



*Elements of Replicable Models to Increase Inclusion
of Vulnerable Groups in Community Disaster Risk
Management:*

Research Report
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ACRONYMS

BDRRMC	Barangay Disaster Risk Reduction and Management Committee
BDRRMP	Barangay Disaster Risk Reduction and Management Plan
CBO	Community-based Organization
COVID-19	Coronavirus Disease
CSG	Community Savings Group
CSO	Civil Society Organization
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
EWS	Early Warning System
FAMATODI	Fakasadian Mangagoyang Tau-Buid Daga, Inc.
FGD	Focus Group Discussion
GAD	Gender and Development
HVCA	Hazards, Vulnerabilities and Capacities Assessment
ICDRM	Inclusive Community Disaster Risk Reduction and Management
IDI	In-depth Interview
IEC	Information, Education and Communication
IP	Indigenous Peoples
IPAO	Indigenous Peoples Affairs Office
IPMR	Indigenous Peoples' Mandatory Representative
IRA	Internal Revenue Allotment
KII	Key Informant Interview
LGU	Local Government Unit
MLGU	Municipal Local Government Unit
MDRRMC	Municipal Disaster Risk Reduction and Management Council
MDRRMO	Municipal Disaster Risk Reduction and Management Office
NCIP	National Commission on Indigenous Peoples
NGO	Non-Governmental Organization
PSF	People's Survival Fund
RA	Republic Act
SAP	Social Amelioration Program
4Ps	Pantawid Pamilyang Pilipino Program

EXECUTIVE SUMMARY

Background

This report presents the result of the formative study titled, *Elements of Replicable Models to Increase Inclusion of Vulnerable Groups in Community Disaster Risk Management* in the municipality of Sablayan in Occidental Mindoro, Philippines. The study was commissioned by Plan International USA in collaboration with Plan International Asia Pacific Regional Office with funding support from Margaret A. Cargill Philanthropies, as part of the implementation of the project, *Inclusive Community Disaster Risk Reduction and Management (ICDRM)* in Bangladesh and the Philippines.

The study aimed to assess the potential of the program elements to be developed into of strong replicable models for making Disaster Risk Reduction and Management (DRRM) more inclusive. To do so, this study focused on the experiences of two Mangyan¹ indigenous peoples (IP) groups — the Alangan in Sitio Calamansian, Barangay San Agustin, and the Tau-buid in Sitio Malatongtong, Barangay Burgos. A total of 59 respondents were interviewed including representatives from the Alangan and Tau-buid communities, municipal and barangay local government officials, civil society organization leaders, and Plan International-Mindoro Field Office staff. Using a combination of data gathering methods, such as a desk review, key informant and in-depth interviews and focus group discussions (FGDs), the study was conducted from the period of April to December 2020.

DRRM Context of Alangan and Tau-buid Mangyan in Sablayan

The study reveals that the top three hazards to which both Alangan and Tau-buid tribes in Sablayan are highly vulnerable are typhoons, rain-induced landslides and drought. They largely bring devastating impact to Mangyan's agricultural crops and produce. Typhoons and landslides also cause damage to housing and disruption of school activities among children. Together with drought, these disasters exacerbate the lack of potable water, which already is a year-round problem for the Alangan tribe. Landslides result in road obstructions that restrict the movement of Mangyan and their access to social services. Aside from these hazards, the Alangan and Tau-buid tribes also cited the coronavirus (COVID-19) health pandemic and conflict between the Philippine armed forces and armed rebels as threats that can potentially impact their communities negatively.

The vulnerability of Alangan and Tau-buid tribes to various hazards is influenced by different interconnected factors that relate to material/physical, social/organizational and attitudinal/behavioral aspects. Physical factors, such as remote geographical location and type of housing, increases the Mangyan's exposure to hazards, while poor access to basic services and lifelines, reliance on traditional livelihood practices (e.g., slash and burn farming), continuous displacement by the majority population², high poverty levels, food and livelihood insecurity³, absence of an accurate population database and land ownership disputes are among the factors that restrict their ability to prepare for, cope with and recover from the impacts of hazards. At the same time, Mangyan suffer from pervasive social exclusion.

¹ The National Commission for Culture and the Arts defined Mangyan as a collective term for the indigenous peoples of the Island of Mindoro, Philippines. Aside from the Alangan and Tau-buid tribes located in the province of Occidental Mindoro, Hanunuo, Buhid, Batangan, Ratagnon, Iraya, and Tadyawan tribes are also found in other parts of the island. <https://ncca.gov.ph/about-culture-and-arts/culture-profile/glimpses-peoples-of-the-philippines/mangyan/>.

² UNHCR Philippines: Indigenous Peoples in Natural Disasters. November 20, 2014.

³ Ibid.

suffer from economic and social exclusion, based on their historical marginalization, discrimination and disenfranchisement from the dominant non-indigenous society. This marginalization of Mangyan communities has resulted in their limited access to adequate and inclusive DRRM-related information. Furthermore, opportunities and inclusive mechanisms facilitate their participation at various levels of risk governance and decision-making processes are lacking. This is especially true for Mangyan women and other vulnerable groups, such as persons with disabilities, older persons as well as children and youth. Within Mangyan society, the male-dominated and leader-centric culture of both tribes prevents women from engaging in activities designed not only to advance their disaster resilience, but also promote their empowerment.

These various factors affecting the vulnerability of Mangyan leave DRRM strategies unresponsive to their concrete and felt needs.⁴ As such, current DRRM interventions by both government and non-government actors, while generally perceived by the IP respondents as beneficial to some extent, are also felt to be failing to address longstanding local and collective issues faced by the IP. Along with their physical exposure to hazards, these social factors of poverty, inequality, marginalization and discrimination are key drivers of risk among IP communities. Social exclusion prevents the IP from asserting their rights and their full participation in the economy, social life and political affairs, including disaster resilience- building.⁵

Nonetheless, it is also important to pay attention to the Mangyan's inherent capacities and potentials that have enabled them to withstand the detrimental consequences of disasters. Mangyan communities have social and traditional practices that aid them in preparing for disasters. Based on the narratives of the Alangan and Tau-buid tribes, they use indigenous knowledge for early warning, specifically for typhoons, through observation of sun, clouds, trees and animal behavior. They also construct indigenous typhoon shelters, called *liba-og* by Alangan and *bale fulod* by Tau-buid, that can withstand strong winds.

Community-led initiatives are also present to mitigate the impact of disasters. They include a Community Savings Group (CSG) involving Alangan women. Among the Tau-buid in Sitio Malatongtong, a mechanism is set in place to secure the community's economic needs in case of emergency through the borrowing of emergency necessities (e.g., food) in a *sari-sari* store, located within the sitio, during typhoons. The amount borrowed is then paid for through the barangay, or village, local government unit (LGU) later on.

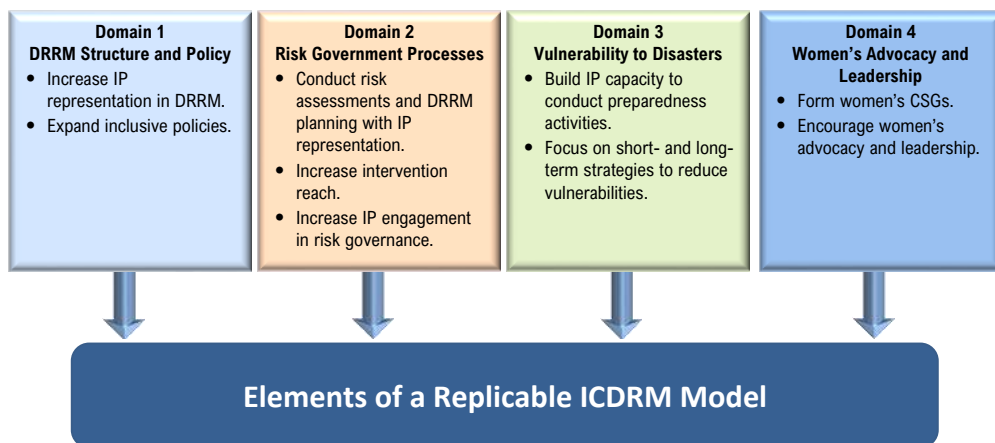
Elements of a Replicable ICDRM Model

The study reveals that replicable elements of a potential model of inclusive community-based DRRM are present under Plan International's ICDRM project intervention in Sablayan. Summarized in the diagram below are the specific project interventions, policies and implementation approaches that can further be

⁴ Lafreniere, A., and V. Walbaun. 2017. *Inclusive disaster risk reduction policy paper*. Lyon: Handicap International; Kalin, W. 2011. *A human rights-based approach to building resilience to natural disasters*. USA: Brookings.

