

Basic Course on Community-Based Monitoring and Information Systems (CBMIS) for Community Trainers and Organizers

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Table of Contents

Ac	ronyms	vii	
Int	Introduction & Rationale		
I.	MODULE 1. What is CBMIS and Its Importance?	1	
	Session 1: CBMIS in the Context of Indigenous Peoples' Sustainable, Self-Determined Development (IPSSDD)	2	
	Session 2. Community-Based Monitoring and Information Systems and Its Importance	6	
	Session 3. IPSSDD Core Domains	11	
II.	MODULE 2. Indicators and Indigenous Peoples	17	
	Session 1. What are Indicators and What are Being Monitored?	18	
	Session 2. Indicators Work at the International Level	25	
	Session 3. Useful Tips and Ideas in Relation to Indicators and Monitoring	29	
Ш.	MODULE 3. CBMIS Tools and Methodologies	33	
	Session 1. Tools and Methodologies	34	
	Session 2. Storage, Management and Data Sharing	52	

IV. MC	ODULE 4. Using CBMIS in IPSSDD	57
Ses	ssion 1. Community Development Work	60
Ses	ssion 2. Project Management Cycle	65
Session 3. Using CBMIS for Indigenous Peoples' Advocacy		71
References		75

Acronyms

	Α		1
AIPP	Asia Indigenous Peoples' Pact	IFAD	International Fund for Agricultural Development
		IIFB	International Indigenous Forum on Biodiversity
	С	IPSSDD	Indigenous Peoples' Sustainable, Self-Determined
CBD	Convention on Biological Diversity		Development
CBMIS	Community-Based Monitoring and Information	IT	Information Technology
	System	IWGIA	International Work Group for Indigenous Affairs
CIDA	Canadian International Development Agency		
			K
	E	KEF	Kalahan Educational Foundation
ESRI	Environmental Systems Research Institute		
			M
	F	MDG	Millennium Development Goals
FAO	Food and Agriculture Organization	MRV	Monitoring, Reporting and Verification
FGD	Focus Group Discussion		
FPIC	Free, Prior and Informed Consent		P
		PGIS	Participatory Geographical Information System
	G	PRA	Participatory Rural Appraisal
GPS	Global Positioning System	P3DM	Participatory 3-D models
GIS	Geographic Information System		

S

SIS **Safeguard Information Systems**

Т

ΤK Traditional Knowledge

U

UNDRIP United Nations Declaration on the Rights of

Indigenous Peoples

University of the Philippines Los Baños UPLB

United Nations Framework Convention on Climate UNFCCC

Change

UNGA **United Nations General Assembly**

UNSD **United Nations Statistics Division**

UNPFII United Nations Permanent Forum on Indigenous

Issues

Introduction & Rationale



n pursuit of development, humanity has engaged in many activities that are mostly extractive in nature and has brought alarming rate of biodiversity loss and climate change, among others. This loss of biodiversity has partly accelerated the climate crises but at the same time, the climate issue is also increasing the rate of biodiversity loss. This situation ultimately brings multiple crises not just to the world in general but more specifically to indigenous peoples.

Indigenous peoples have been and are stewards of Mother Farth. The close interconnection of socio-cultural and economic institutions with the natural habitat of indigenous communities have sustained the remaining biodiversity of the world today. With the current and looming impacts of climate change and biodiversity loss, indigenous peoples are bound to be greatly impacted as well.

The Indigenous Peoples' Sustainable, Self-Determined Development (IPSSDD) framework offers a holistic view of development that responds to the multiple issues that indigenous peoples are experiencing. This framework is based on a balanced integration of socio-cultural, economic and environmental goals and objectives.

Self-determined development means that indigenous peoples are the ones who will decide how economic, social and cultural development should happen in their territories. This includes the need to respect their rights to their lands, territories and resources; respect for their cultures; and their right to free, prior and informed consent. Moreover, this development paradigm of the indigenous peoples considers traditional knowledge and practices as indispensable element, including spiritual, gender, intercultural and intergenerational dimensions.

Why CBMIS?

For many years, indigenous peoples have been subjected to various fields of study and research by external agents. The results of these researches have contributed much in the advancement and emergence of new knowledge and in putting indigenous peoples' issues in the limelight.

However, because most researches are done by outsiders, there are instances when indigenous peoples' knowledge, systems and practices are being interpreted out of context. This way, research has also been instrumental in furthering the marginalization and discrimination of indigenous peoples. At the same time, there remains a dearth of efforts in making the indigenous peoples as managers and holders of the research results that came from their own traditional knowledge.

In the international arena, there is a growing recognition of the contribution of indigenous peoples not just in knowledge generation but also in providing solutions to emerging issues such as climate change. Different indicators are now being used to study further how indigenous peoples are faring in terms of human rights, cultural vitality and well-being, among others. Thus, it has been recognized that the work on indigenous indicators has been ground breaking at the international level.

Community-Based Monitoring and Information Systems (CBMIS) is a process where indigenous peoples are able to generate information for the analysis, monitoring, and use of the community. It is a part of Participatory Action Research that is geared towards community organizing and, ultimately, to community empowerment and the realization of indigenous peoples' sustainable, self-determined development (IPSSDD). This is a counter discourse to the trend of external researchers

doing research in indigenous communities because in CBMIS, the community takes the lead—from conceptualization to data analysis and management.

In short, the community has the sole ownership of the process and results of the CBMIS.

In many parts of the world, some indigenous peoples have successfully used their community data and information to guard and obtain tenure over their territories and resources; while others are just starting to map their communities as basis of community decisions.

What is the CBMIS Course?

This CBMIS course is designed for indigenous communities who are interested to start their CBMIS work and also for those who have already started. It is intended for community-based trainers and organizers, local people doing community-based monitoring and assessments, local advocates and communicators. This course intends to help facilitate the CBMIS work that is undergoing on the ground. This is mostly informative and non-prescriptive. It can be taken by group or individually; and it comes with corresponding group dynamics and individual self-checks for personal evaluation.

This course should be used and tailor-fitted according to the actual needs of the community. The training can run for two days but may be prolonged or shortened depending on the participants.

It is suggested that this course should be taken by individuals who have undergone an orientation on the Indigenous Peoples' Sustainable, Self-Determined Development (IPSSDD) framework.

Objectives of the Course

Specifically, at the end of the training, the learner/participants are expected:

- 1. To reach a common understanding on the importance, relevance and substance of Community-Based Monitoring and Information Systems (CBMIS) within the framework of IPSSDD;
- 2. To share and reflect experiences and deepen understanding about tools and methodologies in carrying out CBMIS;
- 3. To enhance use of data generated from CBMIS being implemented by the community for planning, management and advocacy work at various levels; and
- 4. To link CBMIS work with local to global developments and challenges on the implementation of the UNDRIP (UN Declaration on the Rights of Indigenous Peoples), traditional knowledge, biodiversity and climate change, rights and well-being of indigenous peoples.

Aside from self-checks in critical parts of the course, almost all the modules also end with self-evaluation. Whether you are taking the course by yourself or you are facilitating this to a group, the self-checks could help much to evaluate how much you have understood each module. The group dynamics contained in the course aim to facilitate understanding of the concepts and to provide venue for sharing of experiences and ideas for group learners. This can be also be done by individual learners but they have to find a way to share and exchange ideas with others who might be taking the same course.

The timing of the sessions are just approximates and may vary from one learner (or community for that matter), to another. For those who have been doing CBMIS work and have had basic orientation

on the IPSSDD framework, the course may be completed in as fast as three days. But for communities who are just starting, the course may run for as long as 4-6 days.

Contents

The course is divided into four modules with several sessions each. Some modules have two sessions while others may have up to four sessions, depending on the area of coverage. The contents of the course are the following:

- I. Introduction and Rationale
- II. List of Acronyms
- III. Module 1: What is CBMIS and Its Importance?
 - Session 1. CBMIS in the Context of Indigenous Peoples' Sustainable, Self-Determined Development (IPSSDD)
 - Session 2: CBMIS and Its Importance
 - Session 3: IPSSDD Core Domains
- IV. Module 2: Indicators and Indigenous Peoples
 - Session 1. What are Indicators and What are Being Monitored?
 - Session 2. Indicators Work at the International Level
 - Session 3. Useful Tips and Ideas in Relation to Indicators and Monitoring
- V. Module 3s: CBMIS tools and Methodologies
 - Session 1. Tools and Methodologies
 - Session 2. Storage, Data Management and Data Sharing

VI. Using CBMIS in IPSSDD

Session 1. Community Development Work

Session 2. The Project Management Cycle

Session 3. Using CBMIS for Indigenous Peoples' Advocacy

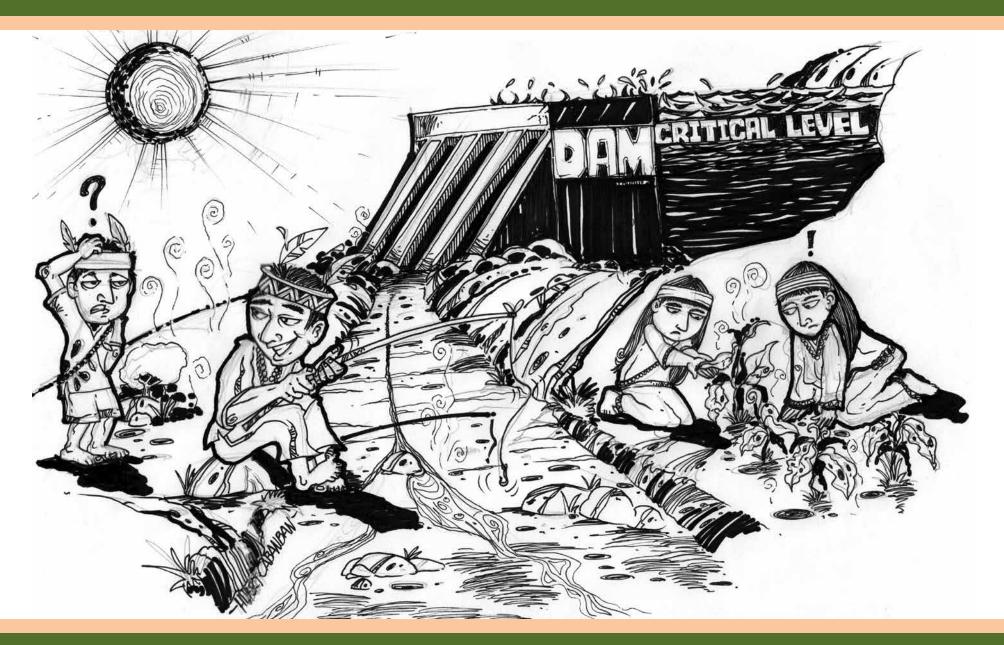
VII. References

VIII. Annexes

Solutions will not be found while indigenous peoples are treated as victims for whom someone else must find solutions.

- Malcolm Fraser

MODULE 1



DURATION



It is important for us to understand first the context why CBMIS is important to indigenous peoples. In this module, you will be introduced to the framework with which indigenous peoples see development.

OBJECTIVES

At the end of the module, the participants will be able to:

- 1. Articulate and define the components of CBMIS;
- 2. Relate the relevance and significance of CBMIS in the context of IPSSDD.



SESSION 1

CBMIS in the Context of Indigenous Peoples' Sustainable, Self-Determined **Development (IPSSDD)**



Meta cards, pentel pens, craft papers, color pens, masking tapes





- 1. In meta cards, write one word that comes into your mind when you hear the word development. Write one idea per card.
- 2. Paste your meta cards in a board. Look at other participants' meta cards and see how your idea can be clustered or grouped together. Put the same ideas together.
- 3. Based on the ideas posted, what makes a community developed? Or what defines community development?



Points to Ponder

Incorporating indigenous peoples' indicators in development

The word development was first used in association with land and economics in the 1700s. However, there were realizations in the latter centuries that development is not only about finance and economy but also about betterment in progressive stages (1836). Later on, education, health and employment were added as other indicators of development. But based on your answers to Activity 1, what other indicators of development were not mentioned?

There are also other generally-accepted or contemporary definition of development. Below are some of the dominant society's view of development vis-a-vis indigenous peoples' development views.

"Human development is a process of enlarging people's choices. The most critical ones are to lead a long and healthy life, to be educated and to enjoy a decent standard of living."

- Human Development Report, 1990

"The basic purpose of development is to enlarge people's choices. In principle, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figures: greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying

leisure hours, political and cultural freedoms and sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives."

- Mahbub ul Haq (1934-1998), founder of the Human Development Report

"Human development, as an approach, is concerned with what I take to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it."

- Amartya Sen, Professor of Economics, Harvard University Nobel Laureate in Economics, 1998

Indigenous peoples around the world have different terminologies for well-being and development. Sumak kawsay (Quichua); suma qamaña (Aymara) and buen vivir or vivir (Spanish), are traditional concepts which reflect the lifeways and identities of Aymara and Quechua peoples. There are many equivalents of these concepts among other indigenous peoples, such as laman laka (Miskitu), minobimaatisiiwin (Anishinaabeg, Cree), qawis ay biaq (Kankana-ey Igorot). All these are phrases used to capture our concepts of the "good life," "good living," "living well," "well-being," "life to the fullest," or "commonwealth."1

Note that in the concepts mentioned above and in the answers that you gave in Activity 1, economics and finance are only a few among the many indicators of development in indigenous perspectives. And more often than not, all the indicators of development are so closely interlinked and interconnected that the absence of one indicator will matter in the overall essence of development.

