential, necessary, desirable, acceptable and deferrable. Furthermore, a comprehensive cost-benefit analysis that also considers indirect costs and benefits, non-monetary values and externalities can be useful for prioritising adaptation options.

7. **Consider adaptation actions that are sustainable.**

This means that LGUs' climate change adaptation actions should not add to climate change or limit the ability of other parts of the natural environment, society or business to carry out adaptation elsewhere. Our actions should avoid any detrimental impacts on other parts of society, the economy or the natural environment. To avoid creating a sense of insecurity, or promoting mal-adaptation, climate adaptation programs should always be based on a multi-hazards, multi-effect assessment. Always consider assessment of their potential negative impacts, including their contributions to conflict and effects on the environment. Also, for actions aimed at mitigating climate change impact in the context of rapidly urbanizing cities and municipalities, choices of priority programs and actions should consider those that would secure the future of vulnerable communities and population by reducing greenhouse gas emissions and low carbon development.

8. **Build on partnership to reduce vulnerability and risk to climate change impacts.**

   Many disasters and climate change impacts occur outside LGU's geographical boundaries. These situations require the cooperation of other local governments and communities to address effectively. Working in partnership will not only help preparedness efforts, but will also provide the opportunity to explore emerging and innovative ways in building disaster and climate resilience.

9. **Avoid mal-adaptation.**

   Mal-adaptation means faulty or inadequate adaptation. Mal-adaptive actions and processes do not succeed in reducing vulnerability to the brunt of climate change but instead reduce the capacity to cope with the negative impact of climate change. It may deliver short-term benefits but lead to harmful consequences in the end. A number of mal-adaptation should be avoided, including actions that conflict with mitigation, actions that use resources unsustainably and actions that distribute the benefits of adaption unequally across community. Mal-adaptation can be avoided through detailed assessment of different options to determine potential impacts of adaptation options in the long term.

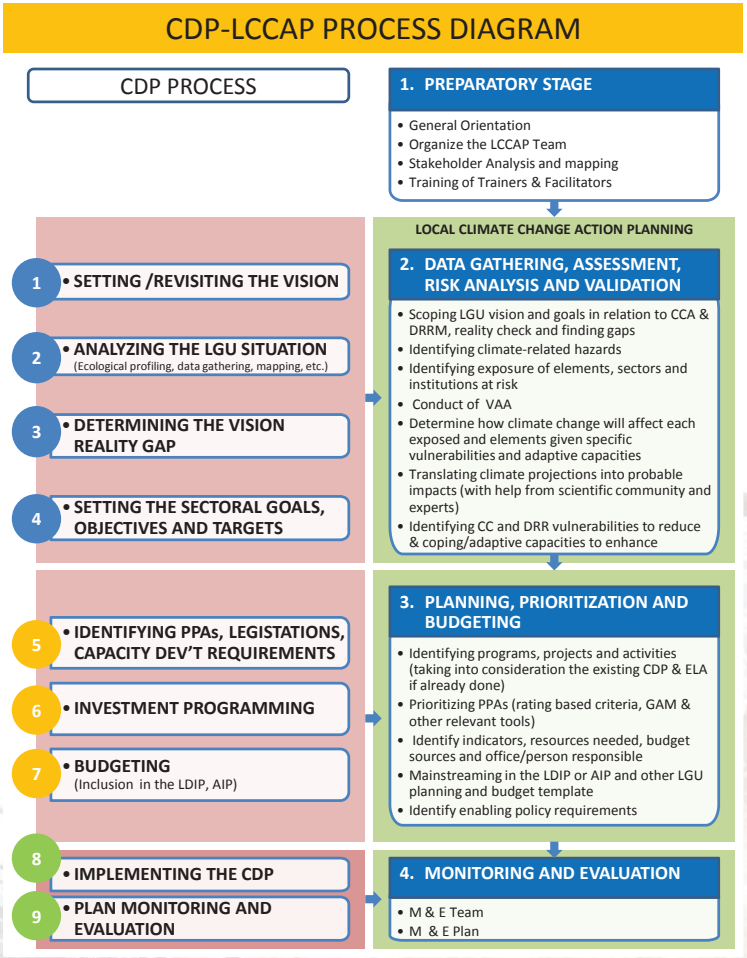
10. **Monitor and evaluate.**

    Strategies and programs should be monitored and evaluated to ensure that learning is captured and made available to others. A monitoring and evaluation system supports the learning process and indicates the progress towards meeting the goals of adaptation. It shall also address impacts of climate change as well as direct and indirect costs and benefits of adaptation actions. Monitoring and evaluation system shall be developed before implementation of such adaptation options. Existing indicator systems can provide support in the establishment of monitoring and evaluation schemes for adaptation.

FRAMEWORK FOR THE FORMULATION OF LOCAL CLIMATE CHANGE ACTION PLAN

Below is the diagram of the framework for the mainstreaming and integration of the local climate change action plan (LCCAP) in the development planning and budgeting of Local Government Units.

The planning process diagram identifies the steps in the development of the CDP where a corresponding LCCAP process could be mainstreamed. On the other hand, if the LGU has already completed its CDP prior to the formulation of its LCCAP, it also identifies the steps or part of the CDP that could be used as entry points in LCCAP formulation. Towards the end of the process, the LCCAP prioritized programs, projects and activities could be integrated in the current CDP and considered for budget allocation in the LGU's Annual Investment Plan.



MODULE A

GETTING READY FOR LCCAP FORMULATION

MODULE A

GETTING READY FOR LCCAP FORMULATION

This module comprises the five preparatory steps in the formulation of LCCAP. However, if the LGU has already started the preparation of their LCCAP, they may opt to skip this module or just choose some of the steps here that they think would help them formulate their LCCAP better. Some of the steps in this module are also link with the CDP process and may require a re-visit of their comprehensive development plan and mainstreaming of the process in the CDP process that every LGU has to do.

At the end of this module, the trainers/users will:

- have a clear understanding of the key concepts and context of climate change impact and disaster risks that their locality and constituents shall have to face
- be able to identify the persons or team who will steer the whole process of LCCAP formulation and the stakeholders who should be involved in the process
- have a shared vision and goal for climate change adaptation with their local leaders and the commitment to pursue these goals
- be trained and prepared for the conduct of the different steps and demands in the formulation, implementation, monitoring and evaluation of the LCCAP

Below is the matrix of the steps included in this module:

	STEP1	STEP 2	STEP 3	STEP 4	STEP 5
DESCRIPTION	General Orientation: Setting the Mood, Drawing Commitments	The LCCAP Core Team: Identify the Champion	Scoping: LGU Vision & Goals for LCCAP, Reality Check & Finding Gaps	Stakeholder Analysis & Mapping	Training of Trainers & Facilitators
OBJECTIVES	✓ Clear understanding of the key concepts and context of climate change impact and disaster risks that their locality and constituents have to face ✓ gather support and commitment to the LCCAP from key leaders and sectors ✓ initially identify planning framework, timeframe & available resources	✓ be able to identify the persons or team who will steer the whole process of LCCAP formulation	✓ have a shared vision and goal for climate change adaptation with their local leaders and the commitment to pursue these goals ✓ identify the resources, data and skills that the LCCAP core team have ✓ identify the gaps and limitations that could be encountered in the LCCAP formulation process	✓ identify the stakeholders who should be involved in the process	✓ be trained and prepared for the conduct of the different steps and demands in the formulation, implementation, monitoring and evaluation of the LCCAP ✓ learn the different methodologies and skills needed in facilitating LCCAP formulation.
TARGET OUTPUT	Well-oriented LDC members EO for LCCAP Formulation Signed Commitment	LCCAP Core Team Team Leader & members identified	LGU LCCAP VMG Planning Framework with budget & Work Plan	List of stakeholders Working committees formed	Trained facilitators Training Plan Training/Activity Design (adapted to LGU local situation & needs)

	STEP1	STEP 2	STEP 3	STEP 4	STEP 5
METHODOLOGY	Seminar / workshop	Meeting / workshop	workshop	workshop	Training of trainers Workshop & case analysis Simulation Games Outdoor activities
LEAD OFFICE / AGENCY	DILG / Office of the Mayor or MPDO or DRRMO	Office of the Mayor / Planning Team or DRRMO	LCCAP Core Team	LCCAP Core Team	LCCAP Core Team / External Consultants
TARGET PARTICIPANTS	LCE, SB Members, LDC members & sectoral representatives	LCE & SB members, Department Heads	LCE, SB Members, Department Heads & Sectoral Representatives	LCE, SB Members, Department Heads & Sectoral Representatives	LCCAP Core Team & selected trainers, representatives from the Academe
REQUIREMENTS / RESOURCES NEEDED	Resource Persons (invite experts if possible) Maps, charts, ppt presentations, projector Manila paper, metacards pens	Manila paper/easel paper Metacards, pens	Copy of CDP, CLUP & AIP, Local data (if available) Crayons, manila paper/ easel paper, metacards, pens	Long List of partners & possible stakeholders Metacards, pens, chart	Resource Persons Expert Trainers Training Modules Venue & equipment Metacards, balls (soft inflatables in different sizes); maps, pentel pens, training kit,
TIME FRAME	1-2 days	½ - 1 day	1 day	1/2 day	3-5 days (excluding travel time)

A.1. General Orientation: Setting the Mood, Drawing Commitments

This step will open the entire process and set the mood for LCCAP formulation. But if the LGU has already started the process of formulating their LCCAP, this step can serve as a review or re-visit of the climate change adaptation and disaster risk reduction concerns of the municipality. The target participants are the members of the Local Development Council. It would be ideal for the Mayor, Vice Mayor and members of the City/Municipal Council and the department heads be present during the general orientation. If the budget allows, all Barangay Captains must also be invited. In general, representatives from different sectors of the locality could be invited given the available resources of the LGU.

OBJECTIVES:

1. Have a clear understanding of the key concepts and context of climate change impact and disaster risks that their locality and constituents have to face
2. Gather support and commitment to the LCCAP from key leaders and sectors
3. Initially identify planning framework, timeframe & available resources

DURATION: One (1) day
SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
	Arrival & Registration		
30 mins to 1 hour	Opening Preliminaries • Opening Prayer • National Anthem • Welcome Messages • of Participants • Rationale & Objectives	Opening Program NOTE: It is ideal if the Local Chief Executive give the opening message and set the mood of the activity	

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
30 minutes	WORKSHOP A.1- Current Local Climate and Disaster Risk Situation Guide Questions: 1. What climatic changes or events have you experienced or observed in our locality in the last three years? 2. Who are the most affected by these changes or events?	▪ Participants may be grouped randomly (either through counting or per age bracket) ▪ answers to the guide questions must be written on the metacard (write phrases or key words only) ▪ the facilitator will group similar or related ideas together	Metacards, pentel pens Use Workshop Matrix No. A.1. to summarize result
	NOTE: This workshop will be done during the orientation to gauge the level of awareness and understanding of the participants	▪ leave the grouped ideas on one side of the board or wall so the speaker/ resource person can refer to it during the discussions or inputs	

1 UN-HABITAT. Participatory Vulnerability & Adaptation Assessment: A toolkit based on the Experience of Sorsogon City, Philippines, CCCI Discussion Paper, No. 1, p8

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
2 hrs	INPUT 1: Understanding CC and DRR Concepts: Evidence-based Adaptation and Planning Key points to be shared / discussed[1]: ✓ Basic definition of terms ✓ The relationship of sustainable development and climate change ✓ Projected global/ regional /national climate change impacts (whichever is available) ✓ The critical role of local governments in climate change adaptation and mitigation ✓ Opportunities for local adaptation and mitigation action: examples from what other cities have been doing ✓ Support organizations / institutions that could be tapped by local governments ✓ The need for a local CC & DRR planning and what the process would entail	▪ A climate science expert or a local resource person on CC & DRR concepts may be invited to give this input. ▪ Without compromising the science, it is critical to use simple language and terms that can be understood by the local leaders. ▪ Maps, pictures, illustrations and diagrams would help a lot in understanding concepts & context being discussed	PPT presentation Maps Diagrams Pictures Video documentary (if available)

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
	OPEN FORUM		
1 hr	INPUT 2. Legal Bases of CCA/ DRR Initiatives: Why do LGUs need to formulate a Local Climate Change Action Plan?	▪ discuss the salient provisions of the laws (RA 7160, RA 9729, RA 10121, etc)	
	OPEN FORUM		
2 hours	WORKSHOP A.2 - Next Steps Guide Questions: 1. What initiatives / plan / policies that we have or are doing now that address climate change & DRRM? Who are in-charge of those? 2. Based on what we learned from the inputs today, what are the things that must be done now to address climate change? 3. Let's complete our Plan Matrix by a) putting in Names or Office/Dept. who would lead the action; b) what can you or your office can commit to achieve or do the things that must be done.	▪ write answers on metacards ▪ facilitator should ensure maximum participation; encourage local officials to answer the questions	▪ Use Workshop Matrix No. A.2.
30 mins	Synthesis	▪ Identify key learnings ▪ mention key actions ▪ reiterate & confirm commitments	
30 mins	Closing Ceremonies ▪ closing messages ▪ reminders/ announcement		

This step (A.1) could be followed by step A.2 on the second day. If this is the case, the closing ceremony will be done on the second day.