⁵ Lovell, E., and V. Le Masson. 2017. Building inclusive disaster risk reduction including climate change adaptation. In I. Kelman, J. Mercer, and J. C. Gaillard (Eds.), *The Routledge Handbook of Disaster Risk Reduction Including Climate Change Adaptation* (pp. 252-263). London: Routledge.

developed to form part of a strong ICDRM model. These are categorized into four domains: (1) Increase IP participation in DRRM structures and policy making;



(2) Strengthen risk governance processes; (3) Reduce IP vulnerability to disasters: and (4) Increase women's participation and leadership in DRRM.

The first domain relates to **IP participation in local DRRM structures and policy making**. The ICDRM project supported interventions enhancing the existing municipal and barangay DRRM structures, which led to expansion in membership to include representatives from vulnerable groups. In the municipality of Sablayan, this new policy established the municipal Indigenous Peoples' Mandatory Representative (IPMR) as the representative of both Alangan and Tau-buid tribes in the Municipal Disaster Risk Reduction and Management Council (MDRRMC) which gave him a platform to formally coordinate IP DRRM-related concerns. At the barangay level, aside from the barangay IPMR, the increase in the number of elected IP officials in the Barangay Disaster Risk Reduction and Management Committee (BDRRMC) enabled Mangyan members to participate in sub-committees thus amplifying their voices in decision-making. In an effort to sustain the gains of this intervention, the project supported the enforcement of policies, through the passage of Municipal Executive Order No. 2019-029 and barangay resolutions in IP inhabited barangays, which institutionalizes the representation of IP in local DRRM structures.

The second domain relates to **IP representation in risk governance processes**, especially in risk assessment and DRRM planning. Through their increased representation in the DRRM structures, IP gained opportunities to take part in risk assessment and planning processes often only done by the LGUs. This led to an increased recognition among LGU members of the importance of IP to be part of resilience-building efforts. In both municipal and barangay levels, the representation of Mangyan in risk assessment and DRRM planning led to the development of DRRM plans that included interventions that directly targeted the needs of IP communities.

In terms of approaches, the emphasis on shifting from municipal and barangay activities to sitio-level project interventions was identified as worthy of replication because it facilitates increased participation of other members of the IP community, especially women, in activities such as family-level disaster preparedness training and simulation exercises. Also, the inclusion of the traditional IP political structure at all stages of project implementation helped facilitate collective decision-making as the IP leaders coordinate community affairs.

The third domain relates to **Reducing IP vulnerability to disasters**. The study revealed that capacity building interventions, such as trainings in family disaster preparedness and simulation exercises, help to raise awareness of disaster mitigation among IP communities, and to some extent, equip them with knowledge to better withstand typhoons. The project's provision of relevant DRRM materials and equipment complemented disaster preparedness trainings and plans, and the provision of equipment, such as the public address system, improved IP communities ability to quickly broadcast disaster warnings.

The fourth domain focuses on **Increasing IP women's participation and leadership in DRRM**. While much effort still needs to be done to include women in resilience building, the study revealed that ICDRM project's initiative to form women's CSGs is an intervention that should be replicated and expanded. Based on the experience of Alangan women, Plan's support to the formation of CSGs helped women to collectively manage their organization. Ultimately, their savings enabled them to provide for the needs of their families in times of emergencies. Most recently, for example, CSG savings supported families during the COVID-19 pandemic when many services stopped and access to markets to buy and sell commodities was greatly curtailed.

Recommendations for Replication

Opportunities remain for further developing these replicable elements to form part of a more robust and inclusive ICDRM model. The research uncovered gaps in ICDRM practice that, once addressed, strengthen the model as a promising practice:

- Increase the representation of women and other vulnerable IP members in DRRM structures and risk governance processes, such as risk assessments, planning, implementation and monitoring of DRRM interventions.
- Increase the number of IP organizations sitting as members of DRRM committees.
- Focus on the underlying causes of risk among IPs, especially those related to poverty, social exclusion, historical marginalization and discrimination that remain unaddressed by most DRRM interventions.
- Address gender-based inequalities within Mangyan communities, which limit women's participation and leadership in disaster risk management.

PART 1. INTRODUCTION

1.1. ICDRM Project

Plan International USA, in collaboration with Plan's Asia Pacific Regional Hub and Bangladesh and Philippines Country Offices, is implementing the *Inclusive Community Disaster Risk Reduction and Management (ICDRM)* project funded by the Margaret A. Cargill Philanthropies. Originally, the project's timeframe was three years covering the period of October 2017 to September 2020; however, due to travel and other restrictions imposed by the COVID-19 pandemic, adjustments were made to the implementation timeframe, thus extending the project for an additional year. The project seeks to increase natural disaster preparedness capabilities of communities in Bangladesh and the Philippines by encouraging the building of inclusive community-level natural disaster preparedness. The term inclusive is operationally defined as *encompassing all members of a community, especially those who have been traditionally marginalized and disempowered, such as women and girls, youth, indigenous peoples (IP), lesbian, gay, bisexual, transgender, and intersex (LGBTI), disabled and the elderly, and therefore left out of the design and implementation of Disaster Risk Reduction and Management (DRRM) Plans*. The lack of inclusion can leave these groups more vulnerable to physical and economic harm and less able to recover from the hardships brought on by natural disasters.

To realize the goal of the project, Plan International-Philippines, through its Mindoro Field Office, implemented capacity building activities covering 20 barangays⁶ in two municipalities of Occidental Mindoro; namely, San Jose and Sablayan. Trainings and workshops for representatives from the local government, schools and vulnerable groups were conducted to increase their awareness of DRRM focusing on community risk assessment; mainstreaming gender, disability and culture sensitivity into DRRM and contingency planning; child rights-based programming; and early warning system (EWS) and evacuation management. Simulation exercises covering typhoon and flood hazards were also organized in the barangays to practice evacuations, validate the learnings of the locals from the trainings and further improve their DRRM-related plans and mechanisms. Advocacy efforts by the project team were also undertaken to ensure the inclusion of vulnerable groups in the municipal and barangay DRRM council/committee.

1.1.1. Purpose and specific aims

The purpose of this formative study was to assess the potential of the program elements in the municipality of Sablayan, Occidental Mindoro to be developed into strong replicable models of inclusive DRRM, especially for the vulnerable and marginalized groups. Further, the study also aimed to suggest alternative elements that might be as or more effective in achieving meaningful inclusion of IP. The ICDRM project in Sablayan is now on its fourth year, and the results of the study can further help Plan and other relevant stakeholders, such as the local government units (LGUs) and civil society organizations (CSOs), in developing strategies to actively involve IP in DRRM.

The study covered two communities in Sablayan where a significant population of Mangyan from the Tau-buid and Alangan tribes live, and these include barangays Burgos (*Sitio⁷ Malatongtong*) and San Agustin (*Sitio Calamansian*).

⁶ Barangay is the smallest administrative division in the Philippines. It is the native Filipino term for a village.

⁷ Sitio refers to a subdivision of a barangay in the Philippines. Typically, its location is usually far from the center of the barangay.

Specifically, the study focused on the following aims:

- Determine if the DRRM activities carried out by the ICDRM project were effective in increasing the representation, participation and decision-making of IP in DRRM committees.
- Gain an in-depth understanding of the specific DRRM needs of the vulnerable populations to be served by these activities.
- Identify and describe the challenges and opportunities that could hamper or facilitate their adoption and use.
- Gather the views, ideas and perspectives of likely beneficiaries about how they can participate in building an inclusive DRRM model and eventually take ownership.
- Analyze how the proposed models would fit within the current DRRM environment with respect to policies, government regulations and funding.

1.1.2. Methods

Since the study was exploratory, Grounded Theory was used as an approach to the conduct of data collection and analysis. Specifically, this approach is characterized by structured, but flexible methodological strategies, with the intention to derive an explanatory theory or model that is grounded on data.

The study employed qualitative methods for data collection using a combination of a desk review, key informant and in-depth interviews (KIIs/IDIs), and FGDs to capture the perspectives of the target stakeholders. In particular, primary and secondary data were gathered from the Plan International-Mindoro Field Office, municipal LGUs (MLGUs) and barangay LGUs, school, CSOs and leaders and members of Mangyan communities. Due to the COVID-19 pandemic, which resulted in travel restrictions, data gathering with select key informants was done remotely through mobile phone and Skype, an online meeting application, from the first week of August to the second week of November 2020. As soon as the travel ban was lifted, the research team conducted fieldwork in Sablayan from the fourth week of November to the second week of December 2020 carrying out face-to-face data collection with participants from the Mangyan communities.