The Indigenous Peoples' Sustainable, Self-Determined Development (IPSSDD) paradigm

Since the Industrial Revolution, development has been modeled from a wasteful economy that ultimately led to the climate change crisis that we are all experiencing now. As such, the impacts of degraded ecosystem services are being disproportionately borne by the poor and is a principal factor contributing to poverty (Bremner, J., López-Carr, D., Suter, L. and Davis, J., 2010). And while indigenous peoples manage the existing richest ecosystems in the world, they are still among the most vulnerable to impacts of climate change and make up 15% of the world's poor (Cultural Survival, n.d.).

¹ Myrna Cunningham Kain proposes to use "commonweal," which goes beyond merely consuming things but enjoying social life in community with associated producers and members.

Indigenous peoples' sustainable, self-determined development (IPSSDD) is an approach that shows the integration of economic, socio-cultural, political, environmental, intergenerational and gender perspectives.

IPSSDD recognizes that knowledge-based approach is not enough and we need to put in the ingredients of holism. One vital distinguishing viewpoint that indigenous peoples possess is holism—"all things are connected" (Ecological Vision, 1989) and "one seen in isolation with others is not the real thing."

This is intended for indigenous peoples, especially the women and the youth, who are willing to collectively chart or plan and implement their road map on sustainable, self-determined development they want to pursue.

IPSSDD also reiterates the value of sustainability in development. Sustainability refers to the perspective of "taking only what you need" and "making sure you leave enough for the next generation." The interculturality approach recognizes that each indigenous community is unique and that the diversity of cultures makes indigenous peoples' communities more vibrant. Yet despite the diversity, indigenous peoples ensure their unity and complementarity.

IPSSDD is not a new framework but is just a reiteration of the self-determination and holistic view of indigenous peoples on development.

Notes

SESSION 2

Community-Based Monitoring and Information Systems and Its Importance

Everyday, we do a lot of decision-making from the time we wake up to the time we sleep.



For example:

- a. To decide whether you eat or not, what information do you need?
- To decide to take an umbrella or not, what information will you need?
- c. To decide if you are going to transplant the rice seedlings or not, what information do you need?

The kind of information you need for the above questions can be answered by monitoring whether:

- a. You feel hungry (stomach is rumbling) or you feel full;
- b. It is cloudy outside and it is the rainy season of the year;
- c. The seedlings are mature enough for transplanting and the elders have declared the rice transplanting season.

Information systems and monitoring are the business of every living matter on earth especially of the human species. And we will be learning more about it as we go further into our course in the coming days. So sit tight, take a pen and paper and feel free to write down questions we hope to be able to answer in the next sessions.

Usually, researchers enter the indigenous communities and ask information from them, making the indigenous peoples as mere "informants." These information are usually collected, recorded, systematized and kept in some filing systems outside the communities. These same information may also be shared to the outside world and used or even "owned" by different stakeholders with different interests.

The huge bulk of information that has been acquired through the years has been systematized in many government establishments during the colonization and post colonization era. These information

systems have been instrumental in informing development agenda of governments, research institutions and non-government organizations as well. This has resulted to a skewed top-down planning development and misappropriation of knowledge.

But despite the colonization, indigenous peoples were able to maintain their close relationship with their land and nature. In fact, in resisting colonization, indigenous peoples have further developed their knowledge systems and practices of nurturing Mother Earth for the promotion of indigenous well-being.

What CBMIS wants to do is to systematize these knowledge systems to facilitate knowledge generation among indigenous peoples' communities.

Self-Check

How are you doing so far? The introduction above about CBMIS just tries to tell that indigenous peoples can also do their own research and system of information. This is basic in community development.

In your notes, write down your community's experiences on research. Who have done researches in your community? What kind of information did they gather? How did the researchers or the community used the research results? How do you or your community feel about these researches?

Explore how your answers can be discussed with other participants.



Points to Ponder

Indigenous peoples have been practicing the monitoring of their natural and physical environment since time immemorial. Before the introduction of the modern writing systems, indigenous peoples already had their "history" in their songs, chants, folklores and paintings, among others. These information systems have been passed on from generation to generation up to the present time using different methods such as story telling, genealogy and performing arts, among others.

Monitoring is an activity or a process of checking the progress or quality (of something) over a period of time. Note that it has one criteria—it is purposive. For indigenous peoples, monitoring is a process of coming out with information, an integral part of research which is the process of collecting data/information for the creation/ production of a more advance knowledge. Some may equate observation with monitoring. However, monitoring can be further defined as:

Note

- Something that is done on a regular or routine fashion while observation can be done only once;
- Recording or noting the observations—recording may mean you write or mentally take note of what you observe;
- Purposive and systematic, not just done randomly.

Community-based, on the other hand, simply means that the process is under the control and management of the community. Therefore, the information and monitoring system is of, by and for the people of a defined community (a village, town, tribe) under their control and management.

For indigenous communities, whose way of life is very much connected to their natural resources, monitoring is also intrinsic in their lifestyle. For instance, the agricultural calendar of indigenous communities are closely related to when the rain comes, the movement of certain animals or birds and the flowering or wilting of certain plants.

According to the Indigenous Peoples' Global Partnership on Climate Change, Forests and Sustainable Development,² CBMIS refers to the bundle of research and monitoring approaches related to biodiversity, ecosystems, land and waters, and other resources; as well as, human well-being. It integrates the ecosystems-, human rights-, and sustainability-based approaches with conscious concern on gender, intergenerational and cultural diversity, to indigenous peoples' economic development and well-being (SIS Submission of Tebtebba and the Partnership to the UNFCCC, Sept 24, 2014).

Why is CBMIS important?

"Knowledge is power." Crucial for indigenous communities' empowerment is their ability to generate, process and come up with advance knowledge. To be able to do this, they have to have a baseline or a synopsis of their community.

For instance, monitoring of resources is done because of, but not limited, to the following reasons:

- a. To have a full access and right over our resources;
- b. To counter existing state policies that are discriminatory to indigenous peoples;

² This partnership, established by Tebtebba in 2009, is composed of 18 indigenous organizations and NGOs from 13 countries in Latin America, Asia and Africa: Tebtebba, Lelewal (Cameroon), DIPY and UEFA (DRC), MPIDO and ILEPA (Kenya), NEFIN (Nepal), CERDA (Vietnam), CHIRAPAQ (Peru), CADPI (Nicaragua), SER MIXE-ASAM-DES (Mexico), FAPI (Paraguay), CIR (Brazil), ID and AMAN (Indonesia), Maleya (Bangladesh), NNK and SILDAP (Philippines).

- c. To be more critical of the changes in the natural resources and propose solutions; and
- d. To be used by indigenous peoples and local communities as a tool for management and documentation of their resources and status of their well-being.

Indigenous peoples have been subjects of researches done by external agents for such a long time. But in CBMIS, the community is involved in the conceptualization, implementation, monitoring and evaluation stages.

What?	CBMIS is a systematic process of data generation, collation, analysis and management		
Who?	The indigenous peoples in the community are the main actors of the process		
Where?	In areas needing action (i.e., areas that matter most to the community)		
When?	Now		
Why?	For knowledge generation		
	For basis of community planning, decision-making and action		
	For basis of policy advocacy		
	For community development		

Community-Based Monitoring and Information Systems (CBMIS) is an essential part of IPSSDD that aims to be a basis for the community planning, decision-making and advocacy. It is a process where the indigenous peoples, including women and the youth, are not mere subjects but actors and managers of the whole process of producing a baseline information and deciding what to make out of the data they generated. This would be further elaborated in Module 4.



Self-Check

It is not yet time to drink your coffee.

Now that you have learned about CBMIS, its context within IPSSDD and its importance to indigenous peoples, you are now ready to do Activity 2.



Activity 2: Community Mapping

MATERIALS

Craft papers, writing pens (pencils, ballpen or markers), coloring pens, masking tapes



- 1. You can do this individually or in groups (according to which community you come from).
- 2. In a craft paper, draw your community and put marks or legend in important parts or resources in the community. You can also mark parts of your community where you have issues or problems.
- 3. You can do this exercise in 30-45 minutes.
- 4. After the exercise, present your community map to the plenary. Post them around the room for future references.

SESSION 3

IPSSDD Core Domains

You might be wondering about the information that you should be gathering or the data that you should be generating in CBMIS.

In this session, we will learn that there have been a series of unification activities and workshops³ involving Tebtebba, the Indigenous Peoples' Global Partnership on Climate Change, Forests and Sustainable Development, and other NGOs and networks to advance the work on CBMIS in the recent years. Through these workshops, agreements were made on the broad framework of CBMIS and how this will inform policy at national and global levels.

Likewise, during a global workshop conducted on February 22-23, 2014, the indigenous peoples' global partnership agreed on the core domains under key thematic areas to be generated with some recommended indicators within the CBMIS. In the table next page, you will see that there are five core domains with indicators under them. The indigenous peoples' global partnership agreed that these five domains are fundamental in indigenous peoples' pursuit of self-determined development.

³ Philippines CBMIS Workshop, Manila, February 2013; Global CBMIS Workshop, Bonn, April 2013; Global Mapping Workshop, Indonesia, August 2013; CBMIS Technical Workshop in Indonesia, August 2013 and in Bangkok, September 2015.

LAND TERRITORIES AND RESOURCES

1	A P I . I I		
Increase or decrease in land areas:	According to land use		
	According to customary land tenure		
Land tenure	Percentage of people with customary land tenure		
	No. of people benefitting		
	With customary land tenure recognized by state		
	Those not recognized by state		
Conflict	Areas of conflicts		
	Areas under control of state or corporations		
	Areas claimed by state but can be used by indigenous peoples		
Laws enacted affecting traditional land-use and land tenure and their effects	No. of communities or percentage of population affected		
	Lands converted to different land use		
Statutory and/or indigenous peoples' intervention on disaster prone areas	Increase or decrease of land areas prone to disaster		
State policies	Increase or decrease in percentage of forest protected by state and/or indigenous peoples		
	Percentage or number of law passed/implemented recognizing the customary rights of people to their forest and its management		
Water	Decrease/increase in no. of water sources, water volume, quality and portability of water for community use		
	Incidences of water-related violence and tensions		
	List of flora and fauna of different, uses and assessment on trends from historical information		
Trends and changes in access to indigenous medicine			

TRADITIONAL KNOWLEDGE

- Increase or decrease in percentage of indigenous children who speak or study in their mother tongue
- Number of government and community programs that promote the use of indigenous language
- Existence of publication/literature material based in indigenous languages
- Decrease/increase in indigenous naming mechanism of both nature and people
- Number of traditional knowledge on resource use recognized by policy and science
- Increase/decrease in number of indigenous livelihoods/practices undertaken by the community,
- Percentage of the population engaged in traditional occupation
- No. percentage of youth, women and elders participating in the transfer of knowledge
- No. percentage of mechanisms/instruments recognizing traditional knowledge
- Increase or decrease in:
 - a. No. of traditional knowledge (TK) mechanism recognized, protected and promoted
 - b. No. of mechanisms/support systems to further develop/innovate for TK promotion, protection and transmittal
 - c. Traditional expressions developed and promoted

FULL AND EFFECTIVE PARTICIPATION

Rate of adopting customary decision-making processes (including customary free, prior and informed consent [FPIC] processes)

Increase or decrease in:

- Percentage of indigenous peoples participating in traditional and contemporary decision-making processes
- Percentage of women in authority in decision-making bodies
- No. of appropriate FPIC processes conducted by the government/corporations
- Capacity-building activities supported by state
- Capacity-building activities supported by indigenous community
- Percentage of people who have increased their capacity for decision-making and do advocacy work

- Recognition and adoption by the state of customary mechanisms/systems on benefit-sharing
- Percentage of indigenous peoples who benefited from programs/project implemented by the state
- Incidences of conflicts associated with benefit-sharing contestations
- Increase or decrease in number/percentage of population accessing/using available communications systems and information, percentage of relevant information
- Percentage of people attending capacity-building activities for full and effective participation

TRADITIONAL GOVERNANCE

Increase or decrease in:

- State laws recognizing traditional/customary governance system
- No./percentage of institutions provided by the state for indigenous peoples' representation
- No./percentage of policies/plans that reflect customary rules/standard
- Percentage of community development plan (land use) adopted and being implemented
- No. of indigenous peoples' representatives elected in state bodies from the community at the regional, national level
- Space for women and percentage of women who are involved in decision-making
- No./percentage of negotiated, rejected and approved projects
- No./percentage of cases violating indigenous peoples' rights that were filed and resolved through customary and/or state laws
- No./percentage of written agreements between the community and stakeholders that are implemented
- Increase or decrease in number of cases of violations due to conflict of laws
- Increase or decrease in number of cases of violence against women (VAW)
- Percentage of cases resolved against emerging cases

HUMAN RIGHTS

- No. of community members aware of policies
- No. of implementing laws
- Percentage of policies implemented at the community level

Levels of assertion of rights:

- No. of collective/individual cases emerged from the conflict
- No. of VAW cases
- Rate of cases resolved (customary and/or formal legal system)
- No. of individuals accessing available services/sources (disaggregated by sex, age and type of services)
- No. of individuals aware that public services are basic rights and are/should be available
- No. of people trained by government
- No. of cases filed/resolved in customary law
- No. of cases filed in legal court
- Stories, narrative accounts of human rights violations and/resolutions
- Status of girls' and women's enjoyment of rights within the traditional set-up

Equitable access:

- Percentage of cases actually filed, resolved, emerging jurisprudence or court rulings in favor of indigenous peoples' rights
- Level of satisfaction when justice is provided

While we learned from the previous sessions that indigenous peoples have been monitoring their weather, ecosystem and other resources in the past, these are largely based on their traditional knowledge and holistic view of their environment. But they also use and adopt new technologies in their monitoring work. So simply put, CBMIS is a way of systematizing all the data and results of monitoring work that indigenous peoples have already been doing.