WORKSHOP MATRIX A.1

CLIMATE EVENTS/CHANGES EXPERIENCED OR OBSERVED *(what & when& where)*	**WHO ARE AFFECTED?**

WORKSHOP MATRIX A.2.

1. What initiatives / plan / policies that we have or are doing now that address climate change & DRRM? Who are in-charge of those?

CURRENT INITIATIVES	**PERSON / OFFICE IN-CHARGE**	**AVAILABLE BUDGET/LOGISTICS**

2. Based on what we learned from the inputs today, what are the things that must be done now to address climate change?

WHAT MUST BE DONE?	**WHO WILL DO IT?**	**WHAT DO WE NEED TO FULFILL/ ACHIEVE IT?**

A.2. THE LCCAP CORE TEAM: Identifying the Champions

This step is intended to form the LCCAP Core Team, the group who will lead, oversee and ensure that an LCCAP will be drafted, eventually approved, implemented, regularly monitored and updated when necessary.

This step could immediately follow the orientation of the key LGU officials and stakeholders (A.1).

OBJECTIVE: To be able to identify the persons or team who will steer the whole process of LCCAP formulation

The core team that should mainly be composed of technical staff of the local government unit is expected to ascertain efficiency and effectiveness of the process. Having the LGU core team would also ensure local ownership and institutional anchoring. LGU staff's familiarity with reporting channels, procedures, and roles and responsibilities of the local offices would be vital inputs to the process. The composition of the team should however be complemented by additional members from partners such as international development organization (if there's any), academic/research institutions, and non-government organizations who can provide the needed expertise or knowledge necessary in the process.[1]

Some reminders and tips:

- ✓ The core team should be committed to the assessment process.
- ✓ It is ideal to have an interdisciplinary assessment team composed of members with experience and exposure in the areas of: local development planning and management, socio-economic research, disaster management, engineering and climate science.
- ✓ The team members should maintain an open mind to see opportunities, needs and gaps.
- ✓ Team members should be sensitive to political, cultural and gender contexts.
- ✓ Team members should possess good communication and analytical skills.

2 Ibid., p.9

THE TEAM LEADER

In most cases, planning is within the jurisdiction of the Planning and Development Office and the department head usually becomes the focal person. If the Mayor has already identified the Focal Person to lead in the LCCAP Formulation, he or she will be the team leader. This time, only the members of the team will be selected. If no focal person is assigned yet, use the output of Workshop 2 (workshop Matrix A.1.2) as the primary source of information. In most LGUs with a DRRM unit, planning for climate or disaster risk related concerns becomes part of the responsibility of the DRRM unit. If the DRRM unit head is capable and familiar with the planning process, he/she could be the focal person in LCCAP formulation.

In any other case, identify who within the LGU or from the stakeholders can be considered a champion of Climate Change or DRR issues. It would be great if the local chief executive / Mayor or the Vice Mayor is the local champion.

A "Champion" is an individual whose energy, skills, political and administrative connections, or community profile can help to initiate and/or maintain the process, sustain commitment to the project and help to ensure a good information flow between the stakeholder group, other project staff and the broader community. A champion may be a politically powerful person with the ability and capacity to effect change, who also happens to be climate-aware, or a community leader who can motivate and educate in vulnerable communities, or is a motivated planner willing to put effort and time into the planning process.[1]

THE MEMBERS OF THE LCCAP CORE TEAM

The members of the core team may range from a minimum of 6 to as many as 12 to 15 members. The lesser the number of members, the better for easier coordination and scheduling. It is recommended that the following LGU departments be represented in the core team:

- ✓ Planning and Development Office
- ✓ Health Office
- ✓ Engineering Office
- ✓ Agriculture Office

3 UN-HABITAT, (2014). Planning for Climate Change, A Strategic, Values-Based Approach for Urban Planners, UNON, ,Publishing Services Section, Nairobi, Kenya

- ✓ Social Welfare & Development Office
- ✓ Budget Office
- ✓ DRRM Office

Other members may be selected from offices or departments identified from the previous workshop (A.1.2). A representative from the SB may also be invited to be a member of the core team.

IMPORTANT: The representative to the LCCAP Core team does not necessarily need to be the department head. It could be a staff who has the knowledge, research capability, right attitude and ample time to devote in the whole LCCAP planning process.

DURATION: Half day to 1 day
SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
Day 2 (*of the General Orientation Activity)* 2 hours	Formation of the LCCAP Core Team	**OPTION 1:** After the General Orientation, the Mayor may meet all the department heads, select the team leader/focal person and the members of the LCCAP Core Team. Academe & NGO representatives may be invited to join the core team. Then, issue an executive order forming the team with their names listed, with their corresponding duties and responsibilities, and budget allocation.	List of LCCAP members Executive Order
		OPTION 2: This is a combination of a workshop followed by the meeting of the Core Team.	

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
10 minutes	Recap of Day 1	✓ Review the events and learnings that took place the previous day ✓ Recall the highlights of the Workshops	
30 minutes	Presentation of the Output of Workshop 2 (Step A.1) Select the Team Leader	✓ From the result of the workshop, identify the team leader. If he/she is present during the activity, acknowledge the person and ask him/her to help facilitate the next steps.	Consolidated Report of the output of Workshop 2.
	Who would be the members of the LCCAP Core Team? *Who would be the members of the secretariat to provide administrative assistance, records filing and database management?*	✓ Ask the heads of the departments or offices identified to provide the name of the assigned person. ✓ If there are identified persons from the Academe, NGOs/POs or Civil Society, get their names and acknowledge them.	

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
1-2 hours	Meeting of the LCCAP Core Team	✓ The assigned Team Leader will lead the meeting to set the initial work plan of the Team. ✓ Among the things that must be decided should be: • schedule and venue of Team meetings • TOR of each member of the team (*initial commitment, availability and capabilities must be known to serve as basis for the TOR which can be formally drafted by the HRD of the LGU)*	

A.3. Scoping: LGU Vision & Goals for LCCAP, Reality Check & Finding Gaps

This step can immediately follow the General Orientation (A.1) as this will involve the same participants. This can be done on Day 2 of the General Orientation program.

OBJECTIVES:

1. have a shared vision and goal for climate change adaptation with their local leaders and the commitment to pursue these goals
2. identify the resources, data and skills that the LCCAP core team have
3. identify the gaps and limitations that could be encountered in the LCCAP formulation process

Once the core team has been organized and there is clear support from the local government leaders, the next step would be to agree on the purpose and scope of the LCCAP. This is essential before proceeding with the assessment and planning steps considering the complexities of climate change impacts.

DURATION: 1 DAY
SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
1 hour	Our Vision & Mission	**PLENARY:** ✓ Present the VMG of the LGU and the DRRM VMG (if there's any) read and see if it already includes an idea or action related to climate change. If yes, get the consensus of the group if the LGU would retain the VMG or they would like to revise it.	Copy of the LGU VMG
1 hour	Our Vision & Mission	✓ If they don't agree yet, distribute one metacard to each participant and ask them to write what they would like to add to the current vision of the LGU to include climate change scenario previously identified ✓ After 5 minutes, gather all the answers, group similar answers together and identify the common idea emanating from the group of metacards. Form the vision statement. ✓ Get the consensus of the group and finalize the vision. ✓ do the same for the mission	Copy of the CLUP and CDP Metacards, pens

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
	Our Goal	**PLENARY** ✓ Review each goal of the LGU and see if it includes climate change goals. ✓ If not, distribute metacard again. ✓ Participants to write their proposed LGU goal that can be achieved within the identified LGU timeline (or it is advised to use the IPCC suggested timeline of 30 years) ✓ After 10 minutes, gather the participants cards, group similar answers together, identify common idea then form the goal statement.	Copy of the LGU VMG Copy of the CLUP and CDP Metacards, pens
1 hour (workshop) 15 minutes per group (reporting)	**REALITY CHECK** Guide Questions: 1. Given the VMG of the LGU, and for the purpose of formulating our local climate change action plan, should the plan focus on the LGU as a whole or on specific location (hotspots)? or specific population group? or on the local economy or specific sector?	**WORKSHOP** ✓ Answer guide question no. 1 as a plenary group. If the LCE or the Mayor & SB members has already decided, proceed to group workshop.	Metacards, pens

DURATION / TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
	1. What would be the timeframe for our plan? Set priorities. 2. What resources are available to create the plan within the identified timeframe? 3. What capacity do we have for LCCAP formulation? **FINDING GAPS** What resources and capacities are not available internally (LGU) or locally? **Decision Point: Retain the focus/ priority area and get external resources / consultant or drop/ change the focus/ priority area?**	✓ Group the participants according to the sectors where they belong such as: • environment (DRRMO, DENR, SOLID WASTE, ENVI NGOs, etc) • social group (dswd, health, NGOs, urban poor, women, senior citizen, youth, PWDs, etc.) • Infrastructure & transport group (engineering, ports, general services, transport services) • institutional group (SB members, religious groups, academe, cultural communities) • Economic group (agriculture & fisheries, business group, market vendors, banking, cooperatives, etc.) ✓ ask them to answer questions no. 2-4 using the workshop matrix ✓ each group will present their output ✓ the facilitator will consolidate all the reports	Workshop matrix A.3 (in Manila paper)

WORKSHOP MATRIX A.3

NOTE: This matrix will just be an initial planning matrix for the LCCAP core team based on the LGU vision, mission and specific goals for the formulation of the local climate change action plan. The LCCAP Core Team would need to revisit and update this workplan and include other columns or items as they decide during team meetings at different stages of the planning process.

FOCUS/ KEY ACTIONS (these are items/ actions that must be included in the LCCAP)	INDICATIVE TIMEFRAME (when to do or work on it?)	RESOURCES / CAPACITY AVAILABLE (what and where (or who) is it?)	GAPS (What must be sourced out externally)

REMINDER: Based on this initial work plan, the Core Team can now do the tasking or form committee/s-in-charge of each area/item. They must create their workplan with proposed budget for submission to the appropriate person of authority in the LGU for approval.

A.4. STAKEHOLDER ANALYSIS & MAPPING

The term "stakeholder" refers to people, groups and/or organizations who have significant and legitimate interest in a specific issue. Mobilizing stakeholders is a key element to improved governance as it builds local ownership and commitment to development activities and processes. In the context of the LCCAP, mobilization of stakeholders is crucial not only in gathering information but also in building consensus and conclusions. Over the long term- the identification of practical solutions to the identified local climate change vulnerability and the delivery and implementation of response actions will be enhanced and generate momentum to act so plans are actually implemented.[1]

OBJECTIVES: Identify the stakeholders who should be involved in the process, along with their interest, capacity and influence to the planning process.

DURATION: 1-2 Hours
SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
30 minutes	Identification of Stakeholders	**OPTION 1: LCCAP Core Team alone** ✓ The members of the LCCAP Core team will list all the possible stakeholders to be involved in the planning process (could be specific persons, group or institution as a whole) in column 1 (list the names in small metacards or strips of paper and post it in the column) ✓ Opposite each name, identify their interest in the plan formulation (column 2), the extent of their influence (Column 3), and their capacity to contribute to the planning process (column 4)	List of stakeholders **Workshop Matrix A.4**

4 UN-HABITAT. Participatory Vulnerability & Adaptation Assessment: A toolkit based on the Experience of Sorsogon City, Philippines, CCCI Discussion Paper, No. 1, p. 12-13

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
30 minutes	Stakeholder mapping	✓ After completing WS Matrix A.4, transfer the names in the mapping diagram – (always refer to the matrix for proper classification) • stakeholders in quadrant 4 (*high stake-high influence*)will be the primary stakeholders who should be involved and consulted most of the time • stakeholders listed in quadrant 2(*high stake-low influence*) are the stakeholders who should be present during consultations • those listed in quadrant 3(*low stake-high influence*) may be included in the expanded list of participants during consultations, maybe part of the advisory group and can be consulted for specific decisions • those listed in quadrant 1 (*low stake-low influence*) will be part of the expanded list of participants during consultations	Stakeholders Map
	Stakeholders' database	The list must be turned-over to the secretariat for records keeping. Ask the secretariat to complete the matrix by adding contact information of each identified stakeholder **OPTION 2: Workshop with actual stakeholders (maybe the same group who attended the General Orientation, invite additional stakeholders)**	List of stakeholders

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
		✓ Give each stakeholders small metacards (4 different colors) and write the following on the card: • *White - Name* • *Green – stake/interest* • *Blue – Influence* • *Yellow – Capacity to contribute* ✓ When they finish, ask them to post their cards on the appropriate columns. ✓ You may ask them to fill-up cards for other stakeholders they know but are not present during the workshop.	Workshop Matrix A.4
		For the mapping, ask them to: ✓ Get their name cards and place it on the appropriate quadrants based on their own self- analysis. **GROUP VALIDATION:** ✓ To determine the groups perception, ask the group(plenary) whether they agree on the list of names in each quadrant. ✓ If they believe that some names must be transferred to another quadrant, they must state the reason why they believe so. ✓ If there would be transfers, ask the final consensus of the group.	Stakeholders Map

WORKSHOP MATRIX A.4
STAKEHOLDER ASSESSMENT

STAKEHOLDER *(specific name, institution or group)*	**STAKE** (*why do you have to be part of the planning process?*)	**INFLUENCE** (*what & how much can you contribute to decision making?)*	**CAPACITY** (*what (knowledge/skill/ resources you can contribute to the planning process?*)

(list as many as you can, listing local stakeholders first before external stakeholders)

STAKEHOLDERS MAP/DIAGRAM

	LOW INFLUENCE	**HIGH INFLUENCE**
LOW STAKE		
HIGH STAKE		

A.5. TRAINING OF TRAINERS: TRAINING OF THE LCCAP CORE TEAM

This step may be taken as one specific activity that can be done before the start of the LCCAP formulation. An external consultant or group of experts on climate change planning may be invited to conduct the training. The participants may be the members of the LCCAP core team and selected stakeholders from one LGU or selected LCCAP core team members of different LGUs within a province. The following training plan may be taken as the basic training for trainers or the LCCAP Core Team. Additional topics and exercises may be added as the training facilitators or consultant may see fit.