The different methods used for data collection are as follows:

- **Desk Review:** This method involved gathering project documents such as risk profiles, DRRM plans and programs, as well as monitoring and project interim reports. A review of these documents enabled the research team to get a clear grasp of how the project progressed since its implementation. In addition, global and national resources, such as journal articles and reports on inclusion and IP in the context of DRRM, were also collected online. These resources provided a deeper understanding of the research topic, which is critical in processing and analyzing the gathered data.
- **KIIs:** The research team conducted one-on-one interview sessions with 12 individuals from the Plan International-Mindoro Field Office, MLGUs and barangay LGUs, CSOs and Mangyan communities. Guided by a semi-structured questionnaire (see *Annex 1*), the KIIs were conducted through field visits, phone calls and Skype. The interviews enabled the research team to have a better understanding of the



Key informant interview with Alangan participant

ICDRM project and get the respondents' perspective on the following: hazards and risks affecting Sablayan, especially the Mangyan communities; existing actions to address these hazards and risks; understanding of inclusive DRRM; elements of replicable inclusive DRRM model/s; steps for replication; opportunities and challenges in replication and how vulnerable groups can participate in building an inclusive DRRM model.

- **IDIs:** To further explore and validate the information obtained from the KIIs and FGD sessions, IDIs were also carried out by the research team involving five individuals from the Mangyan communities and MLGUs and barangay LGUs. The discussion centered on the DRRM needs of Mangyan communities and other vulnerable groups and how Mangyan can achieve full and meaningful participation in decision-making and governance processes. Like the KIIs, the IDIs were conducted through face-to-face and remote approaches (see **Table 1** for a breakdown of respondents who participated).

Table 1. Breakdown of Respondents Across All Methodologies

Methodology	Type of Respondent				Total
	Mangyan Community	B/M LGU	Mangyan CSOs	Plan	
KII	4	6	-	2	12
IDI	3	2*	-	-	3
FGD	36 (Four FGDs: Two sessions with women; two sessions with men)	-	5 (1 FGD)	3	44
Total	43	6	5	5	59

* Not included in the total as they are not unique respondents. The LGU representatives counted as IDI respondents are already included in the tally of KII respondents.

- **FGDs:** Apart from individual interviews, FGDs were also carried out to capture collective perspectives and inputs on inclusive DRRM from the target, especially the Mangyan communities. Six FGD sessions, involving Plan International-Mindoro Field Office staff (1), Mangyan CSO officers (1), and members of the Alangan and Tau-buid tribes (4), were facilitated by the research team. For each Mangyan tribe, two FGD sessions were conducted, one session with male participants and another one with female participants. Among the sectors from the Mangyan communities able to participate were women, older persons and youth. Both male and female respondents from various age groups and sectors participated in the FGDs as presented in **Table 2**. The research team employed an actual field visit and online platform to carry out these discussions. Each of the FGD sessions lasted for approximately two hours and was guided by a questionnaire (see *Annex 2. FGD Guide*).

For the complete list of KII, IDI, and FGD respondents, please refer to *Annex 3. Directory of Respondents*.

Table 2. Age and Sex Disaggregation of Respondents

Type of Respondent	Male					Female				
	15-24 years old	25- 59 years old	60 years old and above	Did not indicate age	Total	15-24 years old	25- 59 years old	60 years old and above	Did not indicate age	Total
Mangyan Community	2	16	1	3	22	4	15	-	2	21
B/MLGU	-	3	-	-	3	-	1	2	-	3
Mangyan CSOs	-	5	-	-	5	-	-	-	-	0
Plan	-	2	-	-	2	-	3	-	-	3
Total	2	26	1	3	32	4	19	2	2	27
Grand Total	59									

As presented in the tables above, the research was able to cover a total of 59 respondents, 15 of which were involved in KIIs and IDIs, while 44 participated in the FGDs. Of the total number of respondents, 54% (32) are male and 46% (27) are female. Further, 83% (49) are Mangyan, while the remaining 17% (10) are non-IP respondents. In terms of age group, the majority of respondents (76%) were between 25 and 59 years old, 5% were 60 years old and above, 9% did not indicate their age and the remaining 10% are youth. For the youth respondents, the study targeted individuals aged between 15 and 24 years old, adopting the definition of the United Nations.⁸

Interview respondents from the MLGU included the Indigenous Peoples’ Mandatory Representative (IPMR) to the Legislative Council, Municipal DRRM Office Head, Municipal Planning and Development Coordinator, and Indigenous Peoples’ Affairs Office (IPAO) Head. Barangay LGU respondents were the Chairperson, Barangay Councilor from the Alangan tribe, and the IPMR of Barangay San Agustin. Interviews were also conducted with Mangyan community leaders, which included a captain, youth leader, barangay health worker and secretary. With assistance from the Plan International-Mindoro Field Office, they were selected based on their position in the tribe and participation in the ICDRM project and other community activities. Further, the education sector was represented by the School DRRM Focal Person. Moreover, Plan respondents involved the Monitoring & Evaluation Officer/Officer in Charge -Program Area Manager and DRR Specialist.

FGD sessions were attended by community development facilitators of Plan International-Mindoro Field Office and officers of two Mangyan CSOs; namely, *Fakasadian Mangagoyang Tau-Buid Daga, Inc. (FAMATODI)* and TAGMARAN. In addition, female and male members of the Alangan and Tau-buid tribes also participated in the FGD. The male participants from both tribes were comprised of farmers and older persons. On the



Focus group discussion among Tau-buid men

⁸ The United Nations, for statistical purposes, defines “youth” as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States. <https://www.un.org/development/desa/youth/what-we-do/faq.html>.

other hand, the female participants were composed of mothers, barangay health workers and a teacher. The discussion with them focused on the hazards and risks affecting them, the consequences of these hazards and their existing actions to address them, the DRRM-related initiatives of government and non-governmental organizations (NGOs), level of their involvement in these activities, perceptions on their inclusion in DRRM actions, barriers to their inclusion, DRRM activities of Plan that can be replicated in other areas and opportunities for them to contribute in building an inclusive DRRM model.

1.1.3. Data analysis

The research team used thematic content analysis to analyze the information collected from the interviews and secondary sources. Inductive coding was undertaken to group related information and ideas as well as identify common themes. The team did manual coding to organize the data. As more data was collected and reviewed, more concepts and categories emerged, which helped the team in establishing a foundation for theory building.

The first wave of data collection primarily involved remote interviews with representatives from the MLGUs and barangay LGUs and Plan International-Mindoro Field Office. Initial coding was done based on the information gathered. This process enabled the team to do preliminary analysis through examining and clustering common ideas and concepts. Initial categories were developed through the preliminary analysis. The KII and FGD questionnaires were revised accordingly to address the gaps and clarify uncertainties in the succeeding data collection.

Categories from the preliminary analysis were tested in the second wave of data collection, which involved remote interviews with Mangyan CSOs and MLGU representatives. Following the second wave of data collection, another round of coding and formulation of categories transpired. Such a process allowed the research team to do further analysis since insights and perspectives from other stakeholders, especially Mangyan, were obtained. A comparative approach was used to review the codes and categories, which is critical in the theory-building process.

When travel restrictions were eased, the research team conducted the third wave of data collection through face-to-face interviews and FGDs with Mangyan leaders and community members. Similar to the earlier data collection activities, a third-level coding and comparative approach were done. During this stage, categories are already defined and developed. This aided the team in coming up with hypotheses and propositions on replicable models for inclusive DRRM based on the experience and context of Sablayan.

1.1.4. Limitations

The research team was confronted with limitations that affected the progress of the study. These challenges were primarily related to the COVID-19 pandemic. As a result of the pandemic, the Philippine government had to enforce community quarantine in the entire country beginning March 2020 resulting in travel restrictions. Because of this situation, the team, which was in Manila, was unable to travel to Mindoro to carry out fieldwork in Sablayan as scheduled. The conduct of data gathering in the covered communities was delayed for months.

Apart from delays in the schedule, the team also had to modify some of its methods for data collection in consideration of health and safety protocols to prevent the spread of COVID-19. Participant observation was not carried out since staying in the communities and houses of Mangyan for a long period of time was not encouraged. This diminished the ethnographic aspect of the study. Further, most of the KIIs were done remotely via phone or Skype instead of using a face-to-face approach.

When conducting remote interviews, the poor network signal and occurrence of disasters (e.g., Typhoon Quinta) were also among the challenges faced by the team. The intermittent communication signal resulted in a longer interview duration while the typhoon prompted the team to reschedule some of the interviews with the LGUs. In addition, the remote interview setup made the language barrier more difficult for the research team to address, especially with Mangyan respondents.