Self-Check

This would be the end of Module 1. How have you understood the relationship of CBMIS and the IPSSDD framework so far? Take a look again at the core domains and their indicators. Do you think you can answer or fill in the indicators needed using your community as a base?

That would be interesting to do. But wait, it would be better to do that after you have undergone Modules 2 and 3. So relax for a while and get ready for Module 2.

MODULE 2



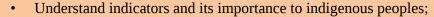
Indicators and Indigenous Peoples

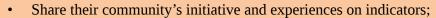
DURATION

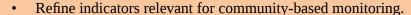
In the first module, you have undergone an overview of the CBMIS as one process of IPSSDD. Likewise, you have been introduced to the core domains that are essential in CBMIS work. Under the core domains, you have also seen number of indicators. To better understand what indicators are, this module will be focusing on indicators and their relevance to indigenous peoples.

OBJECTIVES

At the end of the module the participants are expected to:









SESSION 1

What are Indicators and What are being Monitored?

Since 1992, there has been development in the work of the Convention on Biological Diversity (CBD) on indicators. The process of identification of indicators relevant to indigenous peoples started in 2006 and these were proposed for adoption under the CBD and the Millennium Development Goals (MDGs).⁴ In this module, we will be learning about indicators and its relevance to indigenous peoples. We will also be learning about the different indigenous peoples' efforts on indicators work and how these are significant to CBMIS.

⁴ Tebtebba and the International Indigenous Forum on Biodiversity (IIFB) Working Group on Indicators guided this work and submitted results of meetings to the Working Group on Article 8j and Related Provisions (WG8j) of the CBD and to the United Nations Permanent Forum on Indigenous Issues (UNPFII).





Activity | Measuring Change

- 1. Group yourselves according to the community you come from.
- 2. Identify a community area that you are all familiar with (like a sacred place, a community river) or a community practice (like swidden farming, traditional dispute settlement, etc.). Discuss these questions:
 - a. What is the present status of your community concern/practice?
 - b. What changes did it undergo in the past?
 - What influenced the changes?
 - d. What specific changes would you want to see in this area/practice in the future?

What are Indicators?

Indicators are defined by Navarro (2014) as derived data or statistics that describe a person, a place and event and the changes in them. These are also basic data to describe, report the status of, or keep track of the progress of certain activities or events and can be used to assess what is happening as basis for making appropriate decisions. Indicators can show the differences between and among sub-groups over time.

Indicators are a summary measure to show positive or negative change. Their evaluative nature distinguish them from the descriptive nature of statistics.

According to CIDA (2007), an indicator is a pointer. It can be a measurement, a number, a fact, an opinion or a perception that points at a specific condition or situation and measures changes in that condition or situation over time. In other words, indicators provide a close look at the results of initiatives and actions.

Indicators are powerful tools to show the situation of indigenous peoples on the ground. The effort of coming up with indicators is being done to fill the gap of information and that will make the issues and concerns affecting indigenous peoples visible, up-to-date and relevant to effect policy and social change.

Indicators enable decision-makers to assess progress towards the achievement of intended outputs, outcomes, goals, and objectives. As such, indicators are an integral part of a results-based accountability system (Harvard Family Research Project, 1997).

When cooking the Filipino adobo dish, for example, your ultimate goal is to be able produce delicious food for dinner. You begin by sautéeing the garlic and onion until the garlic turns brown and the onions are translucent. You then add the chicken or pork and sautée until the oil of the meat comes out. Then you add the soy sauce and other ingredients to taste. You let it simmer for 5-10 minutes or until the meat is tender, then add the vinegar.



In this dish, your indicators are the colors of the garlic and onion. When their colors change, you know they are already cooked. Other indicators would include the oil of the meat coming out and the length of time for simmering. These all indicate that your meat is already cooking and ready for the vinegar. This is the same in the community. You set a goal and you have indicators to show where you are, which way you are going, and how far you are from your target.

Types of Indicators

Indicators can measure inputs, process, outputs, outcomes and risks or enablers.

Type of indicator	Definition/description	Examples
Input or resource indicators	Measure resources, both human and financial, devoted to a particular program or intervention (i.e., number of case workers).	Number of indigenous peoples working with the local government
	Input indicators can also include measures of characteristics of target populations (i.e., number of clients eligible for a program).	Number of indigenous women who are part of the dap-ay ⁵
Process, throughput or activity indicators	Measure ways in which program services and goods are provided (i.e., error rates).	Percentage of indigenous women who are part of decision-making
Output indicators	Measure the quantity of goods and services produced and the efficiency of production (i.e., number of people served, speed of response to reports of abuse). These indicators can be identified for programs, sub-programs, agencies, and multi-unit/agency initiatives.	Percentage of indigenous children who have availed of scholarship
Outcome indicators	Measure the broader results achieved through the provision of goods and services. These indicators can exist at various levels: population, agency, and program.	Increased land ownership by indigenous peoples recognized by government
Risk/enabling indicators ⁶	Measure the influence of external factors on the project of program. These include factors which may lead to success or failure of a project (CIDA, 1997).	Occurrence of devastating disruptions like flood

⁵ Dap-ay is an indigenous system/structure that guides the way of life of community life among the Igorots in the Philippines.

⁶ Like all indicators, they should be developed with stakeholder participation, as end-users in particular are likely to know most about potential project risks/enabling factors.

The Canadian International Development Agency or CIDA (1997) lists two categories of indicators which are complementary and useful for monitoring and evaluation:

- 1. Quantitative indicators which can be defined as measures of quantity and focus on areas that are easy to quantify. These indicators are usually drawn from censuses, enumerations and administrative records and are therefore extracted from more formal surveys. They answer the questions of: a) How many, b) How often, c) How much. They are usually expressed in numbers.
- 2. Qualitative indicators are peoples' judgements and perceptions about a certain subject. These are obtained from sources such as public hearings, attitude surveys, interviews, participatory rural appraisal, participant observation, and sociological or anthropological field work or are extracted from less formal surveys. They answer the questions: a) How, b) When, c) Why, d) Who, e) Which and f) What. They also help demonstrate, describe or measure something that has happened.



Self-Check

In your notes, list down the reasons why you think you need indicators in your line of work. What are the things you need indicators for? After finishing your list, let us review the process of developing indicators.



How do you develop appropriate indicators?



1. Involve your program stakeholders in indicator development.

Bring stakeholders together to identify meaningful indicators. This will help ensure the buy-in for your evaluation findings. Consider consulting existing literature and other relevant resources to assist with identifying indicators.

- 2. Review evaluation questions and use your logic model as a template to develop indicators. Link process indicators to your logic model outputs. Link outcome indicators to your logic model outcomes.
- Review indicators to ensure they are specific, observable, and measurable.
- 4. Include baseline data for inputs and outcomes if you are trying to measure change.
- 5. Determine whether the indicators:
 - Provide useful information that can measure processes and outcomes and answer evaluation questions;
 - Are feasible in terms of data availability and timely data collection;
 - Are adequate to capture the information you need. You may need to develop more than one indicator, but avoid creating too many indicators because they can detract from the evaluation's goals.

Keep in mind, some information that are important to track may not have indicators associated with them. For example, some aspects of the program may be qualitative (e.g., describing the nature of a partnership). Sometimes what is important isn't always quantifiable.

Source: Developing Evaluation Indicators, (n.d.) http://www.cdc.gov/std/Program/pupestd/Developing%20Evaluation%20 Indicators.pdf.

Notes

Point of view of the Logical Framework

Development Objective

Describes the project's real outcomethe impact that the project's outputs will have on the beneficiary institution or system in terms of changed behavior or improved performance.

The development objective defines the project's success.

Project Output

Define what the project can be held directly accountable for producing the project's deliverables, the goods and services it will produce. Typically, outputs are independent, synergistic and integrated

Components

Clusters of activities that define how the products and services will be delivered (technical assistance, physical infrastructure and the like)

SESSION 2

Indicators Work at the International Level

If you refer back to the last session of Module 1, you will again find the five core domains that are relevant to indigenous peoples' sustainable, self-determined development. But did you know that before this five domains, the work on indicators relevant for indigenous peoples had started for quite sometime? In this session, you will walk through the history of indicators work and how this has progressed to the present.



Activity 2: Gallery

MATERIALS

Craft papers, writing pens (pencils, ballpens or markers), coloring pens, masking tapes



DURATION



Group yourselves into 5 or 6. Give your feedback/comments/critique on the set of indicators or the core domains that have been developed at different levels (national to global).

You have 5 minutes to look at each different set of indicators. The idea of the activity is for you to look at different indicators as if looking at a painting in the gallery. Make sure you are able to look at the different set of indicators.

Answer the following questions as you move from one set of indicators to the other:

- Can you identify what types of indicators these are, or where they are used?
- How are these indicators useful for indigenous peoples?
- At what level is this information collected and analyzed?

Understanding the Context of Indicators Relevant to Indigenous Peoples

It has taken quite sometime before indigenous peoples were recognized as "peoples" distinct from the mainstream. In many countries over the world, indigenous peoples are agglomerated and are invisible in national statistics. So, globally, indigenous peoples clamored for indicators that are relevant to them.

The UN Statistics Division has noted that the issue of indigenous peoples and data collection are a ground-breaking work. Data collection and disaggregation concerning indigenous peoples pose unique challenges in terms of developing data for global comparative purposes, and of developing data that is useful at a micro-level for indigenous peoples. If bringing out specific data on indigenous peoples as a whole is an enormous task, it is much more difficult on indigenous women and girls who are usually lumped with the mainstream women. This, however, did not stop the efforts of indigenous peoples to advance the development of indicator relevant to them.

The efforts to develop indicators relevant to indigenous peoples is a continuing process, and it is hoped that key information on indigenous peoples, with specific emphasis on indigenous women and girls, will appropriately reflect their situation on the ground. These indicators should show the reality of indigenous peoples' situations by using facts and figures, in a way that exposes discrimination, inequality and denial of human rights. It is a way of putting indigenous peoples' issues and concerns in the agenda.

Among the most significant achievements in the indicators work in the global arena is the indicators on traditional knowledge under the Convention on Biological Diversity. Under the convention, indicators relevant for indigenous peoples have been recognized. These are:

- a. Linguistic;
- b. Status and trends in the practice of traditional occupations;
- c. Status and trends in land-use change and land tenure in the traditional territories of indigenous and local communities;
- d. Demographic trends;
- e. Trends in degree to which traditional knowledge (TK) and practices are respected through full integration, participation and safeguards in national implementation of the strategic plan.

⁷ UNPFII has pushed this work on indicators in 2002 until a workshop on data aggregation was done in 2004.

The International Indigenous Forum on Biodiversity (IIFB), the caucus of indigenous peoples participating in the CBD, is an essential mechanism which facilitated the work on indicators. Hence, indigenous peoples came up with a community-based tool for Monitoring, Reporting and Verification (MRV) on the abovementioned indicators.

In 2009, 12 common themes or domains relevant to indigenous peoples were consolidated during the Global Expert Seminar on Indicators relevant for indigenous peoples. These were:

- Security of rights to territories, lands and natural resources;
- Integrity of indigenous cultural heritage;
- Gender dimensions elders, youth, men, women;
- Respect for identity and non-discrimination;
- Fate control or self-determination;
- Culturally-appropriate education;
- Health:
- Full, informed and effective participation (FPIC);
- Access to infrastructure and basic services;
- Extent of external threats;
- Material well-being;
- Demographic patterns of indigenous peoples.

Alongside this development is the agreement on safeguards (also known as Cancun safeguards) under the United Nations Framework Convention on Climate Change (UNFCCC). Governments were mandated to report on the following safeguards:

- Actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
- Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;

- Full and effective participation of relevant stakeholders, including, in particular, indigenous peoples and local communities;
- Actions that are consistent with the conservation of natural forests and biological diversity, ensuring that actions are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;
- Actions to address the risks of reversals;
- Actions to reduce displacement of emissions.