Also, there might be a need to conduct specific skills training for some members of the Core Team who will be tasked to conduct specific activity or assessment in the whole LCCAP planning process (e.g. GIS Mapping or Map Reading, Vulnerability Assessment for Agriculture/Health/Coastal & Marine or Fisheries, Infrastructure Audit, etc.)

SCHEDULE	TRAINING CONTENT
Day 1 – AM Session	Opening Preliminaries Rationale & Objectives INPUT 1 - Understanding Climate Change Concepts & the Local Context Audio-Visual Presentation: SIGNOS (or any appropriate CC Video Documentary)
Day 1 – PM Session	INPUT 2 – Legal Bases for CCA & DRR Planning INPUT 3 – Mainstreaming CCA & DRR in the Local Rationalized Planning System (CLUP, CDP, LDIP, AIP) INPUT 3 – The Local Climate Change Action Plan Framework
Day 2 – AM Session	WORKSHOP 1 – Stakeholders' Assessment & Mapping INPUT 4 – Understanding Climate Data/Scenarios and Projections
Day 2 – PM Session	INPUT 5 – Understanding GeoHazard Maps & other Spatial Data WORKSHOP 2 – HAZARD MAPPING

Day 3 – AM Session	Game: Where's the Ball? (Optional) Game Processing WORKSHOP 3 – EXPOSURE & SENSITIVITY ASSESSMENT ✓ Exposure Assessment & Mapping ✓ Sensitivity/Vulnerability Assessment
Day 3 – PM Session	Game: Spider Web (Optional) WORKSHOP 4 - ADAPTIVE CAPACITY ASSESSMENT ✓ Adaptive Capacity of Sectors ✓ Adaptive Capacity of Institutions WORKSHOP 5 – RELATIVE VULNERABILITY COMPUTATION
Day 4 – AM Session	Introduction to Simulation Game (Optional) Simulation Game: Multi-stakeholders Consultation on the Climate Change Vulnerability & Adaptation Plan of LGU X
Day 4 – PM Session	WORKSHOP 6 – OBJECTIVES & OPTIONS IDENTIFICATION WORKSHOP 7 – The Local Climate Change Action Plan Formulation & Integration in other Local Plans
Day 5 – AM Session (Optional)	INPUT 6 – Result-Based Monitoring & Evaluation WORKSHOP 8 - M & E Plan
Day 5 – PM Session	Training Evaluation: ✓ What went Well? ✓ What Needs to be Improved? Next Steps Closing Ceremonies

OPTIONS:

This training plan may be divided into two sets with 3-days sessions per set or a series of training sessions if emphasis on skills development is the main objective for some of the workshops. It is recommended that the training-workshops for a particular skill be done prior to the actual conduct of the LCCAP process.

5 UN-HABITAT. Participatory Vulnerability & Adaptation Assessment: A toolkit based on the Experience of Sorsogon City, Philippines, CCCI Discussion Paper, No. 1, p8

MODULE B

LCCAP
FORMULATION
DATA GATHERING
PARTICIPATORY VULNERABILITY
& ADAPTATION ASSESSMENT,
RISK ANALYSIS & VALIDATION

MODULE B

LCCAP FORMULATION
DATA GATHERING PARTICIPATORY VULNERABILITY & ADAPTATION ASSESSMENT, RISK ANALYSIS & VALIDATION

This Module comprises the first six (6) steps from the original twelve (12) steps in LCCAP formulation. These steps requires thorough data gathering, use of simple ratings and computations based on set criteria and tested standards (UN-HABITAT V&AA tools) with validation with concerned sector and stakeholders. Analysis and scientific validation of gathered data can be effectively and efficiently done with the help of a climate change science expert from the CCA/DRR concerned government or private institutions and organizations. Help can also be requested from experts from Local Resource (academic) Institutions (LRIs). Data and information that may be collected from these steps may be overwhelming and daunting to the planning team but caution must be taken in the choices and analysis of data. Some data like weather, rainfall and temperature data may be of regional context so it must still be validated with local experiences. It may also be very helpful to invite a climate change science expert or a knowledgeable resource person from a local academic institution or government agency who can help in understanding and analysis of gathered information.

At the end of this module, the trainers/users have:

- ✓ gathered all CC and DRR data, population data, maps, and all relevant information in creating a local climate change scenario
- ✓ identified areas and sectors exposed to various climate-related and geophysical hazards
- ✓ determined vulnerability and adaptive capacity of the areas and sectors at risks to these climate-related and geophysical hazards
- ✓ determined interactions/interlinks between hazards and its possible impact to exposed sectors
- ✓ determined climate projections and probable impacts of climate change to local areas & sectors

Before the start of a series of assessments and validation workshops, gathering of relevant data from the local government, relevant national government agencies and private sources is imperative and would be very helpful. Some of the important data and information that must be gathered, but not limited to, are the following:

- ✓ LGU environmental and demographic profile (using the most recent CBMS data)
- ✓ Current/Updated Comprehensive Land Use Plan
- ✓ Updated Ecological Profile of the LGU
- ✓ Current/Updated Comprehensive Development Plan
- ✓ LDRRM Plan
- ✓ Local weather & climate data (from PAGASA or DOST)
- ✓ GeoHazard Maps and other Maps (GIS Maps would be very useful) from MGB & NAMRIA
- ✓ Economic and Health data
- ✓ News clippings of climate and disaster related events (if available, for a span of 20 – 30 years

It is also recommended that the Core Team revisit the CLUP and CDP to review and take note of the current ecological, social and infrastructure profile of the locality.

Later, based on the result of the vulnerability and adaptation assessment, the team may compare the two sets of data and include in the plan a proposed updating or revision of the data in the CLUP and CDP to mainstream the LCCAP output in the mandatory LGU plans. This step will be included in Module C.

Some of the steps listed below may be done at different times or simultaneously depending on the availability of resources and capable personnel. Depending on the limitations set at the start of the LCCAP process, on the capability of the planning team and availability of experts, the Core Team may choose to limit or prioritize some of the steps for specific purposes. These limitations must be clearly stated in the final report to guide the members of the team as they finalize the local climate change action plan later and/or for the benefit of other users.

The Core Team may also use different vulnerability and adaptation assessment tools depending on their capacity and preferences. A list of other toolkits and guidebooks for vulnerability and adaptation assessment activities can be found at the annex of Book 3 – Compilation of Tools & Workshop Matrix.

Below is a matrix of the different steps in the planning process:

	STEP B.1a	STEP B.1b	STEP B.2	STEP B.3	STEP B.4	Step B.5
DESCRIPTION	**Climate Hazard Identification**	**Translations & Climate Projections (*with Climate Science Experts)*** **Climate Change Influence Diagram**	**Exposure Assessment:** Identification of Exposed Places, People & Sectors per identified Hazard	**Sensitivity Assessment**	**Adaptive Capacity** **Assessment**	**Vulnerability Assessment Summary &** **The VAA Report**
OBJECTIVES	✓ to identify climate related hazards and climate trends that the locality has observed and experienced (30 yrs span); ✓ to determine the primary & secondary impact of the observed hazards	✓ to further translate observed impacts into climate projections and probable impacts ✓ to map out how the changing climate will interact with other hazards to affect exposed sectors	✓ to identify elements, places, people & sectors exposed to the climate related and geo-physical hazards; ✓ Review against current CLUP	✓ to determine the degree to which exposed people, places, institutions and sectors are impacted by climate change hazards today and in the future; ✓ review against socio-economic data and physical realities	✓ to determine the coping/ adaptive capacity of the people, institutions places & sectors to the identified climate hazards	✓ to determine how the changing climate will affect each exposed sector and element given specific sensitivities & adaptive capacity ✓ to prepare the vulnerability assessment report ✓ to present the VAA result to the LGU decision making bodies (LDC, etc)

	STEP B.1a	STEP B.1b	STEP B.2	STEP B.3	STEP B.4	Step B.5
TARGET OUTPUT	Table of Climate Hazards and observed primary & secondary impact	List of Climate Projections	Exposure Assessment (by sector)	Sensitivity Assessment	Adaptive Capacity Assessment	Vulnerability index/ Matrix VAA Report
METHODOLOGY	workshop Data Gathering/ Research	Desk Work Research	Workshop Survey & FGD Mapping	Workshop Survey & FGD Mapping	Workshop Survey & FGD Mapping	Workshop Desk Work/Analysis Report Writing & Presentation
LEAD OFFICE / AGENCY	LCCAP Core Team	LCCAP Core Team / External Consultants	LCCAP Core Team	LCCAP Core Team	LCCAP Core Team	LCCAP Core Team
TARGET PARTICIPANTS	LCE, SB Members, LDC members & stakeholders	LCCAP Core Team / External Consultants	LCE, SB Members, LDC members & stakeholders	LCE, SB Members, LDC members & stakeholders	LCE, SB Members, LDC members & stakeholders	LCE, SB Members, LDC members & stakeholders

	STEP B.1a	STEP B.1b	STEP B.2	STEP B.3	STEP B.4	Step B.5
REQUIREMENTS / RESOURCES NEEDED	News clippings Weather & climate data Maps, charts, ppt presentations, projector Manila paper, metacards Pens	Resource Persons/ Expert Results of Climate Hazard Mapping & Climate Projections (by a Climate Science Expert)	Copy of CDP, CLUP Local data (if available) Crayons, manila paper/ easel paper, metacards, pens	Copy of CDP, CLUP & AIP, Crayons, manila paper/ easel paper, metacards, pens	Sample Adaptive Capacity Assessment Criteria & Questionnaire	Result of Exposure & Sensitivity Assessments **VAA Report Proposed Table of Contents**
TIME FRAME	½ day to 1 day workshop with LCCAP Core Team per Step / OR ½ day to 1 day Key Informants Interview or Focus Group Discussion with relevant Stakeholders / OR Several Days to Several Months Research and Analysis (depending on the scope of V&A Assessment & Availability of Resources					

GENERAL GUIDELINES

The assessment team should gather and organize the information needed from various local government departments or offices. Note, however, that some information may not be available from the LGU but may be available elsewhere. Thus, linking and networking with other stakeholders operating locally (or even nationally) is crucial. Moreover, vital information will have to be sourced from the communities themselves thus it is important for the assessment team to conduct community consultations through Focus Group Discussions (FGD).[1]

- ✓ Some pointers: Gather updated or most recent data. As much as possible use Data.
- ✓ Information consistent with what the local planning uses. This would ensure local ownership and maintain relevance of the assessment results with the context of the locality.
- ✓ If necessary, the assessment team should write formal letters to request for data/information

When needed, key informant interviews could be used in gathering and validating information[2] It would be crucial for the assessment team (especially if they are not experts in climate science) to have first the basic understanding or knowledge on how climate change projections and models are developed. But again, remember that "scenarios and models are tools" for assessment and adaptation planning and is not the "end-all, be-all" of the Vulnerability Adapation Assessment (V&AA). Conduct of climate modeling is costly and complicated and so it is mostly done by institutions/agencies with expertise on climatology. Often what are readily available from such institutions are national level climate change projections and not down-scaled projections for smaller areas like cities/municipalities (as initially experienced in Sorsogon City). As said, do not get bugged-down by the absence of localized climate models. Downscaled information from climate models is definitely most useful, but the absence of it should not mean that V&AA and adaptation planning cannot be done. To define and assess the city exposure should there be no localized climate projections specifically made for the locality, the rich documented discourse and scientific observations available at the global, regional and national levels could initially be used as basis in defining the city climate change exposure analysis. In such case, what would be crucial is to facilitate ground-truthing of the available projections to establish its relation to actual local observations (recorded or not). The ground truthing could be done by conducting FGDs with communities and through general stakeholder workshops.[3]

6 Ibid., p. 15
7 Ibid., p. 16
8 Ibid., pp 17-18

The different steps outlined above may be done through a small group workshop by the members of the LCCAP Core Team assigned or task to do a particular assessment activity in case enough resources to conduct a big stakeholders workshop are not available. But given enough resources, each group may invite stakeholders relevant to the assigned area or sector to be assessed. Or the entire LCCAP Core Team may work together to do vulnerability assessment of one sector followed by key informant interviews and/or focus group discussion.