PART 2. PHILIPPINES

2.1. Background

The Philippines is an archipelagic country in the Southeast Asian region. It is bounded by the Philippine Sea to the east, the Celebes Sea to the south, the Sulu Sea to the southwest, and the South China Sea to the west and north.⁹ The country is composed of 7,100 islands with three major island groups; namely, Luzon, Visayas and Mindanao. It has a total land area of 300,000 square kilometers inhabited by a population of about 100.98 million in 2015.¹⁰ Contemporary Philippine society is comprised of nearly 100 culturally and linguistically diverse ethnic groups. Of these, the largest are the Tagalog of Luzon and the Cebuano of the Visayas Islands, each of which constitutes about one-fifth of the country's total population. IP and indigenous cultural communities constitute approximately 16% of the total population of the Philippines.¹¹ The majority of them are found in Mindanao (61%), 33% are found in Luzon and 6% in Visayas.¹²

Due to its geographical location and characteristics, the Philippines is uniquely exposed to various hydrometeorological and geological hazards, including recurrent typhoons, earthquakes and volcanic eruptions. Tropical cyclones, accompanied by landslides, storm surges and floods, have been the largest contributor to disaster damage, characterized by losses of life and properties. At least 60% of the country's total land area is exposed to the multiple hazards mentioned above, while 74% of the population is susceptible to their impact.¹³ Furthermore, approximately 85.2% of the country's production sources have been reported to be susceptible to disasters, while 50.3% of the total land area is economically at risk. From 2016 to 2018, the World Risk Report ranked the Philippines third among all the countries with the highest risks worldwide, with an index value of 25; 14% for 2018.¹⁴



Mangyan house in Occidental Mindoro

In 2010, a new landmark law, the Philippine Disaster Risk Reduction and Management Act of 2010 (also known as Republic Act [RA] No. 10121), was enacted by the Government of the Philippines. The law replaced the then existing Presidential Decree 1566 (*Strengthening the Philippine Disaster Control Capability and Establishing the National Programme on Community Disaster Preparedness*) and laid the paradigm shift toward a comprehensive and holistic DRRM framework and program in the country. The law also highlighted the importance of a community-based approach to DRRM, in which at-risk communities, especially the most vulnerable, will be involved in efforts toward enhancing their capacity to mitigate, prepare for,

⁹ Borlaza, G., M. Cullinane, and C. Hernandez. 2021, January 4. *Philippines*. <https://www.britannica.com/place/Philippines#ref23724>.

¹⁰ Philippine Statistics Authority. 2020, 30 December. *Philippine Population (1990-2015)*. <https://psa.gov.ph/population-and-housing/previous-release/2020>.

¹¹ UN High Commissioner for Refugees (HCR). 2014. *Indigenous peoples in natural disasters: Protection in Super Typhoon Haiyan*.

¹² UN Office for Disaster Risk Reduction. 2019. *Disaster Risk Reduction in the Philippines: Status Report 2019*. Bangkok: UNDRR Regional Office for Asia and the Pacific.

¹³ Ibid.

¹⁴ Ibid.

respond to and recover from disasters.¹⁵ In September 2020, the Philippine Congress approved House Bill 5989 (Disaster Resilience Act), creating the Department of Disaster Resilience, which would be the primary government agency responsible for “leading, organizing and managing the national effort to reduce disaster risk, prepare for and respond to disasters, recover and rehabilitate, and build forward better after the occurrence of disasters.”¹⁶

Municipality of Sablayan, Occidental Mindoro

Sablayan is the central town of mainland Occidental Mindoro province. It has a total land area of 218,909 hectares politically subdivided into 22 *barangays*: 10 are coastal barangays; 12 are located inland; and only 3 are considered urbanized.¹⁷

As of 2015, Sablayan recorded a population of 83,169 individuals.¹⁸ It has the second largest population among all 11 municipalities in Occidental Mindoro. Among the ancient aborigin of the island of Mindoro, collectively called the *Mangyan*, the *Alangan* and the *Tau-buid* tribes are found in Sablayan.¹⁹



Figure 1. Map of Occidental Mindoro Showing Sablayan

The landscape of Sablayan is generally characterized by mountain ranges that have rolling, steep, very steep and serrated ridges of deep-sided canyons, intermittent valleys and elongated plateaus, with level and rolling plains along the coastal regions. It enjoys tropical monsoon and littoral climate. This means that the municipality has a long, dry season from November to June and wet during the rest of the year. Farming and fishing are the major livelihood activities in the municipality.²⁰

Similar to many parts of the Philippines, Sablayan’s geographical location and characteristics expose it to various hazards — both hydrometeorological and geological in nature. The municipality’s risk profile reveals an increase in frequency and intensity of typhoons and floods experienced in recent years, which is attributed to an erratic weather pattern due to climate change. Other factors contributing to its increased risks and vulnerabilities are unsustainable land and resource management, which contributes to the decrease in forest cover and wildlife biodiversity, failures of watershed function and siltation of

¹⁵ GNDR. 2018. *Views from the frontline pilot: Country report for Philippines*.
¹⁶ Rappler. 2020, 30 December. *House OKs bill creating Department of Disaster Resilience*. September 22, 2020. <https://www.rappler.com/nation/house-bill-creating-department-disaster-resilience>.
¹⁷ About Sablayan. 2020, 3 July. *Sablayan trailblazing the future*. <http://www.sablayan.net/about/#history>.
¹⁸ Philippine Statistics Authority. 2021, February 26; Census of Population. 2015. “Region IV-B (Mimaropa).” *Total Population by Province, City, Municipality and Barangay*.
¹⁹ About Sablayan. 2020, 3 July. *Sablayan trailblazing the future*. <http://www.sablayan.net/about/#history>.
²⁰ Ibid.

river systems and natural waterways.²¹ As experienced during Typhoons Tisoy (2019), Ursula (2019) and Quinta (2020), the impact of these hazards was catastrophic to the people of Sablayan — in lives, properties, agricultural production and economic activities, especially among the indigenous Mangyan.

The Mangyan tribes of Tau-buid and Alangan are the first inhabitants of Sablayan. The Tau-buid tribe is located in the southern part of the municipality, while the Alangan tribe dwells in the northern portion. In terms of land ownership, the Alangan tribe already holds a Certificate of Ancestral Domain Title; however, the Tau-buid tribe is still in the process of filing their claims application.²² Currently, there are 18 communities of Alangan and 13 communities of Tau-buid in the whole municipality of Sablayan. They can be found in the following barangays: Batong Buhay, Burgos, Ligaya, Pag-asa and San Agustin. Each Mangyan family in the said barangays has around six to 10 members.

In terms of livelihood, the Mangyan in Sablayan largely depend on swidden farming, which is basically the backbone of their subsistence economy. Some of them also rely on home gardening, hunting, fishing and livelihood opportunities out of non-timber forest products for their survival. In other Mangyan tribes, women are also engaged in weaving using buri/nipa leaves.²³ The current livelihood sources of Mangyan remain unsustainable, thus they are among the poorest in the country. On average, a Mangyan family earns just PhP 41 (US\$0.84) a day. During the rainy season, many Mangyan families experience hunger as they are battered by typhoons and landslides leading to damaged livelihoods. Consequences such as 60% of Mangyan children who suffer from malnourishment and high infant mortality rates are continuously faced by them.²⁴

2.2. Study Findings

This section outlines the key findings from the interviews and FGDs conducted with the Mangyan communities, barangay LGUs and MLGUs, CSOs and Plan International-Mindoro Field Office. The findings present a concrete picture of the IP's situation in the context of DRRM based on the narratives and experiences of relevant stakeholders in the municipality of Sablayan. In particular, this section underscores the hazards and vulnerabilities affecting IP; their self-initiated actions, which showcase their capacities in response to disasters; the various DRRM-related projects and programs of government and NGOs for IP; and the perceived effectiveness of these interventions in addressing their DRRM needs.

2.2.1. DRRM needs of IP

Hazards

An estimated 20 million IP inhabit the Philippines, particularly in the coastal and mountainous areas of the country.²⁵ These indigenous groups, of which there are 110 different tribes, have a distinct identity, each with their own language, as evidenced by their rich cultures, traditions and livelihood practices. While the physical environments where IP traditionally live provides them a home and means of subsistence, it also poses a serious threat to their lives considering that they are greatly exposed to various

²¹ Municipal Government of Sablayan. 2020. *Municipal Disaster Risk Reduction and Management Plan*. Municipality of Sablayan, Province of Occidental Mindoro.

²² About Sablayan. 2020, 3 July. *Sablayan trailblazing the future*. <http://www.sablayan.net/about/#history>.

²³ Ibid.

²⁴ Kumar, D. 2011. Philippines' tribes try to save their forest. <https://www.aljazeera.com/features/2011/8/9/philippines-tribes-try-to-save-their-forest>.

²⁵ Mamo, D. and International Work Group for Indigenous Affairs. 2020. *The Indigenous World 2020*. Copenhagen: IWGIA.

natural hazards.²⁶ This situation is evident in the case of Mangyan communities in the municipality of Sablayan, particularly in barangays San Agustin and Burgos where the Alangan and Tau-buid tribes live.