Self-Check

In three sentences, restate how the indicators work on indigenous peoples have progressed at the international level. Go back to the common themes or core domains that are relevant for indigenous peoples identified above. Which among these indicators are evident in your local and national government programs, censuses or statistics? Are there other things that you want to include in the indicators mentioned?

The indicators and safeguards that were recognized under the CBD, the UNFCCC and the global expert seminar (as presented above) are all relevant to indigenous peoples. However, for indigenous peoples doing their own CBMIS in their communities, it is recommended that they use or refer to the the five core domains (presented in Module 1) matrix. This is because the matrix has already tried to put all the previous indicators and domains together under one matrix.



Points to Ponder

The work on indicators relevant for indigenous peoples is still continuing both at the national and global levels. Many governments still do not see the relevance of disaggregating indigenous peoples in their national census, making the contributions and needs of indigenous peoples invisible.

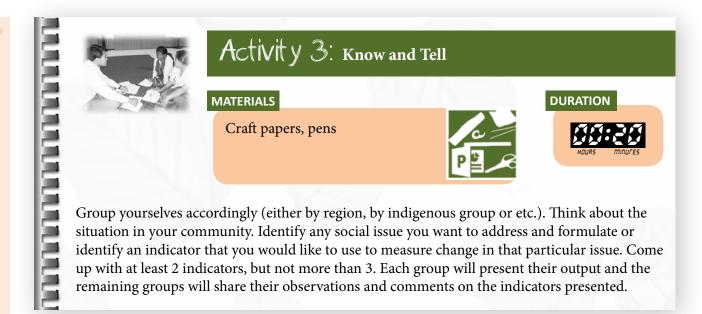
SESSION 3

Useful Tips and Ideas in Relation to Indicators and Monitoring

This session will be an opportunity for you to demonstrate your understanding on indicators. It will also be a space to share comments and other observation regarding indicators and monitoring. Discuss the tips below and see how you can share your perspectives on how indicators and CBMIS may be useful and beneficial to your communities.

- Set appropriate indicators and methods: Develop the types of indicators that are appropriate to the programs/projects through appropriate processes—link them very strongly to the program/project objectives. Use methods that are appropriate for the type of indicator (tangible/intangible; process/outcome).
- Ensure participatory and multi-stakeholders process: Develop indicators with input from a wide range of relevant stakeholders using participatory processes that encourage discussion and enable people to identify indicators of social or behavior change that are meaningful to them.
- **Enable analysis of differences**: Ensure that indicators reflect the need for gender disaggregated data, or data on other important differences such as age, educational level or caste.
- **Remember the limitations of indicators:** Indicators are just part of monitoring and evaluation but they cannot capture the complexities of realities. Indicators can only measure change but not necessarily the reasons behind those changes. It can demonstrate progress but cannot tell why.
- Always allow room for alternatives. Indicators and monitoring is a way to generate feedback of any project/program initiated or implemented, hence, it is encouraged that development of these tool and system are grounded on the needs and interests of the community. These should be empowering and allow spaces for critical understanding and analysis of the situation.

Source: Equal Access Participatory Monitoring and Evaluation Toolkit (n.d.).



There are ways to assess how useful an indicator is. The Equal Access Participatory Monitoring and Evaluation Toolkit (n.d.) provide the following guidelines:

- They are relevant and accurate enough for those concerned to interpret the information;
- They do not need to be perfect;
- Relevance of information is essential to identifying appropriate indicators;
- The need to be achievable and realistic;
- They should enable you to assess change over a period of time.

Characteristics of a good indicator

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Indicators are not exclusively limited to describe qualitative or complex circumstances, but it would be wrong to "reduce" what may be very complex circumstance into a simple indicator. It is also necessary to know that when it is impossible to obtain data, the recommendation is to define and use proxy indicators (which reflect albeit imperfectly trends we seek to explore).

- Is precise, not ambiguous: it can be clearly interpreted in such a way that is fully understood by different actors within indigenous populations and at different points in time.
- Is relevant: reflecting elements or circumstances that are part of what is sought to be understood within a population or situation.
- Is suitable for the users of information: indigenous peoples should identify with the indicator, they must be the ones who understand what "it indicates," and also confident that it truly reflects the relevant information.
- Is sensitive to the effects of the intervention: it has the appropriate level of classification and is collected with an appropriate representation.
- Is practical: the cost of collecting data and producing the information to be synthesized by the indicator is reasonable. Data gathering and monitoring is feasible with the resources available.
- Is reliable and objective: values do not vary according to the person responsible for data collection.
- It respects the privacy and reliability: indigenous peoples report the information used in its development and they should be the ones to decide on what is to be disseminated or published to the public.

Other considerations to guide selection and formulation of indicators can be through these criteria— SMART and SPRICED.

- SMART Specific, Measurable, Attainable and action oriented, Relevant, and Time-bound
- SPRICED Subjective, Participatory, Interpreted, Communicable, Empowering, and Disaggregated



Points to Ponder

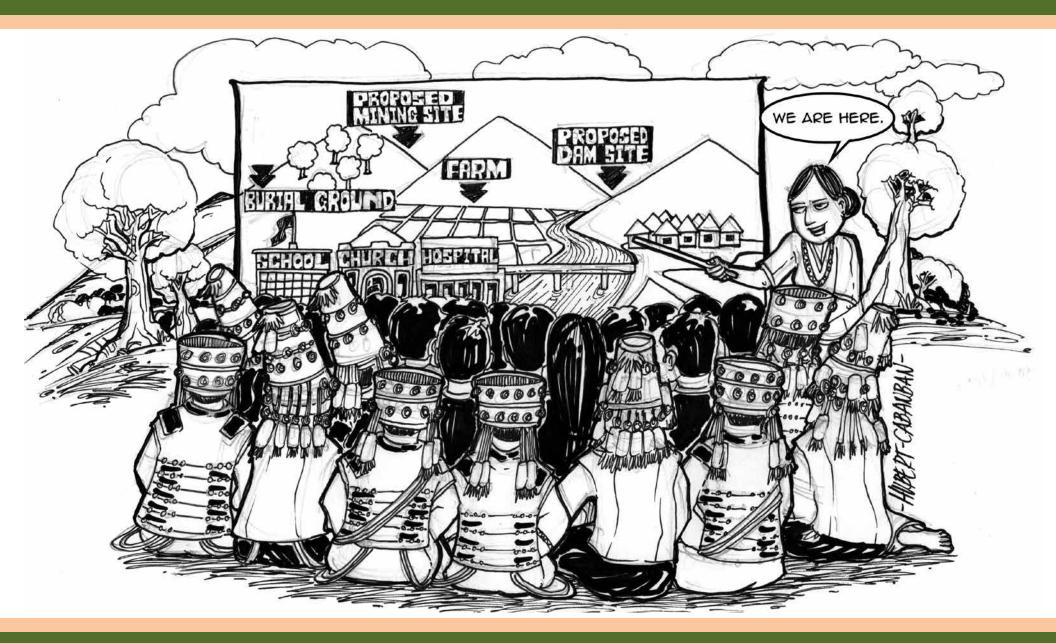
In as much as identifying good indicators is important, so is monitoring these indicators. Monitoring changes through these indicators must be based on the needs of the community.

Ways of monitoring changes must include not only advanced systems but also indigenous ways that can provide accurate information on change and trends in the community.

Monitoring tools must also allow balance information that will come from both men and women, and will allow participation from the youth and elders.

Time element in monitoring is likewise important to enable an up-to-date and organized process of monitoring that will result to proper documentation and comprehensive information.

MODULE 3



CBMIS Tools and Methodologies

DURATION



In this module, we will be learning about the different tools and methods that are being used in CBMIS. It is important to note that because indigenous peoples have been doing community-based monitoring and information systems at different levels already, you will be seeing that there are CBMIS tools and methodologies that are not totally new but are methods that have developed through time.

OBJECTIVES

At the end of the session, the participants will be able to:

- Identify ways of collecting data, data sharing and management; and
- Share actual community experiences on CBMIS.



SESSION 1

Tools and Methodologies

In cooking, you follow a recipe. The recipe includes the ingredients and the steps you need to follow. Sometimes, the recipe also explains why you have to do a certain step (like inserting a toothpick in a cookie to ascertain if it is already cooked). The recipe (which includes the ingredient, the explanations and the steps to follow) is the methodology. For you to be able to follow the recipe, you need certain things such as a spoon, measuring cups, a pot, etc. These are considered tools. In following the methodology (recipe), you come up with your own technique (for example, you use butter instead of cooking oil) (Mark Price Perry, 2005).

Methodology refers to the set of practices that includes theories and concepts behind methods in gathering data. Tools, on the other hand, refer to things that you need to employ in doing the methodology.

Given the wide array of tools and methods available, deciding which tool or method to gather data becomes a challenge for beginners. In deciding which tools to use, you should know the purpose of the activity, the information needed to be obtained, and the combination of appropriate tool(s) that will generate the information needed. The culture of the researcher should also be dependent on the culture of the community, and the practitioners are encouraged to adapt tools to fit in the local situation and can innovate additional tools as the need arises.

The rationale of coming up with CBMIS is both for internal and external communications. First, the community needs the CBMIS so that they can have a better understanding on matters affecting them and to be able to collectively decide the overall well-being of their community. Secondly, CBMIS aims to be able to communicate indigenous knowledge and experiences to the outside world relevant to contributing solutions to our global problem of climate crisis, poverty (economic crisis), and governance (political crisis), among others. For these reasons, we have to be thorough in choosing the most appropriate tools and methodologies.

Self-Check

Our next discussion will be on the different tools and methodologies of CBMIS. The lists of methodologies here are not exhaustive. Feel free to add depending on your experience and knowledge. While we discuss these tools and methodologies, you may also note the ones that you think are best for your community.

A. Participatory Mapping

Participatory mapping emerged from participatory rural appraisal (PRA), which increasingly spread and was used throughout the development community in 1980s. This is simply involving local people—community members conducting mapping activities for a purpose which is significant to them. It became a method for incorporating the spoken word into a map, again with the objective of bringing subordinated voices into a tangible and visible medium that would allow for greater dialogue and negotiation (IFAD, 2010).

Participatory mapping can be used as a tool for advocacy and as a way to enhance community cohesion in the face of land-related challenges—a way to identify rights; a way to make customary tenure relations and rights apparent for outsiders; a way to facilitate the official administrative recognition of these rights; a tool for conflict resolution on land, natural resources, and/or

territory; and a tool for improved collaborative natural resource management and for cross-sectoral territorial planning (Di Gessa, 2008).

There are a lot of maps that can be derived from participatory mapping according to their respective objectives. These maps should be made with the inputs from the local villagers in an open and inclusive process. The number of community members participated in the activity will determine the beneficial outcome. Participatory mapping was often simply sketch maps since this was developed as tool of PRA; however, this evolved until such time that the use of Global Positioning System (GPS) and Geographic Information System (GIS)⁸ were incorporated in the process.

Below are some of the principal tools by International Fund for Agricultural Development, (2009) used in participatory mapping initiatives which ranged from low-cost, low resource-input activities (such as hands-on mapping) to high-cost and high resource-input programmes (such as developing and deploying GIS):

a. Hands-on mapping

Hands-on mapping includes basic mapping methods where community members draw maps on the ground (ground mapping) and paper (sketch mapping). These maps are largely based on community recollection and memory. The maps represent key community-identified features on the land from a bird's eye view. It is a good starting point for framing important land-based issues. It can help provide a broad picture of issues and events covering a large area and can be useful to introduce and acquaint a community with maps and build confidence in using the cartographic medium. It can help plan subsequent mapping activities and engage non-expert users.

b. Participatory mapping using scale maps and images

Local knowledge is identified through conversation and then drawn directly onto a photocopied map or remote-sensed formal cartographic protocols (e.g., scale, orientation and coordinate system) which can be challenging for non-literate individuals.

c. Eco-cultural Mapping

A method that collects and graphically records indigenous peoples' perception across their local landscape. The map shows the forest areas, grasslands, cultivated areas, urban areas,

⁸ Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data. This was developed by Environmental Systems Research Institute (ESRI).

water sources, archaeological sites, and location of natural resources, among others. The creation of an eco-cultural map is a two-step participatory process namely:

Step One: Call community dialogues to share the methodological process and for consensus building. This includes the call for participation of the key actors of the community and sharing the process of creation of eco-cultural maps. It also involves the emphasis of the importance of organized participation in the development of these tools and utility in the diagnostic and auto evaluation as it progresses.

Step Two: Drawing the Maps. Using the cadastral map of the community as reference, the ecocultural maps are drawn showing the community and geographic boundaries; the roads, water sources, cropland, pastureland, forested areas, etc. including major community infrastructures.