B.1. CLIMATE HAZARD EXPOSURE ASSESSMENT & INFLUENCE DIAGRAM

For this step, all identified stakeholders may be invited for a half-day to 1 full day workshop. If many stakeholders from each sector (environment, social, physical / infrastructure, economic and institutional) will attend, the participants may be grouped per sector so they could discuss their answers among themselves and come up with as may information / data that they could give. It is important to invite representatives from the Senior Citizens group who could give information along different timeline.

OBJECTIVES:

- ✓ to identify climate related hazards and climate trends that the locality has observed and experienced (30 yrs span);
- ✓ to determine the primary & secondary impact of the observed hazards

SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
1- 1.5 hrs each	**INPUT 1 – Understanding Climate Change Hazards & Projections**	A climate science expert from PAG-ASA or Climate Change Commission or from a Local Academic Institution may be invited as Resource Person/Consultant to discuss Climate Change Issues, Impacts, Hazards & Projections 20, 30 or 50 yrs onwards based on available data	Climate & Rainfall Data (*current and within 10-20 yrs or even longer span*) Climate Projections & other available climate data (from Project NOAH, PAGASA, etc)
	INPUT 2 - Understanding Geo Hazard Maps & Multiple Hazard Maps	An expert from MGB or NAMRIA or Project NOAH may be invited to discuss and explain how to understand hazard maps and generate GIS data from overlaying the different kinds of maps and climate projections	Copy of multiple hazard maps (e-copies if available) Computer/GIS expert from the MGB/ NAMRIA Local GIS expert/local engineering office staff

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
2-3 hours	**WORKSHOP B.1a** Climate Hazards, Impact Observation & climate Influence Diagram	✓ **Participants may be grouped per sector** ✓ answers to the guide questions must be written on the metacard *(write phrases or key words only, identify specific location, date or year when it happened)*	Metacards, pentel pens Sample list of climate hazards and extreme events (for guidance)
	Guide Questions: 1. Identify past, and current climate, climate extreme events and other disaster hazards that you and your community have experienced in the last 30 years. 2. Opposite each hazard, write the observed primary and secondary impacts that you have experienced. 3. Create a Climate Change Influence Diagram by linking each hazard with related impact(primary and secondary). One impact may also be linked with a one or more related impact.	✓ Check PAGASA or other local scientific institutions for local climate & weather data ✓ Check PhiVOLCS & MGB or the GeoHazard Maps for geo-physical hazards ✓ the facilitator will group similar or related ideas together	Climate Change Influence diagram (*read guidelines in Tool 3-C*) **Other references:** UN-Habitat-CCCI Planning for Climate Change ToolKit (2014) Tool 3-A & Tool 3-B

DURATION / TIME (1 whole day)	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
2-3 hrs	**HAZARD MAPPING** Using a local map of the area, identify the specific location/ areas where the identified hazards occurred, marking the place and the area covered and the date it occurred.	✓ Based on the hazard list/matrix done during Workshop B.1, create a hazard map of the locality. ✓ one large map can be used or divided maps of different political subdivisions (district or cluster of brgys) of the locality.	Maps (Google Maps of the locality can be used as reference in the absence of a local map) Diagrams Pictures
	FOR THE CORE TEAM ✓ Review the matrix and hazard map against the CLUP and identify areas for possible revision or updating later.		Copy of the CLUP

NOTE:

The Exposure Assessment and Analysis must be done per sector to get a good picture and wealth of data for all sectors of the LGU and their exposure to different climate hazards

This can be done simultaneously with each sector through multi-stakeholders consultation. If budget and time are limited, the LCCAP core team may opt to do the sectoral analysis one after the other using specific and relevant data for each sector/ subsector but they have to invite additional members from the sector.

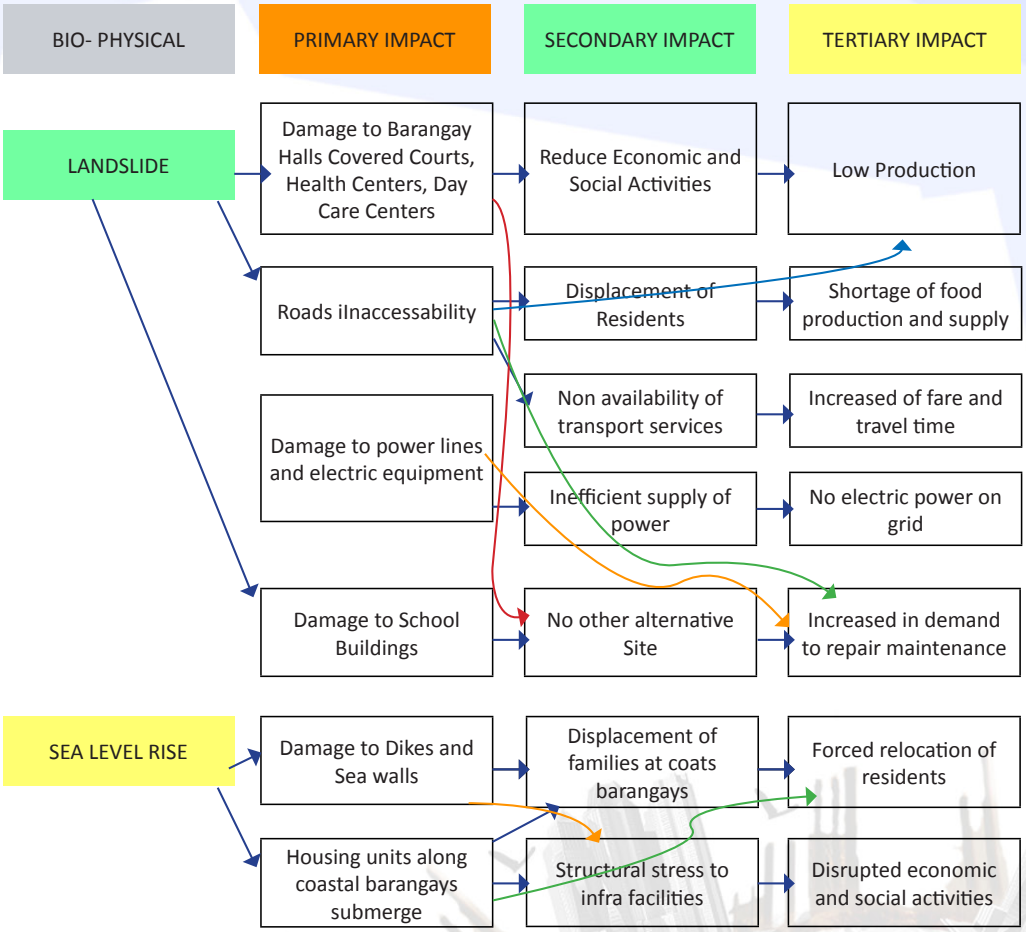
WORKSHOP MATRIX B.1a : Exposure Analysis & Influence Diagram

SECTOR: _____

Climate Change Drivers/ Hazards	**Primary Impact**	**Secondary Impact**	**Tertiary Impact**	**Hazard Area – Exposed Features (People, Places, Institutions)**	
				Location *(Brgy/ Purok – be specific as possible)*	**Exposed Elements** *(Who and what are exposed – by Sector: people, institutions – How many?) Be specific as possible*
EXAMPLE: *Wetter Rainy Season* • *flooding*	Streets are submerged in water Housing units submerged	Disruption in Mobility of people and goods Structural stress in housing unit	Low productivity Increased demand in maintenance and repair investment	*Considering the primary, secondary and tertiary impacts, locate the areas affected by flooding* *(be specific as possible (e.g. by purok or sitio per barangay)*	*In each location, specify who, what are affected by flooding- People? Places? Institutions? (Be specific as possible)* *Example:* • *Water/ Sanitation* • *Economy (formal & informal)* • *Health* • *Population* *- Children* *- Women* *- Men* *- Elderly* *- Physically challenged* • *Security* • *Schools* • *School-age population*

NOTE: The impacts are not limited to linear analysis. The tertiary impact, for example, may also indirectly impact the secondary or primary impact. Arrows can be connected to any other impact depending on how the sector have experienced it or relate it.

Sample Influence Diagram: (from UN-HABITAT)



SECTOR: _____

COLUMN 1	COLUMN 2		COLUMN 3	COLUMN 4
Climate Change Driver/ Hazard	**Historical Trends & Observed Conditions**		**Climate Model Scenario Projections**	**Probability to Recur *(based on consensus)***
	Local/Regional Weather Data	**Stakeholders Observations**		
EXAMPLE: *Climate Change Driver:* *Increased in Precipitation/ Wetter Rainy Season/ Stronger Typhoon* *CC Hazard:* • *Flooding*	*Eighteen typhoons recorded (1993-2009)* • *Highest Rainfall Quantity =179.6 mm* • *Lowest = 96 mm* *Recorded Highest Wind Speed 401 km/h (100mph) (10-min), 940 mbar(hPA)* *Lowest: 5 km/h (45 mph) (10 min) 992 mbar (hPA)*	• *More incidents of rivers overflowing* • *despite repairs, drainage system still malfunctioned during heavy rains* • *increasing number of barangays flooded* • *increasing number of families and individuals affected* • *happens in the 3rd quarter of the year and not on the 2nd quarter when the rainy season is expected*	*2020 Projections for Seasonal Mean Rainfall:* • *Drier summer season: 6% in MAM and 12% in DJF* • *Wetter rainy season: 1% in SON & 16% in JJA* *2050 Projections for Seasonal Mean Rainfall:* • *drier summer season: 26% in MAM and 2% in DJF 2050* • *Wetter rainy season: 2% in SON & 34% in JJA 2050*	*Medium*
• *Rain Induced Landslide*	*(input PAGASA weather/climate data)*	*(input stakeholders observation)*	*(input PAGASA Projections)*	*(High,Medium or Low)*
CC Driver: *Increase in average temperature* • *Drier Summer*	*(input PAGASA or Project NOAH's weather/climate data)*	*(input stakeholders observation)*	*(input PAGASA Projections)*	*(High,Medium or Low)*

COLUMN 1	COLUMN 2		COLUMN 3	COLUMN 4
NATURAL HAZARDS (may be included in separate rows to determine other possible DRRM concerns)	*(input PAG-ASA, Project NOAH or MGB data)*	*(input stakeholders observation)*	*(Input relevant projections)*	*(High,Medium or Low)*

LEGEND:

Column 1: Hazard characterization based on identified CC drivers/hazards from previous workshops by the Sectoral committees. based on occurrence and data from PAGASA/Project NOAH or MGB (in the case of Natural Hazards)

Column 2a: Historical weather/climate data: This information will provide historical data and will include annual and seasonal trends, averages (temperature, precipitation, etc.) and past extreme events (tropical cyclones, droughts, etc.). The collection and summary of historical data can be collected from nearest weather station (PAGASA) or data from Project NOAH.

Column 2b: Gather stakeholders' own observations about changes to the local weather and climate (as provided in Column 2a). This will help reinforce the findings and ensure that the research or assessment done so far is consistent with stakeholders' "on the ground" observations. Input from Senior Citizens are important for historical observations.

Column 3: Based on answers in column 2a & 2b, as well as estimated changes/ projections using climate models (by PAGASA), input the climate change projections for each hazard for 30-50 years. This will show if level of change is expected to increase, decrease or remain the same at a greater rate in the future.

Column 4: Agreement among Sectoral Committee members on confidence or probability to recur, given the discussions on the stakeholders obervation and climate scenarios/projections. Input here should answer the question: "How likely is it that the projections will actually occur?"

B.2. & B.3. SENSITIVITY AND THREAT LEVEL ASSESSMENT

This can be done by the LCCAP Core Team for the entire locality identifying exposure and degree of risks (sensitivity) of people, places, elements and infrastructure and sectors through desk work analysis with the help of a climate science expert or resource person. Socio-demographic data are important information to help determine the profile and number of exposed groups.

The result of hazard mapping analysis will be used to assess sensitivities and help identify risk areas when additional information about sensitivity is collected. It will also be used to help illustrate the type and degree of vulnerability for the different risk categories (i.e. people, places, institutions, sectors) and scales of risk to be defined in the next step

Given the time and resources needed, the core team may divide themselves into sectoral groups and do the assessment and validate the result through focus group discussion with stakeholders.