Both the KII and FGD respondents were asked to identify the hazards and disasters experienced by Mangyan, focusing on the worst and most recent one. Based on the narratives of the Mangyan participants, LGU officials, CSO officers and Plan Field Office staff in Sablayan, **Table 3** shows the hazards that emerged as common and priority to both tribes in terms of effect and frequency.

Table 3. Priority Hazards Affecting Alangan and Tau-buid in Sablayan

Hazard/Disaster	No. of Respondents who Identified the Hazard/Disaster	Percentage of Responses
Typhoon	58 (out of 59)	98%
Landslide	57 (out of 59)	97%
Drought	48 (out of 59)	81%
Fires (Forest and Houses)	23 (out of 59)	39%
Earthquakes	23 (out of 59)	39%
Conflict (Philippine Armed Forces vs Armed Rebels)	22 (out of 59)	37%
Flood	19 (out of 59)	32%
COVID-19	14 (out of 59)	24%

The findings reveal that both tribes are highly vulnerable to hydrometeorological hazards, such as typhoons, rain-induced landslides and drought. These hazards were also identified as top hazards in the records of the LGU of Sablayan, as indicated in their 2020 Municipal DRRM Plan.²⁷ **Table 4** below lists the five most destructive typhoons to affect the Mangyan population in the previous ten years. Based on the accounts of the leaders and community members belonging to the Alangan and Tau-buid tribes, Typhoons Yolanda (IN: Haiyan) and Labuyo (IN: Utor) in 2013; Tisoy (IN: Kammuri) and Ursula (IN: Phanfone) in 2019 and Quinta (IN: Molave) in 2020 were the strongest and most destructive typhoons to hit them. Typhoons are more frequently experienced by Mangyan in Sablayan compared to the other hazards since they occur annually. Typhoons flood the farms, which result in damages to their crops and produce, such as banana, taro, cassava, sweet potato, purple yam and rice.

“When typhoon and landslide strike, the livelihood of Mangyan is adversely affected. Crops such as banana, cassava, rice, purple yam and taro are greatly damaged. We experience hunger. We are frequently affected by typhoons in recent years and Typhoon Tisoy is among those that had the greatest impact in our community.” (KII with a Mangyan leader)

Apart from damaged crops, as emphasized by Mangyan men, typhoons also lead to the death of farm animals such as goats and chickens, which makes it even more difficult for people to meet their economic needs. The detrimental effects of strong typhoons to the livelihood of Mangyan communities exacerbate

²⁶ Gaillard, J. C., and J. Mercer. 2013. From knowledge to action bridging gaps in disaster risk reduction. *Progress in Human Geography*, 37 (1): 93-114; Pan American Health Organization and World Health Organization Regional Office for the Americas. 2014. *Recommendations for engaging indigenous peoples in disaster risk reduction*. Washington, DC: PAHO.

²⁷ Municipal Government of Sablayan. 2020. *Municipal Disaster Risk Reduction and Management Plan*.

their already impoverished condition since they are unable to sell farm products or have adequate food for their family's consumption.

"Because of typhoons that damage our farms, we are left with no means to meet our basic needs. We do not have money to buy food and medicines." (FGD with Alangan Women)

According to an interview with a Mangyan leader, the highest annual income of an Alangan family is around PhP 15,000 (US\$ 312). This is very low compared to the country's average annual family income, which is approximately PhP 313,000 (US\$ 6,508) according to the Philippine Statistics Authority.²⁸ The majority of the Mangyan families suffer from hunger since they primarily rely on agriculture and do not have access to other livelihood options.

Table 4. Estimated Damage Costs of Major Typhoons in the Philippines that affected Mangyan in Sablayan

Typhoon	Estimated Damage Costs (in agriculture and infrastructure)
Yolanda	PhP 39 Billion (US\$ 811.4 Million)
Labuyo	PhP 1.4 Billion (US\$ 29.1 Million)
Tisoy	PhP 6.6 Billion (US\$ 137.3 Million)
Ursula	PhP 4.3 Billion (US\$ 89.4 Million)
Quinta	PhP 2.2 Billion (US\$ 45.7 Million)

Source: ReliefWeb. 2020; 2019; 2013)²⁹ and NDRRMC (2019; 2014)³⁰

In addition to the adverse consequences to their income, damage to houses is also among the serious effects of typhoons. Because of strong winds and heavy rains, the presence of collapsed and destroyed houses is a common scenario in both Mangyan communities.

"Our houses are destroyed due to winds and rains resulting from strong typhoons. Our roofs are blown away and our houses collapse. Along with this, our belongings such as clothes, cooking utensils, and important documents are also damaged." (FGD with Tau-buid women)

Alangan women shared that damaged houses also cause displacement among the Mangyan families since they have to build new houses in different locations within their sitio. Further, Plan and CSO respondents shared that typhoons also result in disruption of school activities for children since schools are often used as evacuation centers.

"The schooling of Mangyan children and youth is adversely affected when we experience typhoons since school buildings are used as evacuation centers for affected families." (FGD with Mangyan CSOs)

Moreover, strong typhoons also result in landslides, which were also identified as a priority hazard affecting the Mangyan by 97% of the respondents. The occurrence of landslides often threatens their

²⁸ Philippine Statistics Authority. 2018. 2018 Family Income and Expenditure Survey National and Regional Estimates, Volume 1 ISHB Series No. 182. Manila: PSA.

²⁹ ReliefWeb. 2020. NDRRMC Update SitRep No. 06 re Preparedness Measures and Effects of Typhoon "Quinta" (I.N. Molave); ReliefWeb. 2019. NDRRMC Update SitRep No. 21 regarding Response Actions and Effects of Typhoon TISOY (I.N. Kammuri); ReliefWeb. 2013. NDRRMC Update: SitRep No. 18 re Effects of Typhoon "Labuyo" (Utor).

³⁰ NDRRMC. 2019. NDRRMC Update SitRep No. 28 re Preparedness Measures and Effects of Typhoon "Ursula" (Phanfone); NDRRMC. 2014. NDRRMC Update SitRep No. 108 Effects of Typhoon "Yolanda" (Haiyan).

economic security since these events cover their farmlands with thick mud and rocks leading to damaged crops and/or poor harvest. It also results in road obstructions that detrimentally affect the movement of Mangyan and their access to social services as shared by respondents from the local government.

“Since the Mangyans are mostly located upland, landslides result in damages to their houses and cause obstruction to roads leading to and from their community, thus affecting mobility to access social services.” (KII with a Municipal Government Representative)

Besides typhoons, landslides may also be triggered by earthquakes, which are perceived as another hazard with the potential to cause adverse effects to the Mangyan communities. Although they have not experienced strong earthquakes in the past, they perceive this hazard as greatly destructive.

Drought is also a major hazard affecting both Mangyan communities, especially during the dry season, as shared by 81% of the respondents. Similar to typhoons, the occurrence of drought also poses a serious threat to their livelihood. The farms become barren and dry, and these often lead to forest/bush fires according to Mangyan, LGU and Plan respondents. Such a scenario prevents the Mangyan communities from engaging in agricultural activities leading to further hunger due to meager yield.

“Due to drought, majority of the lands and forests are damaged because of fires, especially in the months of April and May. We really find it difficult to do our farming activities. Aside from this, the water supply is very limited which further worsens our situation.” (FGD with Alangan men)

Besides the detrimental implications in livelihood, another shared effect of typhoons and drought to the Mangyan communities is water scarcity, especially in the Alangan tribe. While inadequate access to potable water is a year-round problem for them, their situation gets worse during the dry season since there is even less water in the spring that serves as the water source. The Alangan women and men shared that during typhoons, the hose that takes water from the spring to the community gets washed away by flood waters. When this happens, the water gets murky and contaminated. Given this situation, the Mangyan, especially children, are confronted with health risks, particularly water-borne diseases such as stomachache and diarrhea. Specifically, the women articulated:

“Persons with disabilities such as those with visual and mobility impairments as well as the elderly are more affected by diseases resulting from disasters because of their physical and health limitations.” (FGD with Alangan women)

Another health-related hazard currently confronting both tribes is the COVID-19 pandemic. While none from the Mangyan communities in Sablayan were infected by COVID-19 as of December 2020, the pandemic became a serious threat since the widespread transmission of the virus started in the country. As shared by Mangyan respondents, the lockdown and travel restrictions imposed by the national and local governments to curtail the spread of the virus further contributed to their impoverished condition since it prevented the people from going to the lowland. This is evident in the following statements:

“We cannot go to the town proper and sell our products. Even if there are patients from the sitio who need to be brought to the hospital, we are prohibited.” (FGD with Tau-buid men)

“Our impoverished condition worsened as a result of the pandemic since we were not allowed to go to the barangay proper to sell our products for months.” (FGD with Tau-buid women)

According to youth and CSO respondents, Mangyan children and youth also have difficulty with their education since the mode of learning shifted from a face-to-face classroom arrangement to a module-

based approach. Apart from lack of internet access, the parents also find it difficult to guide and teach their children in the new learning arrangement considering their low literacy level.