To graph the map, it is important to follow some guidelines:

- Organize participants according to age groups and ask them to remember, observe, analyze and draw their community, emphasizing the situation of its resources at different times (past and present).
- Each map should contain the most important aspects related to territory, such as waterways, roads, forested areas, plants and ethnobotany importance and irrigation infrastructure, health posts, etc.
- Each group presents their maps. Note the similarities and weaknesses of each map. Discuss the priority issues and the challenges presented by the maps. Also look into what the maps say about the people's activities in the territory.

d. Participatory 3-D models (P3DM)

Participatory 3-D modelling is a community-based method that integrates local spatial knowledge with data on land elevation and sea depth to produce stand-alone, scaled and georeferenced models. P3DM are scale relief models created from the contours of a topographic map. Sheets of cardboard or the likes are cut in the shape of the contour lines and pasted on top of each other to create a three-dimensional representation of topography. Geographic features can be identified on the model using pushpins (for points), colored strings (for lines) and paint (for areas). Data depicted on the model can be extracted, digitized and incorporated into a GIS.

e. Geographic Information System (GIS)

GIS are computer-based technologies that are used for storing, retrieving, mapping and analyzing of geographic data (e.g., ARCGIS and QGIS).9 Since the 1990s, the participatory GIS (PGIS) movement has sought to integrate local knowledge and qualitative data into GIS for community use. PGIS practitioners (who are often technology intermediaries from outside the community) work with local communities to democratize the use of the technology.

f. Multimedia and Internet-based mapping

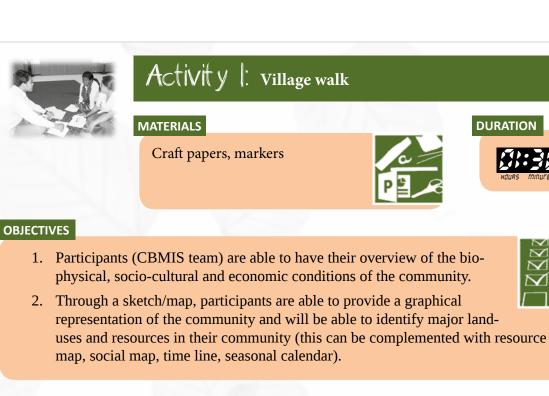
Multimedia and internet-based mapping can combine the usefulness of maps with other embedded digital media, such as video, images and audio, which can be better at documenting the complexities and the oral and visual aspects of local knowledge.

Aside from the above, Google Earth, 10 an open source software that can be downloaded from the internet which has the satellite imagery of the earth, is also being used by some local communities to map their land uses, as well as to locate their forests and other natural resources.

⁹ Quantum GIS is a free and open source Geographic Information System that can be downloaded at http://www2.ggis.org/en/site/.

¹⁰ Google Earth is a virtual globe, map and geographical information program that was originally called EarthViewer 3D created by Keyhole, Inc, a Central Intelligence Agency (CIA) funded company acquired by Google in 2004. This can be downloaded at https://www.google.com/earth/.

Advantages Disadvantages • Some of the principal tools like ground and • Can be time consuming and some mapping sketch-mapping are relatively easy to conduct tools are cost-intensive. and easy to explain. Can create dissonance and lead to conflicts • It allows to integrate local people at a very among the involved stakeholders. early stage, allows to tap local knowledge, and The larger the number of topics to be included, gives local people the feeling that their inputs the more complex the maps will be. For this are valued. reason, it might be better to make several maps, with one issue/indicator per map. It produces a quick overview of the problem. However, this is very time-consuming and • It may foster holistic thinking among storage of such maps can pose difficulties. participants and may make the relations between different problems more easily There will always be questions on the accuracy understandable to them. of the maps. • The resulting map or maps can be used in • There will be a need to update the map so that many activities such as development plans, it will not be left behind by occurring changes. conservation plans and conflict resolution. The applications of GIS into it are very technical • Community will have sense of ownership in the and needs intensive training. Some of the resulting maps. GIS softwares, like the licensed ones from Environmental Systems Research Institute (ESRI) • Community solidarity can be achieved. are expensive but some can be acquired for free like the Quantum GIS.



Suggested steps

- 1. Do a walk on a planned route that should cover the variations in topography and major land-uses of the area.
- 2. Draw a sketch of the area you have passed and make notes on the observation and discussions along the way. You can do this by group.
- 3. After the walk is finished, sit down to finalize the sketch of your route.
- Discuss and record all the data you have collected. The discussion can be done through group reporting. Note the differences of your group work, if any.
- 5. Paste your work on the wall for your co-participants to see.

B. Biodiversity Survey

Biodiversity, as defined by the United Nations Convention on Biological Diversity is the variability among living organisms from all sources including, inter alia, terrestrial, marine and other ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (CBD, 1992). Biodiversity also includes the varieties of seeds domesticated by humans and their wild relatives (agro-biodiversity), the diversity of functional groups in the ecosystem (herbivores, carnivores, parasites, saprophytes, among others) and cultural diversity (which include customs, languages and cosmovisions).

As such the CBD has three fundamental objectives which are: 1) the conservation of biological diversity; 2) sustainable use of its components, and 3) the fair and equitable sharing of benefits arising from the utilization of genetic resources.

Hence, biodiversity survey can be the inventory of flora and fauna in a certain ecosystem. In this particular module, biodiversity refers to the plant species present within an ecosystem in a community that can be determined through scientific means.

One of the ecosystems being sampled is the terrestrial ecosystem where vegetation analysis is being conducted to study the plants, community structures or characteristics. The analyses indicate the dominant plant components that are important in resource management as they may serve as indicators of the state of the ecosystem.

In sampling the vegetation, sampling sites can be identified during the village walk or through the aid of a map and need to be representative of a specific land-use type. These sites should be compared with a benchmark of similar vegetation/land-use type. In order to characterize the vegetation of the area, the objective of the activity and the type of vegetation should be taken into consideration.

There are different sampling methods being used in vegetation sampling to determine the species richness and abundance in a certain community. The most common methods are:

Notes

B.1. Plot Method

The plot method is a pre-determined sample surface area (usually square or circle) used to sample most vegetation attributes in most vegetation types. The size depends on the size and density of vegetation and the number of plots needed depends on the species accumulation curve of the vegetation (Barker, 2001). The location of these plots should be strategically selected so as not to create bias and to represent the extent of vegetation type within the representative area (Frontier Cambodia, 2003). In each quadrat, the species name, cover, count and height will be recorded.

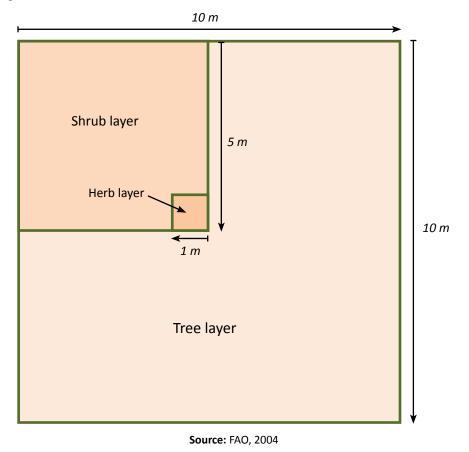


Fig. 1. A diagramatic illustration of a quadrat use in a plot method.

Plot method is often used in the evaluation of herbaceous plant-type communities of different types of ecosystems and is divided into two methods (Franco et al., 1985; Matteucci et al., 1982, Goldsmith and Harrison, 1976):

- Permanent plot method: Determines the flora changes along the seasons and possibly over the years. It can be observed by installing a permanent sample plot. A sample plot of this type is a rectangular area of land clearly marked by mileposts or other durable signs. Registration of plant life and other factors is at regular intervals. This type of sampling area is convenient because you can observe the development of vegetation during the study period.
- **Belt transect method:** A belt transect is a strip, generally 0.5 or 1.0 m wide, marked by placing a second parallel to the original linear transect line 50 meters long. The transect unit sample is used to measure variables such as coverage. This method has the advantage of covering a greater length on the ground (50 m) and the size of the strips allow a quick evaluation of the vegetatation covered. This method is designated as the most suitable sampling method for observing and evaluation herbaceous plant communities with a large number of individuals in a small area of land, such as in the hills. Foster et al. (1995).

B.2. Line Intercept Method

The line-intercept method is especially useful in analyzing non-forest vegetation. Depending on the heterogeneity of the vegetation, a transect that can be 30 to 50 meters length subdivided into intervals will be laid along established transect line. In each interval, the species name, height and cover (length of the transect line intercepted by individual species) of the different species intercepted will be recorded.

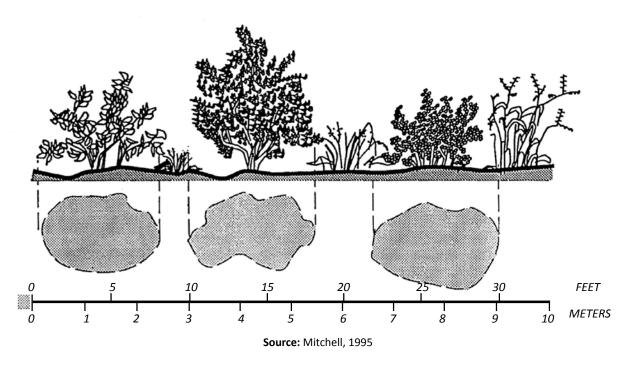


Fig 2. Illustration of a line-intercept method used in floral survey

The different data that were collected and recorded in the field data sheets that were prepared prior the field work will then be processed. In addition, voucher specimens in each of the quadrat/linetransect are established.

Advantages	Disadvantages
 Can determine the conservation status of species present in the area being inventoried. Result derived can be used for management, planning and conservation activities. Can determine the ethno-botanical uses of species present in the area. 	 Very technical and needs trainings to do it. Person to implement needs to be equipped with the theories about biology, ecology, botany, plant's systematics and other related field of sciences. The more sampling plots to sample, the more
	time-consuming.



Activity 2: Construction of 3-Dimensional Map

This activity can show in a small-scale the processes in making a 3-Dimensional model map.



MATERIALS

Sheets of cartons/cardboards with the same thickness and width (number of sheets depends on the elevations of the topographic map to use as basis in constructing the model), paste/glue, pens/ball pens, carbon paper thin paper sheet, double sided tape, cutters and scissors, topographic map labelled with contour interval of 20 meters and scale of preferably 1:10,000 of a certain community printed in a 15" x 15" tarpaulin (this will serve as your reference map); coloring paint

- 1. Cut a base layer sheet in accordance with the length and width of the reference map and set aside for later use.
- 2. Using a double-sided tape, paste the carbon paper at the back of the reference map for tracing. Make sure that the carbon side of the carbon paper is sticking out.
- 3. On a sheet of carton/cardboard, lay out the reference map with the carbon paper on it and start tracing the lowest contour line using a straight line and the contour line next to the lowest using broken line (see figure below). This will serve as the first layer of your model. Cut the straight line using cutter or scissors and label it with respect with its value on the reference map. Follow the same process until you reach the highest contour lines (highest elevation) of your reference map.





- 4. On the base layer sheet that you cut out from the first procedure, paste the first layer (layer with the lowest elevation value) on it. The second layer with the contour line value next to the lowest will be pasted on the first layer. In pasting the second layer, follow the broken line on the first layer for fitting purposes. Follow the same process until the last layer is pasted on the model.
- 5. Eliminate the rough edges of the constructed 3-D model by attaching thin paper sheets on it following its curvatures. This will make your model smooth enough for painting.
- 6. Paint your model according to your desired theme (e.g., land-use).

C. Case Study

A case study is a story about something unique, special, or interesting. Stories can be about individuals, organizations, processes, programs, neighborhoods, institutions, and even events. This attempts to arrive at the same time to develop more general theoretical statements about regularities in the observed occurrence.

Boyce et al. (2006) identified and described that the processes in conducting a case study will follow the same processes that other researches do. This includes:

- a. Plan
 - Identify individuals, organization, and other stakeholders who will be involved
 - Have a brainstorming about the case study topic
 - Identify related information needed and from what source
- b. Develop instruments
 - Develop interview/survey protocols the rules that guide the administration and implementation of the interview/survey. These are the instructions that are followed to ensure consistency across interviews/surveys, and increase the reliability of the findings
 - Develop an interview guide/survey that lists the questions or issues to be explored and includes an informed consent form

- Translate guides into local languages, if necessary
- c. Train data collectors (if necessary)
 - Use interviewers who speak the local language, if necessary
- d. Collect data
 - Gather data related to topic
 - Obtain consent from the respondents
 - Conduct interview
- e. Analyze data
 - Review all gathered relevant information
 - Review all gathered data from interviews/surveys
- f. Disseminate findings
 - Write report
 - Allow others to give their feedback
 - Revise if necessary, validate the report with the community
 - Disseminate

Advantages	Disadvantages
 The examination of the data is most often conducted within the context of its use. Variation in terms of intrinsic, instrumental and collective approaches allow for both qualitative and quantitative analyses of the data. Help to explore and describe the real life environment and explain its complexities. 	 Lack of rigor Little basis for scientific generalization Long and difficult to conduct Produce a massive amount of documentation

D. Focus Group Discussion (FGD)

The focus group discussion is a qualitative method which involves several roles of actors called interviewer and interviewee on a specific topic like rights, gender perspectives, trends, etc. Focus groups, in contrast to individual interviews, provide an additional dimension relating to the interaction between group members. In conducting the focus groups discussions the emphasis should be placed on the interaction between group members.