OBJECTIVES:

- ✓ to identify elements, places, people & sectors exposed to the climate related and geo-physical hazards;
- ✓ to determine the degree to which exposed people, places, institutions and sectors are impacted by climate change hazards today and in the future;
- ✓ review against socio-economic data and physical realities
- ✓ review against current CLUP

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
1 whole day	**WORKSHOP B.2-** **SENSITIVITY ASSESSMENT** GUIDE QUESTIONS: Using the climate hazard exposure profile of the locality 1. What specific areas and elements (infrastructures) and people will be most likely affected or are affected by specific hazards. Do the same for others sectors and groups.	▪ Participants may be grouped per sector. ▪ Answers to the guide questions must be written on the metacard *(write phrases or key words only).* ▪ Assessment should be hazard specific. ▪ For people and sectors exposure assessment, ensure disaggregation of data (women, youth, elderly, economic sectors if any, using CBMS data, ENRO, MAO & FARMC data. ▪ Refer to the ecological & demographic profile of the locality given in the current CLUP.	**Other references:** UN-Habitat-CCCI Planning for Climate Change Toolkit (2014) Tool 3-D

Suggested Focus Group Discussion Activity Design (As used in Sorsogon City)[1]

DURATION	ACTIVITY / METHODOLOGY
5 mins	**Introduction of FGD Participants and Assessment Team**
5 - 10 mins.	**Presentation of FGD Objectives and Overview of Climate Change**
1 – 2 hours	**Guided Discussions:** *(Each discussion topic should be asked in an open ended manner so that the participants could answer as they see fit and in their own terms. Probing will be done during the FGD to gather more information)* ○ What is the community's observation on local temperature? How has temperature change manifested in their community? ○ What is the community's observation on rainfall pattern and volume? What evidences of this change are seen/experienced by the community? ○ What is the community's experience of drought/El Nino? ○ What are the community's experiences on previous tropical cyclones/typhoons? ○ What have the local people observed in the coast? What changes have you seen over the years? ○ How have storm surges affected the community over the years? *(During the discussion, park/note each hazard named and discussed by the respondents)*
1 - 1.5 hours	**Exposure Impact Mapping** *Using the community base map, ask the participants to mark areas/ households which* *were previously affected and by the climate related hazards noted during the discussion.* *Let them share/explain their outputs and probe if needed*
1 – 1.5 hours	***Sensitivity Assessment*** *Following the Mapping exercise, ask the community on the relevance of effects to their community and show it on the map by putting in the quantitative data given.* *The template for Sensitivity Assessment of Hotspots could be used*

9 Ibid., p. 21

15 minutes	**Recap and Closing** *Summarize what has been discussed and share how this would input into the V&AA.* *Thank and congratulate the participants.*

WORKSHOP MATRIX B.2 - SENSITIVITY ANALYSIS per SECTOR
EXAMPLE: SOCIAL DEVELOPMENT SECTOR

1	2	3	4	5	6	7		8	9
Climate Change Driver/ Hazard	**Impacts** *(primary, secondary, tertiary)*	**Location** *(where are there risks? Be as exact or detailed as possible)*	**Who, What is at Risk?** *(people, systems, activities, facilities)*	**Triggers** *(Degree of change that creates/leads to significant impacts from each climate change driver/ hazard)*	**Estimated Threshold** *(Maximum level/ amount of change that the community can endure/ tolerate)* *which may depend on the community/ elements:* •Risk tolerance •Values •Ability to understand what is at stake •(requires *adjustment)*	**Estimated Number of People/Area at risk per given threshold**		**Stressors** *(can be an external factor that aggravates the condition of elements at risk)*	**Data Source** *(be mindful of data sources. Assessment is not just based on perception. It also refers to available, scientific, empirical data).*
						Current (a) *Use current data*	**Future (b)** *Compute for future growth rate based on local rates*		
NOTE: for answers in Columns 1-4, refer to your output of Workshop B.1a & B.1b. Go back to the results of Exposure Analysis for each of the identified Climate Change Driver/Hazards ***This provides opportunity to review your previous analysis and detail further.*** ***Use barangay base maps vs. hazard/ thematic maps, LGU ecological profile, and CBMS results as references*** EXAMPLE: FLOOD				•Clogged drainage •settlements in low lying areas •weak housing materials •large population along the coast / riverside •high dependency ratio	For flooding: how many meters of water level can the community endure before declaring force evacuation status? How many hours/ mm of rain can endanger the sector?	No of affected people Specific area affected	Projected increase in number of people that will be affected	•no local policy on restraint and limits to informal settlements in riverside or coastal areas •ISFs dependent on fishing	CBMS (year?) CDP (what year/period) Ecological Profile (current)

POSSIBLE SOURCES OF DATA AND INFORMATION:

- ✓ Community Based Monitoring System (CBMS) – for sec disaggregated population, poverty incidence and magnitude, other socio-economic information, year covered
- ✓ Community Based DRRM Plan (CBDRRM) – can be referred to in defining the community hotspots (reference year)
- ✓ Disaster Preparedness Audit (reference year)
- ✓ Infrastructure Audit – can be used in defining integrity of infrastructures that might be proposed in climate change options/actions
- ✓ Comprehensive Development Plan (CDP) – for vision review, goals and objectives, programs, projects and services
- ✓ Comprehensive Land Use Plan (CLUP) – as for sectoral data/studies
- ✓ Ecological Profile – for multi-sectoral data
- ✓ Maps – these may include barangay maps, geo-hazard maps, thematic maps, weather maps, etc.
- ✓ Result of Focus Group Discussions with stakeholders/sectors
- ✓ News clippings from Archives (for historical data of occurrence of climate related hazards and disasters)

WORKSHOP B.3 - THREAT LEVEL ANALYSIS

Threat Level Analysis serves as the summary of the exposure and sensitivity assessment workshop. Using the result of the previous workshops as reference, the team will now provide numerical representation of the level of sensitivity of the exposed sector, people and elements for each identified climate change hazard. For purposes of integrating DRRM concerns, the team may also include identified and assessed natural hazards to which the community or the LGU is exposed.

Add another column in workshop matrix B.2 for threat level.

The scoring matrix below is a template to provide the team a uniform and levelled-off basis for assigning score or threat level and minimize perception errors. BUT, it is suggested that before the team start the actual assigning of scores or levels, they must review first the descriptive examples and agree on the parameters for each of the level/score.

This scoring matrix is adapted from UN-HABITAT's Planning for Climate Change Toolkit (2014)

THREAT LEVEL	DESCRIPTIVE EXAMPLES / PARAMETER
HIGH (5)	➢ Large numbers of serious injuries or loss of lives *(define what is large for the LGU – what % of exposed population)* ➢ Regional decline leading to widespread business failure, loss of production, employment and hardship ➢ Major/widespread damages and loss to livelihood *(agriculture, fisheries, business, etc)* environment and infrastructure, with progressive irrecoverable damage ➢ Local government services would cease to be effective
MEDIUM HIGH (4)	➢ Isolated instances of serious injuries or loss of lives ➢ Regional local economic development impacts and stagnation; Serious impacts on livelihood. ➢ Severe and widespread decline in the quality of life within the community ➢ Severe damages and a danger of continuing damage to infrastructure and environment ➢ Local government services struggle to remain effective and would be seen to be in danger of failing completely
MEDIUM (3)	➢ Small number of injuries involving the public ➢ Significant general reduction in livelihoods ➢ Isolated but significant instances of environmental and infrastructure damage that might be reversed with intensive efforts ➢ Local government services under severe pressure on several fronts
MEDIUM-LOW (2)	➢ Minor injuries to pubic ➢ Individually significant but isolated livelihood impacts ➢ Minor instances of environmental and infrastructure damage that could be reversed ➢ Isolated instances of government services being under severe pressure

B.4. ADAPTIVE CAPACITY ASSESSMENT

In this step, use the data collected and matrices filled-up from the previous assessments. Add two or more columns to the previous matrices to input the result/ answers in the adaptive capacity assessment.

OBJECTIVE:

- to determine the coping/adaptive capacity of the people, institutions places and sectors to the identified climate hazards

SESSION GUIDE:

DURATION /TIME	SUBJECT MATTER / ACTIVITY	METHODOLOGY / PROCESS	MATERIALS / RESOURCES NEEDED
1 whole day	**WORKSHOP B.4** **ADAPTIVE CAPACITY ASSESSMENT** GUIDE QUESTIONS: Using the climate hazard profile AND vulnerability (exposure & sensitivity) assessment output of the locality: 1. How do individuals, households, communities/ sectors, and institutions coped or responded to disasters and climate extreme events and hazards they encountered? 2. What capacity do these groups or elements/places have that helped them withstand the impact of climate related hazards? The answers to these questions will be the notes or description that would also be the basis for scoring using the scoring matrix given below.	▪ Participants may be grouped per sector ▪ Answers to the guide questions must be written on the metacard *(write phrases or key words only)* ▪ Assessment should be hazard specific. ▪ For people and sectors exposure assessment, ensure disaggregation of data (women, youth, elderly, economic sectors if any, using CBMS data, ENRO, MAO & FARMC data ▪ Refer to the ecological & demographic profile of the locality given in the current CLUP	**Other Reference:** UN-Habitat-CCCI Planning for Climate Change ToolKit (2014) Tool 3-L, 3-M, 3-N **ADAPTIVE CAPACITY LEVEL** **Scoring matrix**

WORKSHOP MATRIX B.4 – ADAPTIVE CAPACITY ASSESSMENT*

SECTOR: AGRICULTURE SECTOR

HAZARD (*Identified in previous workshops*)	**WEALTH** *What wealth and financial resources are available to address this hazard)*		**TECHNOLOGY** *What technology and related resources are available to address this hazard?*		**INSTITUTIONS** *(What institutions or teams are addressing this hazard? What policies already exists)*	
	Score	**EVIDENCE**	**Score**	**EVIDENCE**	**Score**	**EVIDENCE**
EXAMPLE: **DROUGHT**	*1 (L)*	• *Farmers have low income* • *very limited gov't funds for assistance*	*4 (MH)*	*new drought resistant crop types being tested locally*	*4 (MH)*	• *Agriculture department has been responsive to droughts in the past years* • *Multiple local agricultural NGOs/ cooperative with high capacity*

**Adapted from the UN-HABITAT Planning for Climate Change Toolkit (2014)*

INFRASTRUCTURE *(What infrastructure is available to address this hazard? Can it withstand climate projections)*		**INFORMATION** *What is the level of knowledge of the people on this hazard? Is it distributed to the people who need it?*		**SOCIAL CAPITAL** *What social capital is available that could address the impacts from this hazard?*		**AVERAGE ADAPTIVE CAPACITY SCORE** *(total score divided by number of adaptive capacity factors* ∑N / 6 = AC
Score	**EVIDENCE**	**Score**	**EVIDENCE**	**Score**	**EVIDENCE**	
3 (M)	• *Good irrigation systems on most farms*	3 (M)	*Information on drought resistant crops is not disseminated well to farmers*	3 (M)	*Farmers' cooperative and networking groups share information*	18/6 = 3 MEDIUM adaptive capacity

NOTE: This scoring matrix is proposed to serve as guide in assigning scores/numerical level to represent the relative adaptive capacity of the LGU. BUT it is suggested that the LCCAP Team review this first, adjust and agree on the final indicators and relevant parameters to be used to represent each level/numerical score for each specific sector. The LGUs actual capacity and inherent limitations will determine the final score that will best represent their level of adaptive capacity. The LCCAP team must not be afraid nor limit themselves with this suggested guide for rating their adaptive capacity.

ADAPTIVE CAPACITY FACTOR	ADAPTIVE CAPACITY SCORE/LEVEL				
	5 (High)	4 (Medium High)	3 (Medium)	2 (Medium Low)	1 (Low)
ECONOMIC WEALTH	• have adequate and available financial resources for assistance to all affected sector • the people in the affected areas have their own resources to respond to a hazard	• have enough financial resources for assistance to some affected sectors • the people in the area have access to resources to respond to a hazard	• with limited financial resources for assistance for priority affected sectors • the people in the area have limited access to resources respond to a hazard	• have very limited financial resources for assistance to affected sectors • affected people have very limited access to resources to respond to a hazard	• no available financial resources for assistance to affected sector • affected people don't have their own resources to respond to a hazard
TECHNOLOGY	• there are equipment available for use and facilities to communicate directly with the people/sector affected	• there are some equipment for use and facilities to communicate with the affected people /sector	• limited equipment and facilities for assistance and communication	• very limited equipment and facilities for assistance	• very few facilities and equipment for use and communication with affected sector/people is difficult

INSTITUTIONS	• LGU and community leaders are aware and could effectively manage a quick response in the event of a hazard occurrence • there are existing processes and regulations to control the situation • relevant legislations are in place to respond to a certain hazard	• LGU and community leaders are aware and can response in the event of a hazard occurrence • there are processess and regulations but not yet fully implemented nor tested	• LGU and community leaders are aware but management set-up to respond to a hazard is non existent. • Relevant processes, procedures and legislations are passed but implementing guidelines still has to be formulated	• few LGU officials and leaders are aware of the roles and functions during but quick response team to quickly respond during an occurrence of a hazard is yet to be formed • draft process, procedures and relevant legislations still has to be passed	• LGU officials are not fully aware of a hazard or disaster that may occur • there are no definite processes and regulations to control the situation and respond to a certain hazard.
INFRASTRUCTURE	• there is more than adequate transport, water infrastructure, sanitation, energy supply and management and medical services that can be used to respond to a hazard • these facilities and infrastructures are strong enough to withstand a projected hazard and located in safe areas	• there is enough transport, water infrastructure, energy supply and medical service, etc. that can be used to respond to a hazard • facilities and equipment are available but not enough	• there are some infrastructure, transport facilities and necessary equipment that can be used to respond to a hazard but not enough to accommodate a projected impact of a hazard • infrastructure and facilities still has to be retrofitted to ensure its safety and strength during a hazard	• infrastructures are available but there are no facilities that can be used to respond to a hazard • transport services in some possibly affected areas are not available • energy supply	• necessary infrastructures and facilities necessary to respond to a hazard still has to be constructed • existing infrastructures and facilities are not within standard to withstand a projected impact of a hazard