"It is a challenge for the youth to study nowadays because of the pandemic. We have poor network signal here in the sitio making it difficult for us to do research online when we have assignments." (KII with an Alangan female youth leader)

"The parents are experiencing difficulty in teaching their children using the modules since many of them did not acquire any formal education." (FGD with Mangyan CSOs)

Apart from natural and biological hazards, the Mangyan communities are also affected by human-induced hazards, particularly the conflict between Philippine armed forces and armed rebels. As revealed by the members of both tribes and CSOs, the encounters between these groups generate fear and anxiety among the Mangyan communities and may also lead to loss of life. A Mangyan CSO respondent claimed:

"We consider lack of peace as a disaster affecting indigenous peoples. The tribes feel scared especially those inhabiting the mountains. When they hear gun shots, their immediate reaction is to evacuate and go to the lowland." (FGD with Mangyan CSOs)

The abovementioned consequences of hazards and disasters affect women and men in different ways, especially based on the perception of female members of Mangyan communities. While both men and women suffer from the adverse impacts of typhoons or drought, especially in terms of subsistence, the distress that women feel is more prominent as they think of ways how to provide food on the table, while sometimes unable to help their husbands since they have to stay at home and take care of their small children. Food insecurity is deeply experienced during typhoons and drought causing the Alangan tribe to resort to eating a certain type of root crop called *Nami*.

"Nami is similar to a purple yam, but it has to be prepared in a certain way. It needs to be submerged in water for days because it can cause one to be poisoned. Having Nami on our table indicates a time of food insecurity." (IDI with a female Alangan)

Vulnerabilities

According to the accounts of respondents from the Mangyan communities, LGUs, CSOs, and Plan International-Mindoro Field Office, the vulnerability of Alangan and Tau-buid tribes to various hazards is influenced by different interconnected factors that relate to material/physical, social/organizational and attitudinal/behavioral aspects. The vulnerabilities present a clear picture of the underlying causes why Mangyan communities are greatly affected by different hazards. Based on the study findings, these vulnerabilities place the Alangan and Tau-buid tribes in a more precarious state as they confront the harmful impacts of both natural and human-induced hazards putting their lives at stake.

a. Material/physical vulnerabilities

Respondents from both tribes, LGUs, and the Plan International-Mindoro Field Office shared that physical factors, such as geographical location, type of housing, poor access to basic services and lifelines, unsustainable livelihood practices (e.g., slash and burn farming), high poverty incidence, absence of an accurate database of population and land ownership issues are among the root causes why Mangyan communities are highly vulnerable to different hazards. The prevalence of such factors largely results from the discrimination and disenfranchisement that Mangyan had to endure for generations due to the

encroachment of lowlanders to pursue urbanization and development endeavors.³¹ Findings from the study reveal that the physical topography (e.g., mountainous, upland, presence of river/s) of Barangays San Agustin and Burgos contributes to the susceptibility of Mangyan to typhoons, landslides, floods, and earthquakes. Due to historical encroachment of their lands by lowlanders, indigenous communities are compelled to inhabit isolated and forested communities and often emerged as among the worst hit by typhoon events.³²

“The Mangyan live in the mountains where life is difficult; they remain isolated, and they lack access to services. Although, culturally, the Mangyan may prefer living in the upland areas, it is also a fact that land conversion practices and encroachment of lowlanders have pushed them further up the mountains making them significantly vulnerable to disasters.” (KII with a MLGU representative)

“We are seldom reached by government assistance when there are disasters because of our isolated location. We do not receive help immediately since it is dangerous for them to go to our community especially when there is a typhoon.” (KII with a Mangyan leader)

A typhoon is commonly experienced in Sablayan since the Philippines lies along the Western Pacific Basin where many of the world’s typhoons are generated.³³ As a result of heavy rains brought about by typhoons, the likelihood of landslides and floods in the said barangays is also high, as revealed by the Alangan and Tau-buid respondents. Along with physical isolation, the type of housing in the Mangyan communities also makes them vulnerable to the impacts of typhoons. The majority of the houses are made of light materials, such as wood and nipa, which make them prone to damage and collapse.

Findings also show that poor access to basic services (e.g., health, education and livelihood options) and lifelines (e.g., water, communication, transportation and electricity) resulting from their historical marginalization also limits the capacity of the Mangyan communities to withstand the threat of different hazards and disasters. Resources in the traditional lands of IP have experienced detrimental impacts due to development projects. Destruction of natural protective shields, including watersheds, forest covers, topsoil and mangroves, cause significant impacts on people’s lives, food security, health and welfare.³⁴ Several respondents from the municipal LGU and Plan shared that since the Alangan and Tau-buid tribes are compelled to inhabit hard-to-reach areas with limited resources, they are unable to access the necessary services essential for their safety and wellbeing. Poverty makes the IP, including Mangyan communities, suffer the most serious consequences of disasters.³⁵ Both Mangyan and non-Mangyan respondents expressed that the absence of sustainable livelihood options in their communities is a primary factor that heightens their impoverished condition. Such a reality undeniably exacerbates their vulnerable condition since they do not have the means to secure adequate supplies and necessary services in case of an emergency such as food, water, medicines and a safe evacuation center.

³¹ Kumar, D. 2011. Philippines’ tribes try to save their forest. <https://www.aljazeera.com/features/2011/8/9/philippines-tribes-try-to-save-their-forest>.

³² De Leon, R., D. Garcia, and J. Gregorio. 2016. *A case study on the Philippine government’s disaster response after Typhoon Haiyan for the Indigenous Mangyan-Alangan community in Sitio Longgani, Naujan, Oriental Mindoro*.

³³ UN Office for Disaster Risk Reduction. 2019. *Disaster Risk Reduction in the Philippines: Status Report 2019*. Bangkok: UNDRR Regional Office for Asia and the Pacific; Municipal Government of Sablayan. 2020. *Municipal Disaster Risk Reduction and Management Plan*. Municipality of Sablayan, Province of Occidental Mindoro.

³⁴ UN Office for Disaster Risk Reduction. 2019. *Disaster Risk Reduction in the Philippines: Status Report 2019*. Bangkok: UNDRR Regional Office for Asia and the Pacific.

³⁵ UN High Commissioner for Refugees. 2014. *Indigenous peoples in natural disasters: Protection in Super Typhoon Haiyan*.

“At present, majority of the Mangyan are dependent on slash and burn farming. When disasters strike such as drought or typhoon, we really suffer since all our crops are damaged and we do not have other sources of livelihood. Because of this, we have been requesting livelihood assistance such as carabao [Philippine water buffalo] and plow from the government for quite a long time now, so that we can farm in the plains.” (KII with a Mangyan leader)

In addition, an MLGU respondent expressed that lack of an updated and accurate database of Mangyan population also places them in a vulnerable state. Since many of them are not properly registered in the government database, they remain unaccounted for when it comes to the implementation of development programs by the government. This being the case, the interventions remain blind and unresponsive to the needs of Mangyan communities.

“Some Mangyan, especially those who are identified as hubad, are hesitant to register, which makes it difficult for them to be monitored. When the Social Amelioration Program³⁶ was implemented, and rice was distributed as part of the COVID-19 response, some IP were not on the list since they are not registered in the barangay. Hubad refers to the traditional Mangyan who do not wear any top and do not believe in education.” (KII with a MLGU respondent)

Moreover, respondents from the Mangyan CSOs shared that land ownership issues also surfaced, particularly in the Tau-buid tribe. They struggle in securing the Certificate of Ancestral Domain Titles since the process has been very slow. They have been working with the National Commission on Indigenous Peoples (NCIP) and LGU of Sablayan for the past 15 years to secure the titles. The Mangyan also have limitations in terms of financial resources, so they cannot do constant follow-up with the concerned offices.

“Without the land titles, we will not have legal ownership of our lands. Along with this, we will not have autonomy and control over the programs being implemented for us.” (FGD with Mangyan CSOs)

b. Social/organizational vulnerabilities

Apart from physical vulnerabilities, there are social factors that also magnify the vulnerability of Mangyan communities. Based on the narratives of respondents from the MLGU and Mangyan communities, opportunities and inclusive mechanisms to participate in risk governance and decision-making processes are lacking at various levels, especially among Mangyan women and other vulnerable groups, such as persons with disabilities, older persons as well as children and youth. A Tau-buid woman shared they are not actively involved in risk assessment, DRRM planning, and monitoring and evaluation activities conducted by the local government and other relevant stakeholders.