In the FGD, one can observe, interpret and describe a reality seen from various angles, as the discursive interaction between participants provides the narration of personal experience and expression of ideas resulting in the group generating their views on the issue. From a gender perspective, this method is vital because it brings together men and women to discuss gender relations. The discussion makes it possible for them to appreciate their diverse positions and behaviors in various dimensions of everyday life.

Focus group discussions complement surveys/interviews that have a typical 6-12 member-participants, plus a moderator. The participants should be more or less homogenous. It should also be conducted in the local language of each community lasting from 1.5 – 2 hours to ensure that the discussions would produce useful information (Bernard, 2006).

In conducting an FGD, it is important to set a discussion guide which will facilitate the discussion. This guide contains the questions which will be asked to participants during the session. Elliot and Associates (2005) suggested three question types in conducting a focus group discussion. These are:

- a. Engagement questions begin the session with one or two question as introduction to make the participants feel comfortable with the topic of discussion;
- b. Exploration question these are the questions that probe deeper into the topic;
- c. Exit Question check if there are additional comments regarding the topic, and check if nothing is missed.

As concluded by Masadeh (2012), focus group is highly valued as a research tool, most notably for its ability to generate in-depth insights into topic in an efficient and timely manner. Despite some of the limitations and logistical hurdles involved, this technique is seen as effective and less resourceintensive, compared to other methods.

Advantages	Disadvantages
 Good for deeper exploration of people's insights on the topic. 	Some people may feel inhibited in expressing non-consensus views.
• Can gain a large amount of information in short span of time.	 Not guaranteed to be statistically representative because of a small number of people involved.
 An effective tool to cross check information derived from other data collecting tools. 	 Outcome derived cannot be used as a representative to generalize the whole characterization of the population.

E. Survey Research

One of the methods, which is widely used in social sciences, is survey research. A survey is any activity that collects information in an organized and methodological manner about characteristics of interests from some or all unit of population using well-defined concepts, methods and procedures, and compiles such information into a useful summary form (Statistics Canada, 2010).

According to Kelly et al., (2003) the term "survey" is used in variety of ways, but generally refers to the selection of a relatively large sample of population from a pre-determined people, followed by the collection of a relatively small amount of data from those individuals. Therefore, the researcher uses the information from the sampled individuals to generalize the characteristics of the whole population.

E.1. The Interview

Interview is the most widely employed method in quantitative approach. This is use to simply explore the experiences, beliefs and/or motivations of individuals on specific matters. This is also believed to provide a deeper understanding of the social phenomena than what can be obtained from quantitative methods like the questionnaires (Gill et al., 2009). This data collection method can be done on the phone, in person, by mail or even by computer and has its own advantages and disadvantages. In addition, it produces different types of data that are useful for different types of researches (Bernard, 2006). Some examples of interviews include:

 Informal interviewing. This is characterized by a total lack of structure or control. The researcher just tries to remember conversations heard during the course of a day in the field.

- Unstructured interviewing. This type of interviewing involves sitting down with another person and holding an interview anytime and anywhere. This is based on a clear plan that you keep constantly in mind, but is also characterized by a minimum of control over other the people's responses.
- Semi-structured or in-depth interviewing. This type of interview is scheduled and is based on an interview guide (list of questions and topics that need to be covered in a particular order).
- Structured interviewing. In this kind of interview, respondents are exposed to the same set of questions and their responses are compared.

Advantages	Disadvantages
 Any misunderstanding and mistake can be corrected easily because the of the presence of the interviewer and interviewee. 	 Preparation for the interview, taking interviews and interpretation of the responses require much time.
 Rapport between interviewer and interviewee can be developed. 	 Interview can be influenced by biases of the interviewer.
• Interview can collect fresh and primary data for specific topic.	 The success of the interview depends on the ability and the efficiency of the interviewer.
 Can collect sufficient information because the interviewer can ask any questions related to topic to the interviewee. 	
• It is very simple, prompt and low-cost method of communication.	
 Both interviewer and interviewee can increase their knowledge due to interchanging their views and ideas. 	

E.2. The Questionnaire

A questionnaire is a group or sequence of questions designed to obtain information on a topic from a respondent. The questions must conform to the survey's objectives and give information that is useful for data analysis. A well-designed questionnaire should efficiently collect data with a minimum number of errors and inconsistencies, friendly to both interviewer and respondent and lead an overall reduction in the cost and time with data collection (Statistics Canada, 2003). Food and Agriculture Organization (1997), identified nine steps involved in coming out of a well-designed questionnaire. These are as follows:

- Decide the information required;
- Define the number of respondents;
- Choose the methods of reaching your target respondents;
- Decide on question content;
- Develop the question wording;
- Put questions into a meaningful sequence and format;
- Check the length of the questionnaire;
- Pre-test the questionnaire;
- Develop the final survey form.

Advantages	Disadvantages
Practical.	Lacks validity.
 Large amount of information can be obtained from a large number of people in a short period of time and in a relatively cost-effective way. Results can be easily quantified. 	 No determination of the truthfulness in the answer of the respondent. It might be biased. Respondents may differently interpret the questions and therefore answer the questions according to their interpretation.

Example of a Questionnaire

A portion of the household survey questionnaire used in Fidelisan, Sagada, northern Philippines during the collection of the socio-economic information of the Applai tribe.

Name of Community: Respondent's Name:	Respondent No. Date		
A. Demographics and Socio-Economic Information			

Household Member	A1. Age	A2. Gender	A3. Civil Status	A4. Ethnicity	A5. Citizenship
		1. Male	 Single 	450	
		2. Female	2. Married		
			Widowed		
			Separated		
			Divorced		
Head of Family					
Spouse	1				
	1				
Children					
	1				
01 5 11 11					
Other Family Members					
	1				
				1	

Self-Check

Whew! You might be saying, "That was a lot!" But don't get overwhelmed, that was just a presentation of the menu of methodologies that you can use. You can either use only one or combine more than one methodology depending on your purpose. Meanwhile, facilitating an interview is a skill that can be learned or developed. What is most important is that you know the culture of the people you are conducting the interview with. Remember two words respect and sensitivity.

We already completed the methodologies on our list. Now let us see how you will fare with our exercise below.



Activity 3: Mock FGD

MATERIALS

Enough space for an FGD, pens and papers, FGD guide question



DURATION



- 1. Assign 10 participants to be "mock FGD participants," 1 moderator, 1 documenter and all other participants as audience. (It is also possible to pre-assign someone who will act as a shy participant and another to act as a dominating participant).
- 2. Using one FGD guide, let the mock FGD begin. (You can let the FGD run for 15 minutes).
- 3. Let the audience watch and list down their observations. After which, discuss the following questions:
 - a. For the participants: How did you feel during the FGD?
 - b. For the moderator: What were the challenges you met during the FGD?
 - c. To all: What are the tips you can share regarding difficult participants? How about sensitive topics?

ALTERNATIVE ACTIVITY

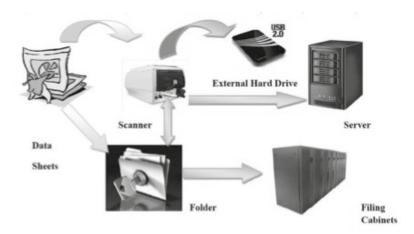
- 1. Group yourselves into 5 persons per group.
- Using the 5 core domains (in our CBMIS matrix), each group will work on one domain and answer the following questions:
 - a. If you are asked to generate data on your given domain, what tools and methodologies would you use?
 - b. What do you think are the advantages and disadvantages of your chosen tools and methodologies?
- 3. Discuss your answers in the plenary.

SESSION 2

Storage, Management and Data Sharing

Data Storage and Archiving

All information gathered during the data collection should be filed and stored in a manner where all information can be secured and/ or can be accessed accordingly. Data storage and archiving are very important and final components of the data collection processes. Fig. 3 is the Winrock International (2012) description on the basic framework in storing and archiving data.



Source: Winrock International, 2012

Fig. 3. Processes involved in data storing and archiving of information

Data Storage in the field

In the field, preferably two community members are responsible for storing and keeping the field data records. These persons can also be the ones who will validate the data on the data records with the community core team leader. All collected and validated data records are stored in a dry and safe place where they cannot be tampered or destroyed until they are transported to the office.

Data Storage in Office

All data records/sheets gathered during the field work must be encoded to software (e.g., MS Office applications) accordingly or scanned and compiled into a document to be stored electronically. This makes sure that the original copy has duplicates.

Hard Copy (paper storage)

It is also advisable that all original data sheets/records from the field must be photocopied and kept in a separate location. All data sheets/records are placed in a special jacket folder in the filing cabinet with their specific labels. Inside the jacket are subfolders with the different types of data collected.

	Advantages	Disadvantages
•	Paper-based storage materials are cheap and easy to produce.	Require more storage space.
•	Does not require complex technology or special skills to use.	Can be easily damaged by natural forces.Difficult to search.

Softcopy (paperless storage)

The scanned data sheets or the encoded information are stored in a computer along with the data entered in the field laptop. These data files are backed-up on a server if necessary. Folders containing data should be properly labelled and organized. All digital data collected and compiled are also stored in the archive file on both desktop in the office and on the server (if there is).

Advantages	Disadvantages
 Less space will be used for these kinds of systems and may be able to cut costs in paper and storage cabinets for paper-based storage. This will be more convenient since searching for files and documents will be easier compared to manual searching. Eco-friendly, less paper consumption. 	 There may be issues in human error in the creation of systems and inputting of files. Bugs in the system can be a problem which will need thorough and high technology requirements. Security will be an issue due to the emergence of hackers as technology advances. Since it is primarily technology-based, one must have a technical person in the community who can fix or have expertise on the technology used.

The paper and paperless storage can be used hand-in-hand while taking into account the different advantages and disadvantages of each system. In the case of CBMIS, since it is "community-based," the community needs to be involved in the storage and management of the information from their own place. A good set-up is having the two systems hand-in-hand in the community, managed by local organizations involved in the CBMIS process.

Information management

Information management is defined as the collection and management of information from different sources. Also it is involved in the process of distribution of such information. In starting a CBMIS project, this should be one of the major aspects to look into. Information can either be beneficial or detrimental to a community, if not managed properly.

Storage issues to be addressed:

- 1. There should be a clear decision by the community on the different information that will be stored in and outside their community.
- 2. A general guideline on what system is to be set up in the community be it paper based, paperless or both.
- 3. Security of the storage area or device should also be a priority in setting them up.

Sharing issues to be addressed

- 1. Clear set of rules (e.g., community protocols) on which information to be shared to the community and to the public.
- 2. Guidelines on accessing the information from its storage including questions on who can access, what purposes will the information be used and mechanisms on how gains from the information can be beneficial or shared by the stakeholders.

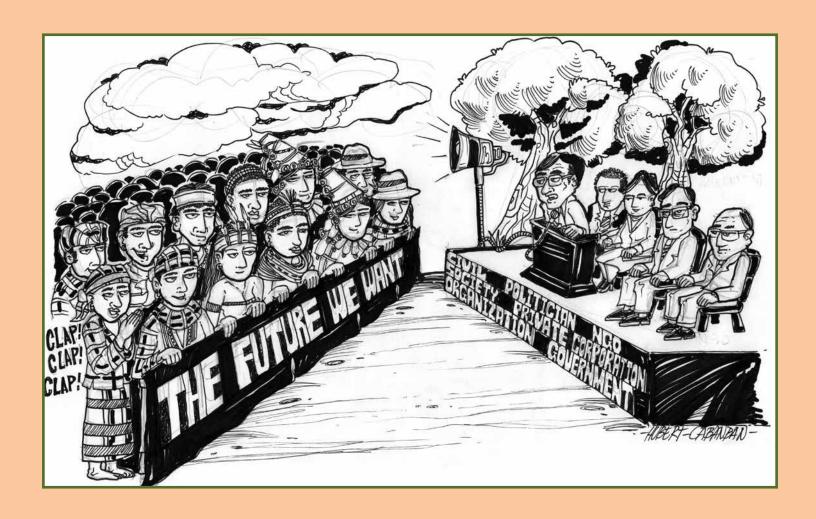
Self-Check

In your notes, list down at least 5 possible issues on information management issues and 5 information-sharing issues. Contemplate on these issues and how they can be mitigated by the community. Share your ideas to other participants.



Points to Ponder

Basically, there is no one-size-fits-all methodology as there are methodologies that are more appropriate than the others, depending on the communities you work with and on the issues you want to deal with.



MODULE 4





Activity |: Mock FGD

IMPORTANT: You are encouraged to bring copies of your community profile or write one if you do not have one yet.



1. Refer to the core domains matrix. Using the land, territories and resources domain, fill in the indicators needed using your community profiles.