ADAPTIVE CAPACITY FACTOR	ADAPTIVE CAPACITY SCORE/LEVEL				
	5 (High)	4 (Medium High)	3 (Medium)	2 (Medium Low)	1 (Low)
INFORMATION	• LGU and stakeholders in the area/sector are well aware of the hazard and its potential impact to them • communication facilities and procedures are in place to respond in the occurrence of a hazard • Early warning system in place and drills have been conducted	• LGU and some stakeholders are aware of the hazard and its potential impact to them • there is a early warning system in place	• some degree of awareness of LGU and stakeholders • communication facilities are in place but procedures are not yet in place • draft early warning system available	• limited awareness of LGUs and stakeholders due to lack of IEC program	• LGU officials and affected communities are not yet fully aware of the hazards and its potential impact • no early warning system yet
SOCIAL CAPITAL	• there is political willingness to allocate resources to build adaptive capacity of the LGU • there are specific agencies, community groups and/or NGOs that have the mandate and skills to focus on the specific sector/area during occurrence of hazards	• there is some degree of willingness of the leaders to allocate funds to build adaptive capacity of the LGU	• LGU have political willingness but still has to be convinced to allocate resources to build adaptive capacity of LGUs • there are specific agencies and NGOs with mandate to assist affected communities but still lack skills to respond	• LGU officials still has to be convinced to allocate resources to build adaptive capacity of LGUs • There are limited number of agencies and NGOs with mandate and skills to assists occurrence of hazards	• LGU officials still has to be oriented on adaptive capacity building • Specific agencies still has to have clear mandate and plans to assist affected communities

	• there are trained emergency response teams for this sector/ area	• some agencies are and NGOs are available and have skills to assist specific sectors during occurrence of hazard • there is a team with basic skills for emergency response	• Team have been organized for emergency response	• Team for emergency response still has to be organized	• No NGOs with mandate and skills to help specific sector in times of climate hazards • No policies or orders yet for the creation of the team for emergency response

B.5. SUMMARY OF VULNERABILITY ASSESSMENT

This step summarizes the result of the threat level (exposure & sensitivity) vs. the Adaptive Capacity of the different groups and sectors by computing the vulnerability ratings. The formula for computing relative vulnerability is:

$$\text{RELATIVE VULNERABILITY} = \frac{\text{THREAT LEVEL (based on the exposure and sensitivity analysis)}}{\text{ADAPTIVE CAPACITY}}$$

But must have a clear and consistent monitoring and evaluation program to ensure adequate adaptive capacity of the LGUs all the time.

MATRIX:

HAZARD (identified in Workshop B.1)	THREAT LEVEL (summary of Workshop B.3)	ADAPTIVE CAPACITY (summary of Workshop B.4)	RELATIVE VULNERABILITY
EXAMPLE: DROUGHT	4 (Medium High)	3 (Medium)	4/3 = 1.33 (low vulnerability)

LEGEND:

Threat Level	Adaptive Capacity Score					Relative Vulnerability
	High (5)	Medium High (4)	Medium (3)	Medium Low (2)	Low (1)	
High (5)	1	1.25	1.66	2.5	5	High (4-5)
Medium High (4)	0.8	1	1.33	2	4	Medium High (2.1-3.9)
Medium (3)	0.6	0.75	1	1.5	3	Medium (1.5-2)
Medium Low (2)	0.4	0.5	0.66	1	2	Medium Low (1-1.49)
Low (1)	0.2	0.25	0.33	0.5	1	Low (>1)

VULNERABILITY ASSESSMENT REPORT

The LCCAP Core Team will now prepare the result of the Vulnerability Assessment Exercises. The team may use **UN-HABITAT CCCI's Planning for Climate Change Toolkit (2014) Tool 3-Q – Vulnerability Assessment Report Outline** as their guide in the preparation of the report taking into consideration the limitations in terms of scope and agreed objectives at the beginning of the assessment process. It is also important to include maps generated and all data gathered as part of the annexes or attachments. The list of people, sectors and institutions who participated in the VAA process must also be included in the report for future follow-up or involvement in the implementation of adaptation options and plans to be created in Module C.

SUGGESTED FORMAT/TABLE OF CONTENTS FOR THE VULNERABILITY ASSESSMENT REPORT
(plan template)

TABLE OF CONTENTS

1. BACKGROUND & RATIONALE

- **Rationale of the Plan**
- **LGU Profile**
- **Planning Context**
- **Planning Approach**
- **LCCAP Core Team & Stakeholders**

II. VULNERABILITY & ADAPTATION ASSESSMENT RESULT

- **Climate Related Hazards & Its Impacts to LGU**
- **Elements, Sectors and Institutions Exposed to CC Hazards & its Impacts**
- **Vulnerability and Cross-sectoral Analysis**
- **Adaptive Capacity**
- **Identified CC Adaptation Options**

III. ANNEXES

- **The VAA Team Members**
- **Pictures**
- **MAPS (enhanced)**
- **Workshop Outputs (per sector)**
- **Attendance Sheets (participants & Resource Persons)**
- **List of References**

OTHER ASSESSMENT TOOLS

Other available tools and audit forms of other government agencies which are currently being used by LGUs to assess their current governance and management situation may also be used to gather additional data and information that can be used to assess and measure vulnerability of certain places, elements and sectors. Some of those tools and audit forms are:

- Infrastructure Audit 1 (for Government Buildings) –*this is particularly important in assessing vulnerability and sensitivity of schools and other government buildings being used as evacuation center and command response center*
- Infrastructure Audit 2 (for Roads and Road Networks)
- Infrastructure Audit 3 (for Bridges)
- Local DRRM Audit (c/o DILG BLGS)
- Environmental Compliance Audit (c/o DILG BLGS)

MODULE C

LCCAP
FORMULATION
PRIORITIZING, PLANNING
& BUDGETING

MODULE C

LCCAP FORMULATION:
Prioritizing, Planning & Budgeting

This Module comprises the next five (5) steps from the original 12 steps in LCCAP formulation. These steps comprise the bulk and actual mainstreaming process of the results of the vulnerability and adaptive capacity assessment done in the previous Module. In this module, a copy of the LGU mandated plans such as CLUP, CDP, ELA, LDIP and AIP is necessary in the mainstreaming process. If these exercises will be done before a CDP or ELA and LDIP or AIP is completed, it is suggested that the steps be considered during the formulation of these mandated plans to ensure that the final plans incorporates the identified climate change adaptation and mitigation options. It is also important to refer to the National Climate Change Action Plan during the workshop for this Module in order to ensure the linkage of the local climate change action plan with that of the NCCAP. The national climate change action plan will also provide ideas on the objectives and options that would respond to your identified vulnerabilities. However, it is also important to bear in mind the capacity and resources available in your LGU to make your plan more realistic and implementable. It would pose a big challenge to the LGU if capacity and resources would still need to be taken from outside sources. Funds to be sourced out from development partners would need project development activities and proposal writing.

If the LGU mandated plans are already done and is already in the process of implementation, this module will be used to review and enhance the objectives of the current plans, include climate change adaptation options in the list of priority programs, projects and activities and put forward necessary legislations in the ELA that will address the requirements of the LCCAP. The result of the VAA will also ensure that the programs, projects and activities would be directed to the identified locations and affected sectors and would minimize biases and political considerations in choosing beneficiaries of such programs, projects and activities.

In this module, although priority is given to the identification of the ADAPTATION OPTIONS, it is also strongly suggested to identify MITIGATION OPTIONS to help reduce carbon footprints of the LGU and communities and contribute to the efforts of reducing our impact to the world's climate. Research may be required in the identification of possible and effective mitigation options such as low carbon emission options for power generation and transport facilities, use of renewable energy sources, environmental projects to improve natural carbon sinks, projects that will reduce or capture CFCs and methane gases from agriculture, industries and wastes, etc.

At the end of this module, the trainers/users have:

- identified objectives and performance indicators responsive to the vulnerabilities and capacity needs of the LGU and affected communities
- prioritized programs, projects and activities that would address the challenges of climate change and improve resilience of the LGU and communities
- identified necessary enabling mechanisms and legislations that would enhance the implementation of the plan
- identified budgetary requirements and fund sources for plan implementation
- incorporated the budgetary requirements in the investment plans & programs of the LGU (LDIP & AIP)

Below is the matrix showing the steps in this Module:

	STEP C.1	STEP C.2	STEP C.3	STEP C.4	STEP C.5	Step C.6
DESCRIPTION	**SETTING GOALS, OBJECTIVES & TARGETS** Check with the goals, objectives and targets of the LGU for the period (short term, medium term & long term goals)	**IDENTIFICATION OF PPA's and Legislations needed** PPAs that would make help address the identified vulnerabilities of the people and places Identify policy requirements	**PRIORITIZATION OF PPA's** Prioritize programs, projects and activities according to urgency, feasibility and acceptability. Check with the CDP and AIP	**ACTION PLANNING & PERFORMANCE INDICATORS** ➢ Incorporate/ mainstream the PPAs into the CDP and CLUP by identifying entry points and objectively verifiable success indicators	**INVESTMENT PROGRAMMING** ➢ Mainstream or incorporate the set goals, objectives, targets and PPAs in the LDIP	**BUDGETING** ➢ Incorporate PPAs into the AIP to ensure availability of funds/ resources for implementation of PPAs
OBJECTIVES	✓ Determine what CC and DRR vulnerabilities you want to reduce and what coping/ adaptive capacities you want to enhance	✓ Identify adaptation options/choices based on the VAA result ✓ Identify specific programs, projects and activities (PPAs) and policy requirements that will help reduce vulnerabilities and develop coping/adaptive capacities	✓ Analyze benefits and constraints of such actions ✓ Prioritize PPAs	✓ Identify performance indicators/ OVI, resources needed, (e.g., human, financial, institutional support), time frame	✓ Identify budget/ sources from local, provincial, national or international sources.	✓ Transfer data, Information to the AIP and other planning and budgeting templates ✓ Identify enabling policies and mechanisms
TARGET OUTPUT	Set of enhanced objectives per sector (may include sub-objectives if deemed necessary)	Long list of CC Adaptation options (projects, programs & activities) & local policy requirements	Prioritized PPAs that can be incorporated in the CDP, CLUP and AIP	Local Climate Change Action Plan (*can be a stand alone plan*) with identified performance indicators	Prioritized PPAs with corresponding budget and identified sources incorporated in the LDIP	Prioritized PPAs (short term) incorporated in the AIP with required enabling legislations

METHODOLOGY	Desk Work Workshop	Desk Work Research	Workshop Desk Work	Workshop Desk Work	Workshop Desk work	Workshop Desk Work/Analysis budgeting
LEAD OFFICE / AGENCY	LCCAP Core Team	LCCAP Core Team / External Consultants	LCCAP Core Team	LCCAP Core Team	LCCAP Core Team, Budget Office & Treasurer's Office	LCCAP Core Team, Budget & Treasurer's Office
TARGET PARTICIPANTS	LCCAP Core Team	LCCAP Core Team / External Consultants LCE, SB Members, LDC members & stakeholders	LCCAP Core, Team LCE, SB Members, LDC members & stakeholders	LCCAP Core Team	LCCAP Core Team LCE, Finance Committee, Budget Officer, Treasurer	LCCAP Core Team LCE, Finance Committee, Budget Officer, Treasurer
REQUIREMENTS / RESOURCES NEEDED	Result of Exposure & Sensitivity Assessments Copy of CDP, CLUP & ELA	Result of Exposure & Sensitivity Assessments Copy of CDP, CLUP & ELA	Copy of CDP, CLUP & ELA	Copy of CDP, CLUP & AIP,	Copy of CDP, LDIP & ELA	Copy of CDP, LDIP, AIP & ELA
TIME FRAME	½ day to 2 day workshop with LCCAP Core Team per Sector & 2 days to 1 week consolidation into a final LCCAP with budget					
TIME FRAME	½ day to 2 day workshop with LCCAP Core Team per Sector & 2 days to 1 week consolidation into a final LCCAP with budget					

C.1. SETTING GOALS, OBJECTIVES & TARGETS

This step will start the mainstreaming process of the results of the vulnerability and adaptive capacity assessment done in the previous module into the mandated LGU plans and programs. The team should have a copy of the CLUP, CDP and ELA and cull out the objectives already stated in these documents and input those in the matrix given below.

This step must be done per sector to ensure focus and comprehensive review and enhancement of the sectoral goals, objectives and targets. The members of the team must always refer to the result of the VAA in the review and formulation of the enhance goals, objectives and targets. Fill-in the identified gaps in the documents by including CC & DRR responsive objectives for each sector.