“Women are not involved in decision-making processes including discussions on disaster-related matters. Usually, the meetings are attended by men. They just relay to us the agreements from the meeting.” (KII with a Tau-buid woman leader)

While the males are the ones who represent the Mangyan communities in decision-making processes, they are also treated as docile recipients of assistance. As shared by both tribes, in most cases, they are not consulted in the process. Interventions are designed solely by the government and are merely

³⁶ Business World. 2020. The Social Amelioration Program (SAP) is the Philippine government's emergency subsidy program for more than 20 million Filipino families belonging to the low-income and most-vulnerable sectors – those that are severely affected by COVID-19. The SAP grants a P5,000 to P8,000 (US\$ 98-157) monthly cash subsidy to low-income families for two months, depending on the area of residence. The subsidies provide marginalized sectors of society the means to afford basic needs during the pandemic.

presented to them for implementation. The prevalence of such a practice reflects the treatment to Mangyan communities as incompetent actors and leaves the formulated vulnerability reduction strategies unresponsive to their concrete and felt needs.³⁷

Another vulnerability that is evident in both communities relates to limited access to DRRM-related information as shared by Mangyan leaders and community members. A leader shared they sometimes receive an invitation from the LGU for a meeting on the day itself. Since it takes hours to walk from their sitio to the town proper, they are not able to attend. According to Alangan women, there are instances wherein the arrival of a disaster warning from the LGU or invitation to participate in a DRRM-related activity was delivered late.

"Someone from the [local] government disseminates warning. However, the communication of the warning is late and is done through SMS. We just receive the information after the disaster." (FGD with Alangan women)

Further, the format and language used in the information, education and communication (IEC) materials are also not inclusive and accessible to the Mangyan considering factors such as age, gender, language, literacy level and culture, as shared by Tau-buid women. Gaps in information dissemination lead to poor disaster preparedness and planning.

Since the Mangyan communities have limited access to DRRM information, lack of adequate knowledge and capacity to be able to take on more active role/s in DRRM programming and implementation also increase their vulnerability to disasters. As expressed by Tau-buid women, the absence of inclusive capacity building strategies and isolation of Mangyan communities are among the key factors of why many of them remain deficient in terms of DRRM awareness and skills.

"We still lack adequate knowledge and capacity in relation to disasters. It is important for us to have trainings such as drills that are based on our local context." (KII with a Mangyan leader)

c. Attitudinal/behavioral vulnerabilities

Based on the narratives of Mangyan respondents, especially women, attitudinal issues also contribute to the enhanced vulnerability of Mangyan communities. The male-dominated and leader-centric culture of both tribes prevents women from engaging in activities that are designed not only to advance their disaster resilience, but also to promote their empowerment.

"Decision-making in the community is exclusively done by men. They just relay the agreements to women who are normally in charge of housework and child-rearing." (FGD with Taub-buid women)

This is supported by the accounts of an MLGU respondent who mentioned:

"They [the Mangyan] really have a patriarchal culture. Actually, we tried to organize the Mangyan women before. The men in the community questioned us. I had to explain to them that women should not only be limited to doing household chores." (KII with an MLGU representative)

³⁷ Lafreniere, A., and V. Walbaun. 2017. *Inclusive disaster risk reduction policy paper*. Lyon: Handicap International; Kalin, W. 2011. *A human rights-based approach to building resilience to natural disasters*. USA: Brookings.

Further, the longstanding discrimination experienced by Mangyan is another evident factor that places them in a more vulnerable state. Due to historical discrimination and marginalization, IP are often treated unfairly and remain underprioritized.³⁸

"We often experience deceit and are not taken seriously even by people from the MLGU." (FGD with Alangan women)

2.2.2. Current status of DRRM for IP

Actions by Mangyan Communities

Despite the evident vulnerabilities of Mangyan communities in Sablayan, study findings show they also possess capacities that enable them to withstand the detrimental consequences of disasters. Similar to the vulnerabilities discussed above, the capacities of Alangan and Tau-buid tribes can be clustered into three categories; namely, material/physical, social/organizational and attitudinal/behavioral.

As shared by the Mangyan respondents, one of their notable practices under the physical aspect is the construction of an indigenous typhoon shelter that can withstand strong winds. Mangyan families only build this house during typhoon season. The materials used are the same with the materials used in the construction of a typical Mangyan house. The only difference is the height of the structure since the typhoon shelter is built closer to the ground to prevent destruction caused by strong winds. The said structure is about 4 to 5 feet tall. The Alangan tribe calls it *liba-og*, while the Tau-buid tribe calls it *bale fulod*.

"The liba-og is built close to the ground and is low in height to prevent the structure from being blown away by strong winds. Its size depends on the number of members in the family." (FGD with Alangan women)

Both tribes also conveyed that upon receipt of a warning about an approaching typhoon, they also reinforce their houses using ropes and bamboo. In addition to typhoon shelters, they have designated evacuation centers (e.g., daycare centers, schools and church) located within the communities where they can seek refuge in case of emergency. Some Mangyan women also shared they practice stockpiling of whatever available necessities (e.g., food, blankets and emergency supplies) they can bring as they evacuate to a safer place. However, in most cases, the supply is not adequate enough to sustain their needs during an emergency.



Mangyan's indigenous typhoon shelter

To prevent landslides, Tau-buid women engage in tree-growing activities to hold the soil. In response to earthquakes, Mangyan also install hammocks to prevent children from becoming dizzy during an earthquake.

³⁸ Lovell, E., and V. Le Masson. 2014. *Equity and inclusion in DRR: Building resilience for all*. London: Climate Development Knowledge Network & Overseas Development Institute.

Mangyan communities also have social and traditional practices that aid them in preparing for disasters. Based on the narratives of the Alangan and Tau-buid tribes, they use indigenous knowledge for early warnings, specifically for typhoons, through observation of sun, clouds, trees and animal behavior.

“The dark color and fast movement of clouds warn us of an impending typhoon along with the unusual strength of winds. Such observations are helpful, especially for IP who live in the highest parts of the mountain and are not reached by warning from the barangay [LGU].” (FGD with Alangan women)

Further, as shared by Alangan men, they also have an established communication protocol for early warnings from the MLGU down to the sitio. The MLGU, particularly the Municipal Disaster Risk Reduction and Management Office (MDRRMO), is able to relay information to the barangay LGU through SMS. The barangay LGU then disseminates the information to the sitio using the same platform. The sitio captains then use various approaches to spread the information within the community, and these include house-to-house visits and use of the public address system (e.g., portable speaker and round horn). Both tribes are also guided by an EWS posted in public places, which provides information on various alert levels and corresponding actions that they have to take in response to a typhoon. Although there is already an established system for warning, there are still instances when the information sent through SMS does not reach the Mangyan households on time, considering the weak and intermittent network signal in their community, especially during a typhoon.

The required representation of Mangyan in the local (barangay, municipal and provincial) DRRM committees is supposed to enable them to participate in governance processes, as expressed by Mangyan leaders. At the barangay and MLGU levels, the Mangyan are represented by IPMRs. While the presence of IPMRs provides opportunity for Mangyan to be represented at various government levels, the extent to which they are able to genuinely represent and push forward the welfare of the greater IP population varies. Based on the accounts of Mangyan respondents, some IPMRs are more proactive in initiating consultations through regular community meetings, while some are not. Furthermore, some are less capable in pushing for a concrete IP agenda at the barangay council. The selection of IPMRs is also only limited to men, depriving women of the opportunity to exercise leadership and contribute to the development of their community.

Apart from the IPMRs, Mangyan are also elected as members of the barangay council, the legislative body of the barangay. Some are also part of the barangay justice system, while others work as barangay peacekeeping and security officer and health worker.

Further, Alangan women expressed that the presence of a Community Savings Group (CSG) is also deemed effective in securing the economic wellbeing of Mangyan in times of disaster. Through the ICDRM project of Plan International, the CSG was formed and enabled the members to have a source of funds during emergency situations.

“During the lockdown as a result of the pandemic, we were able to withdraw from the savings group and use the money to purchase food and other essential supplies for hygiene such as alcohol and soap.” (IDI with a female Alangan)

Since the CSG is comprised of women members, it also provided a venue for them to organize and take on a different role outside housework. However, as a result of the pandemic, which restricted the movement of Mangyan and deprived them of their income source, the CSG is not operational at the moment.

The positive attitude and values of Mangyan communities also play an important role in securing their wellbeing from the adverse consequences of different disasters. Both tribes are able to showcase self-reliance in times of emergency, which has been honed from their past disaster experiences. Community ingenuity (*diskarte*) is very evident as the Mangyan try to survive amid their impoverished and difficult situation. Based on the accounts of Tau-buid men, historically and culturally, they do not rely too much on outside help.