LAND TERRITORIES AND RESOURCES

Increase or decrease in land areas:	According to land use
	According to customary land tenure
Land tenure	Percentage of people with customary land tenure
	No. of people benefitting
	With customary land tenure recognized by state
	Those not recognized by state
Conflict	Areas of conflicts
	Areas under control of state or corporations
	Areas claimed by state but can be used by IP's
Laws enacted affecting traditional land-use and land tenure and their effects	No. of communities or percentage of population affected
	Lands converted to different land use

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ı	3	1
ı	-	ı
ı	-	1
ı	2	
ı	2	
	-	

Statutory and/or indigenous peoples' intervention on disaster-prone areas	Increase or decrease of land areas prone to disaster
State policies	Increase or decrease in percentage of forest protected by state and/or indigenous peoples
	Percentage/No. of laws passed/implemented recognizing the customary rights of people to their forests and its management
Water	Decrease/Increase in no. of water sources, water volume, quality and portability of water for community use
	Incidences of water-related violence and tensions
	List of flora and fauna of different, uses and assessment on trends from historical information
Trends and changes in access to indigenous medicine	

- 2. After filling in the matrix, review your data. Were you able to fill in all the data needed? If not, what are the data gaps?
- 3. What is the value of the data you filled in the matrix? Identify ways with which you can use this data.

In Module 1, we discussed the importance of CBMIS in defining the development that indigenous peoples want. Consequently, we went through the data or indicators that we need to look at and the menu of methodologies that we can use in the CBMIS work.

In this module, we will provide you an index of how CBMIS results can be maximized or used for community development. Specifically, the module aims to:

OBJECTIVES

Review community development work as part of IPSSDD and how this relates to indigenous peoples.



- Enhance capacities of participants to maximize CBMIS in community decisionmaking processes.
- Share on how CBMIS can strengthen indigenous peoples' positions in advocacy work from local to global arenas.

SESSION 1

Community Development Work

For a long period of time, indigenous peoples and their knowledge have been regarded as backward and irrelevant. So for the longest time, the state, the church, non-government organizations and other institutions have forced top-down plans and development initiatives for indigenous communities. History showed that many of these development initiatives have eroded and discriminated many indigenous knowledge, systems and practices. Ultimately, development initiatives that are imposed and did not get the full, prior and informed consent of indigenous peoples hampered the real essence of community development.

There are many components of community work, which will be discussed in more detail later; but what is community development? What does it aim to achieve?

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Definitions (Cavaye, n.d.)

The key elements of community development are expressed to varying degrees in many definitions. Some key descriptions are as follows:

- For community development to occur, people in a community must believe working together can make a difference and organize to address their shared needs collectively (Flora et al., 1992).
- Community development is a group of people in a community reaching a decision to initiate a social action process to change their economic, social, cultural and environmental situation (Christenson et al., 1989).
- Community development is a process that increases choices. It creates an environment where people can exercise their full potential to lead productive, creative lives (Ron Shaffer, pers. com).
- Community development is a process where people are united with those of governmental authorities to improve the economic, social and cultural conditions of communities and communities are integrated into the life of the nation enabling them to contribute fully to national progress (United Nations, from Biggs, 1999).
- Community capacity is the combined influence of a community's commitment, resources and skills that can be deployed to build on community strengths and address community problems and opportunities (Aspen Institute, 2000).
- Community vitality is the capacity of the local socio-economic system to survive and persist in generating employment, income, and wealth and to maintain if not improve its relative economic position (Shaffer, 1989).
- Community economic development is about identifying and harnessing local community resources and opportunities and stimulating sustainable economic and employment activity (Kenyon, 1994).
- Sanders (1958) saw community development as a process moving from stage to stage; a method
 of working towards a goal; a program of procedures and as a movement sweeping people up in
 emotion and belief.

Based on the definitions of community development above, we connect this with the indigenous peoples' sustainable, self-determined development.

Self-Determination of Indigenous Peoples



What is most widely implied in the term "self-determination" is the right to participate in the democratic process of governance and to influence one's future—politically, socially and culturally.

Self-determination embodies the right for all peoples to determine their own economic, social and cultural development. Self-determination has thus been defined by the International Court of Justice (in the West-Saharan case) as the need to pay regard to the freely expressed will of peoples.

It is important to stress that for indigenous peoples, the term "self-determination" does NOT most often imply secession from the state.

The right to self-determination

The right of self-determination of peoples is a fundamental principle in international law. It is embodied in the Charter of the United Nations and the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. Common Article 1, paragraph 1 of these Covenants provides that:

"All peoples have the rights of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."

The right of self-determination has also been recognized in other international and regional human rights instruments, such as Part VII of the Helsinki Final Act 1975 and Article 20 of the African Charter of Human and Peoples' Rights, as well as the Declaration on the Granting of Independence to Colonial Territories and Peoples. It has been endorsed by the International Court of Justice. Furthermore, the scope and content of the right of self-determination has been elaborated upon by the United Nations Human Rights Committee and Committee on the Elimination of Racial Discrimination, as well as international jurists and human rights experts.

Source: IWGIA, (n.d.).

From the excerpts above, we can infer that IPSSDD can be achieved through community development work. But community development entails extensive programs and activities that are informed by community data or indicators. This is where CBMIS would come in. CBMIS will not just end up being a database that will add knowledge of the community but will also inform all other processes of community development work.

To know how to use CBMIS in our work, we have to understand first the components of community development work.

Components of Community Development Work

- a. Education and Awareness We always go back to our premise that knowledge is power. When people are aware and they understand the community situation, they are more able to participate in local decision-making processes. Thus, social orientation and mobilization is a key to informed decisions and full participation. Education and awareness is a process that aims to develop the potential of indigenous communities to recover and strengthen acquired skills.
- b. Participatory Action Research Participatory Action consists on building community systems involving various sectors including those who wield political power in an effort to improve and find synergies for better conditions. This is about collective investigation of the problems and issues with the active participation of the community in the whole process. Its primary aim is to give members of marginalized groups a voice, or to enable them to make their voices heard. The research process aims to come up with short- or long-term actions to community issues or concerns.
- c. Community Organizing This entails arousing, organizing and mobilizing people in the community for them to be able to represent their community and influence vital decisions (governments, corporations and institutions, among others) about their interest in a sustainable manner. The main principles of community organizing are self-reliance, unity, integration, empowerment and respect. The organizing must lay a solid foundation for the emergence of natural community leaders with capacity for analysis and conscious representation.

A community development process involves addressing challenges and possible solutions comprising of:

- Mainstreaming
- Full and effective participation
- Flexibility
- Trust
- Self-learning and mutual learning
- Action-reflection-action process
- Effective research: growing ability to identify actors, conflicts, weaknesses, resources and implement guidelines for improvement and evaluation throughout the process.
- d. Policy Advocacy Campaign Advocacy is defined as the process of raising the voices in an effective manner so as to influence others. As a means, it is done through educating and creating or increasing awareness among the general public, government and policy makers, or other entities such as private corporations on issues affecting or confronting the community and the need to align policies, laws, programs, projects to address the needs (AIPP, 2013).
- e. Institution-building and Networking For community development to prosper and be sustained, there is a need for institution-building and networking. Institution-building is an internal process that ensures the capacity of an organization to carry out its mission. Networking, on the other, hand entails enlistment of support from other individuals, communities or institutions that have the same vision as you. Network and alliances serve as support groups for stronger influence and coverage.

What Community Development is Not



We have discussed the components, principles and processes of community development. Final clarification comes from describing what community development is not.

It isn't service delivery: Rural people are clearly demanding greater service delivery from both government and the private sector. Clearly, providers should give the best service possible. Yet community development is more than delivering services. Delivering what "clients" perceive they need does little to stimulate the "rethinking," social networks or leadership that builds the ability of communities to manage change.

It isn't social work or welfare: In a community development process, many communities may aim

to improve the situation of the unemployed, ill, disabled or poor, strengthen social interaction, or improve social support services. However, community development is not a social welfare program. It is a self-directed process aimed at a broad range of economic, social and environmental community benefits.

It isn't a "feel good" exercise: Community development produces real "bricks and mortar" and "dollars and cents" outcomes. It achieves this through cooperative action, rethinking and organization. But it involves a lot of action and work. It is far more than a morale boosting exercise.

Source: Jim Cavaye (n.d).

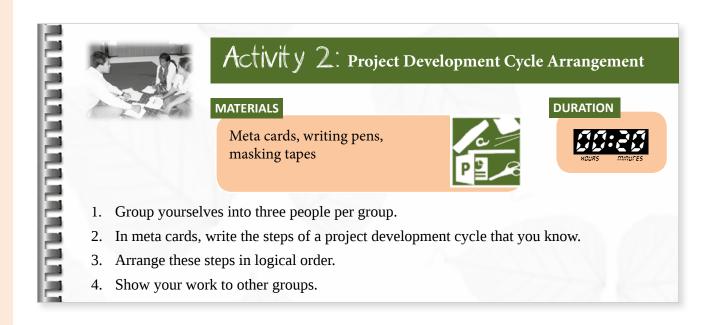
Self-Check

Go back to Activity 1 of this module (Mini-CBMIS activity). Look into the data that you have written under the indicators. How have you used these data so far? Have you used them for community education? How about policy advocacy? Have these data inform researches you are undertaking in your community? Or did these data corrected previous researches written by outsiders about your community?

Notes

SESSION 2

Project Management Cycle



Community development is both an art and science. It is the art of making people more effective than they would have been without you (or the project for that matter). It is also the science of doing things in a systematic and appropriate fashion.

What are the project development steps you wrote in Activity 2? Is your arrangement different from other groups or individuals?

You will find next page the basic project management cycle. While you will note that the planning is written first and evaluation last, this does not necessarily mean that the process is linear. In community development work, all the processes can interface with each other.

1. Planning: Logic of ideas

- This is comprised of formulation of Vision, Mission, Goals, Strategies and Objectives
- Action Planning: What needs to be done? Who does what at what time (when)? How and why? What and how much resources are needed?
- Establish standards based on set objectives

2. Implementation: Logic of practice

- Organize resources
- Implement and monitor performance
- Controlling (Measure and report performance; Compare actual performance with set objectives and standards; Take corrective and preventive actions against problems)
- Directing (Motivation, Communication, Performance Appraisal, Conflict resolution)

3. Monitoring

Monitoring is the systematic gathering and analyzing of information that will help measure progress on an aspect of your project. Ongoing checks against progress over time may include monitoring water quality in a catchment or monetary expenditure against the project budget. Monitoring is not evaluation as such but is usually a critical part the evaluation process and should therefore be included at your project planning stage.

Monitoring can be done but not limited on the following:

- The implementation process (resources and time);
- The outputs/products (quality, quantity and timeliness);
- The use by and benefits for beneficiaries (appreciation, relevance, sustainability);
- Actors and factors influencing your project's success.

The limitation of traditional project management is that it usually ends in an output. However, we choose to believe that project management cycle should include the use of outputs to intentionally create bigger outcomes, which in turn lead to results or impact. Consider the example of a Results-Based Management chain below:

Fig. 1. The RBM results chain How? What do we want? Why? **Activities Inputs Outputs Impacts Outcomes** The financial, Actions taken The products, The short-Actual or through which capital term and intended human and goods and medium-term material inputs are changes mobilized services that effects of an in human resources used for to produce result from development intervention's development development specific outputs; as measured intervention outputs interventions change in by people's development well-being; conditions improvements in peoples' lives Resources **Results PLANNING IMPLEMENTATION**

Source: http://web.undp.org/evaluation/handbook/ch2-4.html

While there is a limit to our influence, it does not necessarily mean we also limit the scope of our monitoring. We need to go beyond sphere of influence and monitor effects beyond impact.

4. Evaluation: compare the logic of ideas and the logic of practice

Evaluation provides an opportunity to reflect and learn from what you've done, assess the outcomes and effectiveness of a project, and think about new ways of doing things. In other words, it informs your future actions. The aim of doing program or project evaluation is to determine relevance, efficiency, effectiveness, sustainability and impact.

Evaluation should ideally be factored into your initial project planning (see setting your direction). When you are setting your vision, goals and actions, you need to be considering how and when you'll check your progress against them. You may decide that you will:

- Refine your project as you go, so that evaluation is part of your regular project activities;
- Evaluate the project at agreed milestones, e.g., on a yearly basis or after major activities;
- Carry out an initial baseline exercise against which you compare progress at the end of the project.

In summary, evaluation is an assessment of an ongoing or completed project, program or policy, its results, design and implementation.

Consider the evaluation template sample next page:

	Questions
1. RELEVANCE. It assesses the project's intention and not the project's achievements. It can be measured by seeing if the outcomes set in the log frame were achieved.	 Is there really a need for the project or program? To what extent are project's purpose and overall objective responding to the needs and priorities of the different stakeholders?
2. EFFECTIVENESS	 Did we deliver as planned? Are we doing the right activities? To what extent have the project outputs and the project purpose been achieved? To what extent the beneficiaries are enjoying the services and the products delivered by the project?
3. EFFICIENCY. The actual utilization of resources is compared to the plan and budget. Efficiency focuses on how the outputs are realized, not their effects.	 Were resources (human, physical and financial) used wisely to realize the activities and outputs? Are we doing the activities right? Have the available means been optimally exploited?
4. IMPACT. Projects do not "cause" impacts but it will contribute to the unintended, positive or negative change.	 How did it change the lives of the target group? What wider effects have been caused by the intervention?
5. SUSTAINABILITY	What happens when the project ends?Is it likely that the intervention's positive effects continue after the project period?
Factors affecting sustainability 5.1 Appropriateness	 Are the beneficiaries and intermediate organizations technically and financially capable of using the technology after the outside support has ceased?
5.2 Environmental protection	• Is the continuation of environmental protection guaranteed?