OBJECTIVES:

- ✓ Check with the goals, objectives and targets of the LGU for the period (short term, medium term & long term goals) as stated in the CLUP, CDP & ELA. Refer to the NCCAP for ideas and national objectives
- ✓ Refer to the result of the VAA to determine what CC and DRR vulnerabilities you want to reduce and what coping/adaptive capacities you want to enhance

** Enhance the objectives of the sector by re-stating the current objectives or create additional objectives that would address the identified vulnerabilities and climate change impact*

SESSION GUIDE:

This step can be done as a sectoral workshop if the budget allows. At the minimum, the LCCAP Core Team may invite additional 3-5 members from the sector to form a sectoral team with the Core Team member as Team Leader. This step may be accomplished in one(1) day.

STEPS:

1. Get a copy of the CLUP or CDP or ELA (whichever are available) and cull out the goals and objectives (main objective and specific objectives) of your sector, transfer to the workshop matrix.

2. Input the link to the vulnerability and adaptive capacity assessment by referring to the outputs of Module B particularly the **output matrix of Step B.2** (sensitivity and threat level analysis: impact, triggers, stressors, location and number of people at risk)

3. Identify the gaps then enhance the goals and objectives.

If needed, formulate new or additional objectives that will address the identified vulnerabilities.

NOTE: Objectives are formulated by combining an action word that describes a direction or goal*(e.g. reduce, increase, improve, build, construct, etc.)* with the specific subject *(e.g. reduce poverty…, increase income…, build resilience, etc).*

To facilitate identification of the indicators and formulation of M&E tools, objectives must be SMART (specific, measurable, attainable, realistic and time bounded). As much as possible, avoid formulating objectives that would be difficult to implement and assess within reasonable time. More difficult but necessary objectives may be written for the long term goals but still must be realistic and attainable.

WORKSHOP MATRIX C.1
SECTOR: Social Sector - Agriculture

OBJECTIVES *(as stated in the CLUP/CDP/ELA, may include sub-objectives)*	**LINK TO CLIMATE CHANGE** *(refer to the result of the VAA – Workshop Matrix B.2)*	**ENHANCED ADAPTATION OBJECTIVES**	**MITIGATION OBJECTIVES** *(if any, if applicable)*	**INDICATORS** **(***specific, measurable***)**
EXAMPLE: *Reduce poverty* *Support a prosperous economy*	*Hazard: drought due to increasing temperature & longer and drier summer* - *50% of riceland affected, planting season reduced, one cropping per year during el nino.* - *(name of most affected brgy)* - *number of affected farmers*	*Reduce poverty among farmers though improved irrigation and water supply*	*Improve/ enhance forest cover of watersheds*	✓ *Hectares of enhanced forest cover* ✓ *Number of planted trees* ✓ *Level of water in irrigation canals* ✓ *Number of additional irrigation/ water support facilities*

C.2. IDENTIFICATION OF PROGRAMS, PROJECTS, ACTIVITIES AND POLICY REQUIREMENTS

This step will identify specific programs, projects, activities and legislations corresponding to each objective formulated in Step C.1. Again, review and cull out PPAs and policies already given in the CLUP, CDP and ELA then enhance the list by adding climate related PPAs that would respond to the identified vulnerabilities and would enhance the adaptive capacity of the LGU and the community or sector.

OBJECTIVES:

- ✓ Check with the list of PPAs and legislations as stated in the CLUP, CDP & ELA.
- ✓ Refer to the result of the VAA to determine what specific CC and DRR responsive programs, projects and activities you want to implement in the short term, medium term and long term plans.
- ✓ Identify as many as possible for both the adaptation and mitigation options.

SESSION GUIDE:

This step can be done as a sectoral workshop if the budget allows. At the minimum, the LCCAP Core Team may invite additional 3-5 members from the sector to form a sectoral team with the Core Team member as Team Leader. This step may be accomplished in one(1) day.

STEPS:

1. Get a copy of the CLUP or CDP or ELA (whichever are available) and cull out the list of PPAs and policy requirements per Objective as identified for your sector, transfer to the workshop matrix.
2. Distribute 5 to 10 metacards to each member and write as many PPAs as you think necessary. PPAs must also be specific and realistic. Write one item per card.
3. Match the cards with the corresponding objective (if it can be included in more than one objective, copy the idea in another card) and classify whether the idea card is a program, a project or an activity. Reword vague answers to clarify suggestions.

4. If possible, identify each PPA's timeline (short term or immediate; medium term or long term) by noting it on the meta card.
5. Create a long list of options

NOTE: Like the OBJECTIVES, identify PPA's must be SMART (specific, measurable, attainable, realistic and time bounded). As much as possible, avoid formulating actions that would be difficult to implement and assess within reasonable time. However, more difficult but necessary objectives may be written for the long term goals but still must be realistic and attainable. Members must also consider "low regret" options for big and costly projects as this may eat up large portion of the budget putting other options at risk. **ALWAYS BEAR IN MIND THE CLIMATE CHANGE LINK OF YOUR IDENTIFIED OPTIONS.**

WORKSHOP MATRIX C.2 – LIST OF OPTIONS (PROGRAMS, PROJECTS, ACTIVITIES, LEGISLATIONS)

SECTOR: _____

OBJECTIVES	LINK TO CLIMATE CHANGE	PROGRAMS	PROJECTS	ACTIVITIES	POLICIES
Cut and paste the answer to this columns from your output in Workshop Matrix C.1)		**Insert already identified PPAs and legislations in the CLUP, CDP or ELA; then include your additional options**			
		(include actions directed towards capacity enhancement, awareness building that requires continuous implementation and involves cross sectoral participation)	*(specific actions directed towards specific sector, or as a response to specific need)*	*Specific actions that may be related to a program or project with specific time line, usually short term)*	*(May include ordinances, resolutions, agreements, executive orders, memorandums, etc.)*

C.3. PRIORITIZING PROGRAMS, PROJECTS, ACTIVITIES & POLICY REQUIREMENTS

Using the long list of options identified in Workshop C.2, arrange the list according to priorities and timeline. Again refer to the CDP and ELA as these are already approved plans. Enhance the CLUP, CDP and ELA with the prioritized PPA & recommended policies.

OBJECTIVES:

- ✓ To prioritize programs, projects and activities and identify appropriate time line for each
- ✓ To recommend policies that would enable the implementation of the prioritized actions

STEPS:

1. Using the output in matrix C.2, prioritize the identified options through direct ranking using sticky dots of different colors representing basis for ranking.
2. Give each participant 4 sticky dots per color and ask them to put their dots in the options they choose or prioritize. They may use one or two sticky dots at certain options which they strongly believe should be prioritized.
3. After all the participants have cast their votes, tally the number of sticky dots per option and rank them accordingly.

BASIS FOR RANKING (to be represented by different color)

RED for URGENCY – this option must be on top priority because of it must be implemented immediately to significantly reduce the hazards or risk of identified vulnerable people and places. Options gaining the most number of red dots is perceived to be the most urgent, in decreasing order

YELLOW for RESOURCES – the option that would require the most resources. Put your yellow dots to options where you would put your resources or where you would invest.

GREEN for FEASIBILITY OR EFFECTIVENESS - which option could be implemented and work well relative with other options given the necessary design, implementation and maintenance support and resources. The option must also be acceptable with the beneficiary or community.

Other basis may be identified and assigned a corresponding color. It is advised that each color be posted in different columns for ease in tallying.

NOTE: The group may also opt to just use the output in workshop Matrix C.2 and just add another column.

OBJECTIVES	**LINK TO CLIMATE CHANGE**	**LIST OF PROGRAMS, PROJECTS, ACTIVITIES & POLICIES** *(per objective)*	**VOTES** *(sticky dots)*	**RANK**
Cut and paste the answer to this columns from your output in Workshop Matrix C.1)		*Option 1*		*1*
Objective 1. *Option 3* *Option 4* *Option 5 …*		*Option 2*		*3*
				*2*
Objective 2. *Option 2* *Option 3* *Option 4*		*Option 1*		

2nd NOTE: If the group would like to use a more technical prioritization, you may refer to UN-HABITAT's prioritizing, screening and ranking tool in the Planning for Climate Change ToolKit series of 2014. See Toolkit No. 5-C and 6-B.

C.4. ACTION PLANNING AND PERFORMANCE INDICATORS

For Step C.4, the LCCAP Core Team must first consolidate the workshop outputs of the different sectors (workshop matrix C.1- C.3) and incorporate it in the CLUP or CDP or ELA. The Core Team, together with the Planning Officer of the LGU should agree first on which available plan must be updated to incorporate the climate change adaptation and mitigation options identified in the three(3) preceding sectoral workshops. The group may choose the CDP as it is term based and may already include most of the immediate and urgent options.

For **Steps C.5 & C.6**, the LCCAP Core Team, together with the Planning and Budget Officers and the SB Committee on Finance should review the current Local Development Investment Plan and Annual Investment Plan and incorporate the identified priority options. Allocate corresponding budget and identify possible funding sources to the additional options which are not yet included in the current investment plans. This may require concurrence, and agreements and amendments in the legislations as required by the Rationalized Planning System and relevant government guidelines. In determining the budget allocation, the team should consider the financial capacity of the LGUs and plan for fund sourcing if needed.

OBJECTIVE: To mainstream or incorporate the identified priority actions and policies in existing mandated LGU Plans and Investment Programs.

STEP: For uniformity and compliance in for matting, use the specified LGU format for these plans as mandated or required in the Local Rationalized Planning System and prevailing DILG or Government guidelines.

NOTE: In case the LCCAP Team decides to ALSO create a stand- alone LCCAP Plan that can be used in proposal writing or project development for fund sourcing, the group must use the prescribed format of the potential fun ding source or agency. In case there is no prescribed format, the following matrix may be used:

WORKSHOP MATRIX C.4 & C.5 - LCCAP WORK PLAN & PERFORMANCE INDICATORS

OBJECTIVES (per Sector)	**PRIORITY PROGRAMS, PROJECTS, ACTIVITIES & POLICIES**			**INDICATORS** (Objectively Verifiable Indicators of success/ performance)	**INSTITUTIONS /SECTORS or DEPARTMENT INVOLVED/IN-CHARGED**	**RESOURCES REQUIRED** *(identify where it in included: (LDIP or AIP of Yr____)*
	SHORT TERM (1-3 years)	**MEDIUM TERM** (4-6 years)	**LONG TERM** (7 years & above)			
IMPORTANT REMINDERS: ✓ ***Input in these columns must be taken from the result of Workshop Matrix C.1 – C.3)*** ✓ ***Always refer to VAA result to keep the link with Climate Change Impact in identifying adaptation and mitigation options***						

SUGGESTED FORMAT/TABLE OF CONTENTS FOR THE LOCAL CLIMATE CHANGE ACTION PLAN (Narrative plan template)

TABLE OF CONTENTS

1. BACKGROUND & RATIONALE

- Rationale of the Plan
- LGU Profile
- Planning Context
- Planning Approach
- LCCAP Core Team & Stakeholders

II. VULNERABILITY & ADAPTATION ASSESSMENT RESULT

- Climate Related Hazards & Its Impacts to LGU
- Elements, Sectors and Institutions Exposed to CC Hazards & its Impacts
- Vulnerability and Cross-sectoral Analysis
- Adaptive Capacity

III. LCCAP OBJECTIVES

- Objectives of CDP & CLUP (based on current CDP & CLUP)
- Objectives Analysis
- Climate Change Issues & the LCCAP Goals & Objectives

IV. Adaptation Actions

- Identified Adaptation Options
- Prioritized PPAs
- Identified enabling requirements
    - o Budgetary requirements (LDIP or AIP)
    - o Policy requirements
- Work & Implementation Plan
- Other Potential Sources of Funds

V. Monitoring & Evaluation

- Indicators and Targets
- Monitoring and Evaluation Plan

VI. REFERENCES & ANNEXES

Local Climate Change Action Plan	
I. Background	This should include the following: (a) **Rationale** (a brief discussion of the plan, how it was developed and the purpose and limitations of the plan) (b) **LGU Profile** (Ecological Profile, demographic trends, current land use and development issues and challenges) (c) **Planning Context** (LGU development priorities, Vision-Mission-Goal, LGU planning context including existing and implemented climate change plans and programs) (d) **Planning Approach** (Planning framework, guiding principles, stakeholders and engagement)
II. Vulnerability Assessment	This should discuss the results of vulnerability assessment in summary with the following details: • Identified climate-related hazards and their impacts to the LGU • Elements, sectors and institutions exposed to climate change impacts • Summary and findings of vulnerability assessment (exposure, sensitivity and adaptive capacity) • Vulnerability and cross-sectoral analysis • Identified climate change key development issues
III. Plan Objectives	• Link to LCCAP to the goals and objectives of CDP and CLUP • Convert climate change issues into objectives
IV. Adaptation Actions	This part should include the following: • Identified adaptation options (taking into considerations the PPAs in the CDP and ELA, LDIP) • Prioritized PPAs(using GAM and CCC matrices, Urgency test, PFCC's ranking of Options), indicators, resource needed, budget sources and office/person responsible • Identified enabling requirements (considering current LGU legislative agenda)
V. Monitoring and Evaluation	This should contain the following: • The M & E Team • M&E Plan and Targets

MODULE D

Monitoring and Evaluating the LCCAP

MODULE D

Monitoring and Evaluating the LCCAP

This module suggests a simplified monitoring and evaluation matrix to monitor implementation of the local climate change action plan formulated in Module C. However, if the LCCAP is already mainstreamed in the LGU mandated plans, it is suggested that the LGU mandated monitoring and evaluation processes and tools be used. An M&E plan with budget must be created to direct the activities of the monitoring team.