5.3 Socio-cultural relevance	 Have measures been taken to ensure ongoing participation of all members of the target group?
5.4 Institutional and management capacity	 Have measures been taken to ensure the future functioning of organizations set up or strengthened in the intervention?
5.5 Economic and financial aspects	 In the long run, will the benefits continue to be higher than the costs, which will now have to be entirely borne by the target group itself?
5.6 Policy support	Do the country's policies allow for the continuation?

Source: Australian Development Agency, 2009.

The above-mentioned theories can be applied in all of the components of community development that were mentioned in Session 1.

Self-Check

We just finished reviewing the project management cycle. You will note that this cycle can be used in all the components of community development. You need to plan, implement, monitor and evaluate when you do community education, participatory action research, community organizing, etc. So the project development cycle is not divorced from community development work. And as we have been reiterating, CBMIS results will inform all of the processes that we do in community development.

Now, take a break because we are almost done with our module. When you come back, we will look more closely at how CBMIS may be used specifically for policy advocacy.

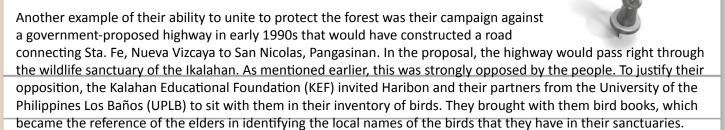
SESSION 3

Using CBMIS for Indigenous Peoples' Advocacy

In Module 2, we briefly discussed information management as the process of collection and management of information from different sources. In this session, we reiterate that community development has to be guided by information and knowledge derived from CBMIS work. Thus, it is imperative that community development workers should also know how to manage their information systems. In short, indigenous communities need an information system that is flexible enough to deal with the changing information needs of their organizations or communities.

If done appropriately, CBMIS can be a tool for indigenous communities in their community development work.

For example, the Ikalahan people of northern Philippines were able to negotiate with the Philippine government regarding the management of their ancestral domain through a Memorandum of Agreement. And because they had an efficient information system of their forest inventories, they were able to stop a major road construction in their territory. Look at the excerpt below:



This activity with the elders and other community residents lasted for at least two days. The inventory continued by allowing ornithologists and other bird watcher groups in the sanctuary to identify more birds. They were able to identify at least 150 species of birds, 35 of which are endangered. Through this community effort, people were able to show the government what the road construction would destroy and its possible irreversible impact on the biodiversity in the reserve. Because of this, the highway project did not push through.

Source: Enkiwe-Abayao, et al., 2012.

In the same manner, CBMIS can be very helpful with the current advocacy of indigenous peoples around the world.

In Session 1, we defined advocacy "as the process of raising the voices in an effective manner so as to influence others. As a means, it is done through educating and creating or increasing awareness among the general public, government and policy makers, or other entities such as private corporations on issues affecting or confronting the community and the need to align policies, laws, programs, projects to address the needs" (AIPP, 2013).

Hence, advocacy is a political process by an individual or group, which aims to influence decisions within political, economic, and social systems and institutions. Advocacy can include many activities like press conferences, public speaking, community assemblies, publication of researches and communication briefs and lobbying with states or governments. Simply put, advocacy is the act or process of supporting a cause.

Self-Check

How are you doing so far? In the discussions above, we are trying to show how CBMIS work can contribute, not only to the overall total development work in the community, but also in advocacy (can be both internal or external). In your notes, write down advocacy work your organization is doing now. In another column, write down the kind of information or data that you think can strengthen your advocacy. In sharing this to your group, think also of the possible ways of gathering additional data/information you think you need in your advocacy work.



Activity 3: Practicum in planning within the framework of IHA-IPSSDD using indicators relevant to indigenous communities

1. Review the management cycle that we have discussed.

DURATION

- 2. According to your community priorities, discuss with your group and identify your objectives, inputs, activities, outputs, outcomes and desired impacts.
- 3. Make a plan of action and also discuss how you will monitor and evaluate your progress.
- 4. Remember that you need to make a SMART (Specific, Measurable, Attainable, Realistic and Time-bound) plan.



Points to Ponder

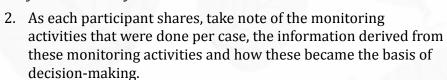
Throughout the years, indigenous peoples and their communities have been subjects of policies and projects, which are either beneficial or disadvantageous to them. Generally, they are excluded from decision-making, rendering the so-called development agenda unresponsive to the needs of the indigenous peoples. Processes such as planning up to evaluation are a top-down system, resulting to inappropriate and discriminating policies or programs. With the CBMIS, indigenous communities are equipped with relevant data and are thereby confident to lay their positions in various spaces where their sustainable development is at stake.

In pursuing their own sustainable development path, indigenous peoples must understand the ins and outs of a project where they can effectively participate and integrate the data they have generated from their own CBMIS.



Alternate Activity

1. Consider this question: What significant issue or problem have your community encountered and how were these resolved?





Note

References

AIPP. (2013). Training Manual on Advocacy, Lobbying and Negotiation Skills for Indigenous Peoples in Climate Change and REDD+. Asian Indigenous Peoples Pact: Chiangmai, Thailand. p. 2.

Austrian Development Agency (2009). Guidelines for Project and Programme Evaluations. From: http://www.oecd.org/development/evaluation/dcdndep/47069197.pdf. Accessed June 15, 2015.

Barker, P. (2001). A technical manual for vegetation monitoring. Hobart, Tasmania: Resource Management and Conservation, Department of Primary Industries, Water and Environment. http://dpipwe.tas.gov.au/Documents/Manual_screen.pdf. Accessed December 14, 2014.

Beharrell, N. K. and E. W. Fanning (Eds.) (2003). Forest research methodology. Frontier Cambodia Environmental Research Report 2. IN Frontier Cambodia. Society for Environmental Exploration, UK.

Bernard H. R. (2006). Research methods in anthropology: qualitative and quantitative approaches. (4th ed.) United Sates of America: Altamira Press.

Bremner, J., Lopez-Carr, D., Suter, L. and Davis, J. (2010). Population Growth, Ecology and Poverty, IN J.C. Ingram et.al (eds.), Integrating Ecology and Poverty Reduction: The Application of Ecology in Development Solutions, 65-74, DOI 10.1007/978-1-4614-0186-5_6.

Boyce, C., Thapa, S., and Neale, P. (2006). Preparing a case study: a guide for designing and conducting a case study for evaluation input. Retrieved from http://www.pathfinder.org/publications-tools.

Carl Folke. (n.d.). Traditional Knowledge in Social-Ecological Systems. From: http://www.ecologyandsociety.org/vol9/iss3/art7/. Accessed December 5, 2014.

CIDA. (2007). Guide to Gender-Sensitive Indicators. From: http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/Policy/\$file/WID-GUID-E.pdf. Accessed February 11, 2015.

Cultural Survival. (n.d.). Who are Indigenous Peoples. Retrieved from: http://www.culturalsurvival.org/who-are-indigenous-peoples.

Di Gessa, S. (2008). Participatory mapping as a tool for empowerment: experiences and lesson learned from the ILC Network. From: http://www.landcoalition.org/sites/default/files/legacy/. Accessed February 12, 2015.

Elliot and Associates. (2005). Guideline for conducting Focus Group. Retrieved from https://assessment.trinity.duke.edu/documents/ February 14, 2015.

Enkiwe-Abayao, Leah, Jo Ann Guillao, Mikara Jubay-Dulay and Helen Magata. (2012). Reclaiming Forests and Coasts: Indigenous Peoples Cope with Climate Change IN Knowledge, Innovation and Resilience Indigenous Peoples' Climate Change Adaptation and Mitigation Measures. Baguio City, Philippines.

European Commission. (March 2004). Aid Delivery Methods: Volume 1 Project Cycle Management Guidelines. https://ec.europa.eu/europeaid/aid-delivery-methods-project-cycle-management-guidelines-vol-1_en (accessed June 2015).

Fidel, R. (n.d.). The case study method: a case study. Graduate School of Library and Information Science. University of Washington, WA.

Food and Agricultural Organization. (n.d.). FAO Document Repository. Retrieved from http://www.fao.org/docrep/w3241e/w3241e05.htm. February 15, 2015.

Gill, P., Stewart, K., Treasure, E., and Chadwick, B. (2008). Methods of data collection in qualitative research: interview and focus groups. Briting Dental Journal 204, 291-295. Retrieved from http://www.nature.com/bdj/journal/v204/n6/full/bdj.2008.192.html. February 15, 2015

Harvard Graduate School of Education. (1997). Harvard Family Research Project. Indicators Definition and Use in a Results-Based Accounting System. From http://www.hfrp.org/ publications-resources/browse-our-publications/indicators-definition-and-use-in-a-results-based-accountability-system. Accessed January 18, 2015.

International Fund for Agricultural Practices. (2010). The IFAD adaptive approach to participatory mapping: design and delivery of participatory mapping projects. Retrieved from http://www.ifad.org/pub/ February 13, 2015.

International Fund for Agricultural Practices. (2009). Good practices in participatory mapping. Retrieved from http://www.ifad.org/pub/ on February 10, 2015.

International Work Group for Indigenous Affairs. (n.d.). Self determination of indigenous peoples. http://www.iwgia.org/human-rights/self-determination. Accessed March 11, 2015.

Jim Cavaye. (n.d). Understanding Community Development. From: http://vibrantcanada.ca/files/understanding community development.pdf. Accessed on March 10, 2015.

Kelly M., Clark, B., Brown, V., and Sitzia, B. (2003). Good practice in the conduct and reporting of survey research. International Journal for Quality in Health. Volume 15, No. 3 Pp 261-266 Retrieved from http://intqhc.oxfordjournals.org/content/intqhc/. February 15, 2015.

Mansata, Bharat, (eds.). (1989). Ecological Vision: Exploring Alternatives for Co-evolution. Calcutta, Classic Books.

Masadeh, M. A. (2012). Focus group: reviews and practices. International Journal of Applied Science and Technology. Vol. 2 No. 10. Retrieved from: http://www.ijastnet.com/ journals/Vol 2 No 1.

Mitchell, W. A. (1995). Line Intercept. Pennsylvania State University. Retrieved from http://el.erdc.usace.army.mil/elpubs. February 14, 2015.

Navarro, B. (2014, November). Introduction to Indicators: Some Practical Tips. Asia Regional Preparatory Workshop for the Second Global Meeting of the Indigenous Peoples' Forum at IFAD. Jakarta, Indonesia.

Parlee, et al. (n.d.). In Using Traditional Knowledge to Adapt to Ecological Change: Denésôåiné Monitoring of Caribou Movements. From: http://pubs.aina.ucalgary.ca/arctic/ arctic58-1-26.pdf.

Perry, M., (2005). Talk About Planning your Project. From: https://www.projectmanagement.com/discussions/discussionsTopicContainer. cfm?forcemobile=on&ID=6392&thisPageURL=/discussion-topic/6392/describe-the-differences-between-methodology--techniques-and-tools.

Tebtebba Foundation. (2013). Developing and Implementing Community-Based Monitoring and Information Systems: The Global Workshop and the Philippine Workshop Reports. Baguio City, Philippines.

The Business Communication. (n.d.). Advantages and disadvantages of interview. Retrieved from: http://thebusinesscommunication.com/advantage-and-disadvantage-ofinterview/. February 16, 2015.

University of Surrey. (n.d.) Introduction to research. Retrieved from: http://libweb.surrey.ac.uk/library/skills/Introduction%20to%20Research%20and%20Managing%20 Information%20Leicester/index.htm on February 15, 2015.

Winrock International. (2012). Standard operating procedure for terrestrial carbon measurement. Arlington, VA.

Yin, R. (2003). Case study research: design and methods. Thousand Oaks: Sage Publications.

Zainal, Z. (n.d.) Case study as research method. University of Teknologi, Malaysia. Retrieved from: http://www.psyking.net/HTMLobj-3837/ on February 13, 2015.
Equal Access Participatory Monitoring and Evaluation Toolkit. Retrieved from: http://betterevaluation.org/sites/default/files/EA_PM%26E_toolkit_module_2_objectives%26indicators_for_publication.pdf. Accessed February 11, 2015.
Guidelines for conducting focus group. Retrieved from: https://www4.uwm.edu/cuts/focus.htm on February 13, 2015.
Developing Evaluation Indicators. Retrieved from: http://www.cdc.gov/std/Program/pupestd/Developing%20Evaluation%20Indicators.pdf.