It is also strongly suggested that a multi-sectoral monitoring and evaluation team be formed. If possible, this team must be given formal mandates and budget to perform their task. It is important to include independent sectors and representatives from the non-government or people organizations and local experts from the academe to get a better and more objective evaluation results.

Monitoring & Evaluation Matrix

Component of the LCCAP	Year 1			
	Planned Activities	Expected Outputs / OVI	Actual Accomplishments	Justification/ Comments

NOTE:

1. Fill up columns 1(Component), 2(Planned Activities) and 3 (expected Results/ Objectively Verifiable Indicators) by copying directly from the LCCAP all the activities and targets for Year 1.
2. Answer Column 3 (Actual Accomplishments)
3. The corresponding justification or comments for items not accomplished must be inputted in column 5.
4. Those Planned Activities in Year 1 that were partially or not accomplished or actions still to be done would be transferred to a similar matrix for Year 2 under Columns 2 & 3.
5. Additional columns may be added to list down persons or office/department-in-charge, specific time frame and logistics needed.

However, if there are M&E templates for the LGU mandated plans where the LCCAP plan, programs, projects and activities were mainstreamed (i.e., CDP or ELA) it is advisable to use the LGU or DILG required monitoring and evaluation formats for purposes of uniformity and compliance.

POST TRAINING REFLECTION SHEET FOR TRAINORS/ FACILITATORS & TRAINING MANAGEMENT TEAM

This reflection sheet will help us evaluate the over-all conduct of our training, give us insights on our performance as trainers and training team and guide us for further improvement of our training design.

INSTRUCTION: Read each statement carefully. Encircle the number on the scale from from 1= bad / low to 5= very good / high that best describes your answer to the questions below.

- How did you experience the training (workshop) as a whole?

  1 2 3 4 5

- How did you experience the practical arrangements?

  1 2 3 4 5

- How did you experience the group work?

  1 2 3 4 5

- To what an extent do you experience that your sense of urgency to address the CCA/DRR situation of your LGU has increased, as a result of the training / workshop / seminar?

  1 2 3 4 5

- To what an extent are you more aware of the importance of vulnerability and adaptation assessment, as a result of the training / workshop / seminar?

  1 2 3 4 5

- How important is it to involve the LGU officials as partner advocates for CCA/DRR Planning?

  1 2 3 4 5

- To what an extent do you regard complementation of resources and sharing of responsibilities and accountability as the best strategy to achieve success in the climate change planning?

  1 2 3 4 5

- To what an extent are you motivated to take on a proactive leadership to be / become a model LGU?

  1 2 3 4 5

- Do you think this workshop will lead to a change of your behaviour or attitudes?

  1 2 3 4 5

Encircle 3 to 7 words that you think best describe the training / seminar / workshop:

New Knowledge	Traditional	New thinking	Participatory	Meaningless
Slow	Important	Dry	Engaging	Social
Plain	Initiatives	Messy	Joyful	Predictable
In the forefront	Pretence	Visionary	Mobilizing	New Perspectives
Thumbs Up	Networking	Worrying	Powerful	Difficult
Coward	Applicable	Brave	Bullshit	Uniting
Fun	Meaningful	Influence	Old Knowledge	Learning
Co-creative	Trustworthy	Confusing	Dynamic	Boring
Inspiring	Stiff	Important Results	Professional	Hopeful
"Bitin"	Dialogue	Narrow Minded	One way Communication	Redundant

- **I**f anything, what would you like to see more of during the training? What did you find so good or most useful in this training?

  _____
  _____

- If anything, what could be taken out of the training?

  _____
  _____

- If there is anything you would like the team to know of, please write it here:

  _____
  _____

b) this I found not so good/missing

_____
_____

Training of Trainers for Local Climate Change Action Plan (LCCAP) Formulation
(Date & Venue)

Pre-Training Evaluation

Instructions:

This evaluation aims to determine your level of knowledge on the following subject matter. Kindly put a check (✓) mark after each item to indicate your response using the rating scale below.

*(**1**) Very Low* *(**2**) Low* *(**3**) Average* *(**4**) High* *(**5**) Very High*

I. Training Contents

(List down topics included in the training design to be used)

Topics	1	2	3	4	5	Remarks

II. Participants

1. Please list down your individual learning expectations.

_____
_____
_____
_____
_____
_____
_____
_____

(5) Very High	- has very good knowledge and background and had opportunity to apply them
(4) High	- has good knowledge and opportunity for application
(3) Average	- has some knowledge but does not have the opportunity to apply them
(2) Low	- has very little and has no opportunity to apply them
(1) Very Low	- has no knowledge at all

Training of Trainers for Local Climate Change Action Plan (LCCAP) Formulation
(Date & Venue)

Post-training Evaluation

Instructions:

Please put a check (✓) mark after each item to indicate your rating (as described below) of the various aspects of the program. For your comments and suggestions, use the space provided after each item. Your objective rating and comments will help us fine tune and identify problem areas for subsequent implementation of this program in other regions.

I: Program Design: How much knowledge/skills did you learn from the following input?

(1) Very low (2) Low (3) Average (4) High (5) Very high

Topics	1	2	3	4	5	Comments & Suggestion

Answer the following tables using this scale:

*(**1**) Strongly Disagree (**2**) Disagree (**3**) Undecided (**4**) Agree (**5**) Strongly Agree*

	Training Elements	1	2	3	4	5	Comments & Suggestion
Contents and Methodology	1. Topics were clearly defined and training objectives clearly stated						
	2. The training provided sufficient detail not only on the specific topics but other relevant topics as well						
	3. The training offered sufficient opportunity for participants questions and discussions						
	4. The training was too technical and difficult to understand						
	5. Most of the questions are answered during the training						
	6. The training sessions did not allow sufficient time for breaks or talk informally with other participants						
	7. The materials provided during the training was helpful in understanding what the speakers were presenting						
	8. The schedule for the training provided time to cover all of the proposed activities						
	9. The methodologies used for the conduct of the sessions were appropriate and allow for maximum participation						

	Training Elements	1	2	3	4	5	Comments & Suggestion
Resource Persons	10. The resource persons/trainors were knowledgeable about the topic						
	11. The resource persons/trainors were well prepared for the session						
	12. The resource persons/trainors answered questions in a complete and clear manner						
	13. The resource persons/trainors were respectful of the different skills, values and ideas presented by the participants						
	14. The resource persons/trainors used appropriate training aids to the participant's understanding of the presentation						

II. Administration

		1	2	3	4	5	Comments & Suggestion
Facility/Admin Support	15. The session room and related facilities provided a comfortable setting for the training						
	16. Adequate training handouts and materials were provided to the participants						
	17. The location of the training venue was convenient for me and easy to find						
	18. The food and accommodation provided were of high quality						
	19. Training equipments and other apparatus are functioning well.						

III: Participants

1. What were your problems/constraints/difficulties during the training program that affected your participation?

   _____
   _____
   _____
   _____

2. Are the learning/s you've got in the training applicable to your job?

   If yes? How? _____
   _____
   _____

   if no? Why? _____
   _____
   _____

3. How can the training be improved?

   _____
   _____
   _____

Bibliography

Climate Change Commission, 2012. National Climate Change Action Plan; 2011-2028. Republic of the Philippines: Climate Change Commision.

Coastal CORE Sorsogon (CCS), Marinduque Council for Environmental Concerns (MaCEC) and Social Action Center Northern Quezon (SAC-Northern Quezon). (2011). Voyage to Disaster Resilience in Small Islands: A Guide for Local Leaders. Quezon City, Philippines: Christian Aid – Philippine Office.

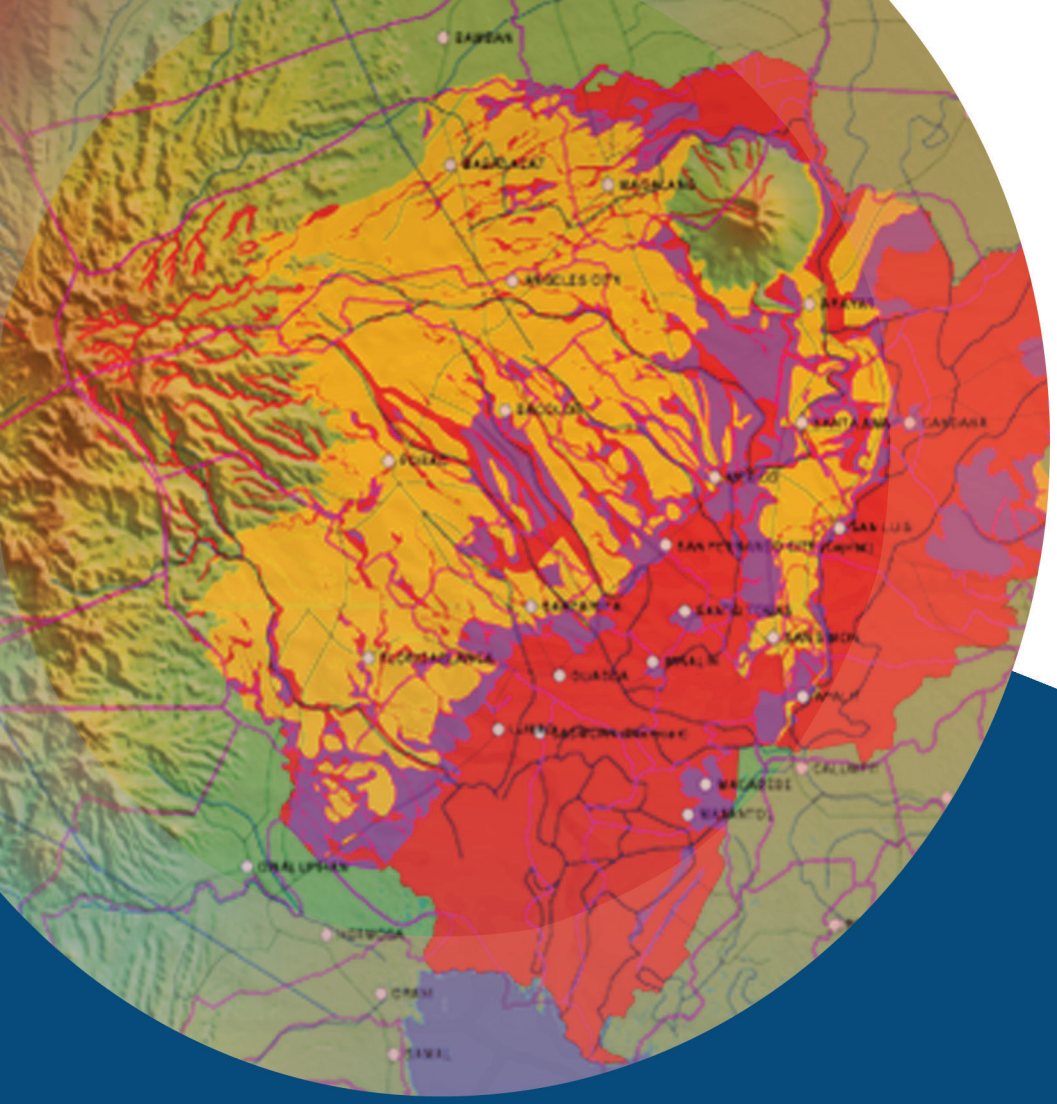
Department of Interior and Local Government, Bureau of Local Government Development, 2008. Rationalizing the Local Planning System, A Source Book, 1st Edition. Philippines: DILG-BLGD.

Marinduque Council for Environmental Concerns (MACEC), Ateneo School of Government, Manila Observatory, Coastal Core Sorsogon, Aksyon Klima Pilipinas, Regional Climate Change Adaptation Platform for Asia, Province of Albay, Province of Iloilo, (2012). Alternative Pathways to Climate Change Adaptation and Disaster Risk Reduction: Mainstreaming and Integration in Development Planning and Budgeting of Local Government Units, Philippines: Aksyon Klima and the Building Disaster-Resilient Communities Learning Circle.

United Nations Human Settlements Programme (UN-HABITAT), 2010. Participatory Climate Change Assessments: A Toolkit based on the Experience of Sorsogon City, Philippines. Nairobi, Kenya: UN-HABITAT.

United Nations Human Settlements Programme (UN-HABITAT), 2014. Planning for Climate Change: A Strategic, Values-based Approach for Urban Planners. Nairobi, Kenya: UN-HABITAT.

United Nations Human Settlements Programme (UN-HABITAT), 2014. Planning for Climate Change: A Strategic, Values-based Approach for Urban Planners – Toolkit. Nairobi, Kenya: UN-HABITAT.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DILG
LOCAL GOVERNMENT ACADEMY
1988
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Years