“Instead of waiting for external help, we try our best to make both ends meet using the available resources in the community.” (FGD with Tau-buid men)

The Tau-buid tribe of Sitio Malatongtong also has a mechanism for securing their economic needs in case of emergency. As shared by Tau-buid men, they borrow emergency necessities (e.g., food) in a *sari-sari* store located within the sitio during typhoons. After the typhoon, through the community leaders, a list of affected families and receipts are submitted to the barangay LGU. The amount borrowed is then paid for through the barangay LGU. Since the area is hard to reach and it usually takes time for the barangay LGU to provide relief goods, the said arrangement is deemed effective in ensuring their subsistence.

Further, Alangan women shared they give priority to vulnerable groups (e.g., children, persons with disabilities, sick people and older persons) during evacuation. Moreover, the findings show there is an expressed desire among women from both tribes to take a more active role in community building. They want to be organized and engaged in activities that aim to advance their economic and social welfare. Tau-buid women conveyed they want to form a cooperative where they can engage in economic activities and earn for their families. Alangan women also articulated their aspiration to have a separate organization and set of officers from men.

Actions by Duty-Bearers

The narratives of both tribes, LGUs, CSOs and Plan revealed that duty-bearers from government and non-government entities implement interventions to support local needs and advance a disaster-resilient environment for the Mangyan communities. In adherence to their obligation to protect the Mangyan communities as rights holders, the findings reveal these stakeholders provide or have provided support to both tribes before, during and after a disaster.

Prior to a disaster, the government at all levels has actions that equip the Mangyan to prepare for disasters. According to Alangan men at the national level, the Department of Social Welfare and Development (DSWD), through its poverty alleviation program, *Kapit-Bisig Laban sa Kahirapan-Comprehensive and Integrated Delivery of Social Services Program*, had constructed bridges, roads and schools within the Mangyan communities. Apart from infrastructural support, DSWD also implements a conditional cash transfer program dubbed *Pantawid Pamilyang Pilipino Program (4Ps)* that aims to provide social assistance by providing cash to poor families and achieving social development through investments in human capital (e.g., health, nutrition and education). Since it is a conditional cash transfer program, the beneficiaries are required to meet the following conditions before receiving the assistance:

- The parents must attend family development sessions where topics on health, nutrition, and responsible parenting are discussed.
- Children aged 0-5 years old must receive preventive health check-ups and vaccines.
- Children must receive deworming pills twice a year.
- Pregnant women are also given pre- and postnatal care.

- Children aged 3 to 18 years old must enroll in school and maintain a class attendance rate of at least 85% per month.³⁹

In addition to the national-level initiatives, the provincial government of Occidental Mindoro organized a capacity building activity in DRRM. Specifically, a basic first-aid training was conducted among male Mangyan leaders.

Respondents from the MLGU and Alangan tribe conveyed that through the IPAO, interventions were carried out to increase Mangyan's access to education and economic support, as shown in the following statements:

"IPAO provides salary to local teachers in the IP communities through its IP Literacy Program." (KII with a MLGU representative)

"Livelihood interventions such as conduct of trainings, provision of farm inputs, and distribution of cash assistance were provided by IPAO to us." (FGD with Alangan women)

In partnership with the NCIP, IPAO also assists them in securing ancestral land titles and in developing their Ancestral Domains Sustainable Development and Protection Plan. In addition to IPAO's efforts, another LGU respondent articulated that the MDRRMO had initiated actions that aim to support the DRRM needs not only of the Mangyan communities, but also of other vulnerable groups in Sablayan, such as women, older persons and persons with disabilities. Among these actions include the establishment of an early warning mechanism in partnership with the barangay LGU, passage of a policy on mandatory conduct of a simulation exercise in all barangays and development of an online reporting system for DRRM-related information among the barangays. Further, the Municipal Legislative Council pioneered the creation of a dedicated Disaster Preparedness Committee in 2019.

"The committee was created in adherence to RA 10121, the country's DRRM law, which emphasizes the importance of shifting from a response-oriented framework to a more proactive and holistic approach, covering all the thematic areas of DRRM." (KII with an MLGU respondent)

Similar to the pre-disaster phase, findings reveal that the government at all levels has interventions during the emergency period. In response to COVID-19, DSWD delivered cash assistance worth PhP 5,000 (US\$98) to Mangyan and other poor families through its Social Amelioration Program, according to one MLGU respondent and Alangan women. In addition to this, Alangan men shared that the IPAO of Sablayan also provided livelihood support through distribution of chickens and vegetable seedlings to selected Mangyan families. In case of strong typhoons and floods, the MLGUs and barangay LGUs do search and rescue operations, particularly in Sitio Calamansian, as shared by the Alangan tribe. In addition, both tribes relayed that the distribution of relief goods is also a common response activity of both MLGUs and barangay LGUs.

"After a typhoon, we usually receive relief assistance from the barangay [LGU]. Usually, the relief packs contain rice, canned goods, noodles, coffee, and sugar." (FGD with Alangan women)

³⁹ Department of Social Welfare and Development. 2020. Pantawid Pamilyang Pilipino Program. [https://car.dswd.gov.ph/programs-services/core-programs/pantawid-pamilyang-pilipino-program-4ps/#:~:text=4Ps%20is%20a%20poverty%20reduction,needs%20\(short%20term%20poverty%20alleviation\).](https://car.dswd.gov.ph/programs-services/core-programs/pantawid-pamilyang-pilipino-program-4ps/#:~:text=4Ps%20is%20a%20poverty%20reduction,needs%20(short%20term%20poverty%20alleviation).)

In the post-disaster phase, both national and local governments carry out actions that aim to help Mangyan communities recover and regain their sense of normalcy. Alangan men shared that one of the activities conducted by the barangay LGU immediately after a disaster is the conduct of damage and needs assessment. This enables them to identify the affected families and the assistance they need. The majority of the interventions provided by other government entities after a disaster are focused on addressing the economic needs of Mangyan families considering their impoverished condition. Further, Mangyan women expressed that, at the national level, the Department of Agriculture distributed seedlings and fertilizers to support their livelihood. On the other hand, at the local level, the IPAO implements food for a work program after a disaster, as reflected in the following statements:

“Food for work is an annual program of the LGU with a budget allocation of Php 200,000 [US\$ 4,115].”
(KII with an MLGU representative)

“After a typhoon, we repair damaged canals and clear the roads in exchange of rice and groceries as part of the Food for Work program.” (FGD with Alangan men)

Other than government stakeholders, NGOs also play a significant role in equipping Mangyan communities in Sablayan to prepare for, respond to and recover from disasters, as articulated by both tribes. Mangyan men and women revealed Plan International is a strong non-government actor in DRRM.

“Plan is the only non-government organization that provides disaster-related projects in our community, and we are thankful for their presence.” (FGD with Tau-buid women)

Through the ICDRM project, which started in 2017, Plan was able to conduct pre-disaster activities in both tribes, including: (1) Conduct of DRRM trainings focusing on community- and school-based disaster preparedness, family disaster preparedness planning, barangay contingency planning highlighting an inclusive EWS and evacuation plan, DRRM planning and budgeting, environmental protection, gender mainstreaming and culture sensitivity, community savings, family planning and safety measures for COVID-19; (2) Sectoral risk assessment; (3) Simulation exercise in communities and schools to test the contingency plan; (4) Provision of early warning devices, such as solar-powered portable speaker and round horn for public address; (5) Formation of a CSG and (6) Advocacy for the passage of a policy on the expansion of the DRRM Council to include representatives of Mangyan and other vulnerable groups in partnership with the MLGUs and barangay LGUs.

Furthermore, Plan implemented activities during the emergency phase. According to Mangyan respondents, one concrete example is the initiative of Plan to provide hygiene kits and a portable handwashing facility in response to COVID-19. The hygiene kits contain hand soap, laundry soap, sanitary cloth for women and young women and a water container.



Figure 2. Portable Handwashing Facility from Plan International

“The supplies provided by Plan during this time of pandemic are really beneficial to us. Since we have issues with access to water, the containers [Jerry Cans] they distributed are useful for us to be able to stock up.”
(IDI with an Alangan woman)

Further, relief goods (e.g., rice) were also provided by Plan to the communities during the pandemic. For Tau-buid, they also recognized the efforts of Plan to distribute school supplies for children, such as bag, pencil and notebook, after a typhoon hit their community.

Besides Plan International, there are other NGOs who are also active in providing support to Mangyan, especially in the case of Alangan. Based on the narratives of the Alangan women respondents, the Convoy of Hope conducted a feeding program in the sitio; *Pampamayanang Mangyan Ugnayan Inc.* organized a tree-planting activity and distributed seedlings for landslide prevention and livelihood support; and FPD provided medicines considering the limited health services available in the community.

2.2.3. Perceived effectiveness of DRRM strategies for IP

As shared in the previous section, both government and non-government entities provide a gamut of DRRM interventions for Mangyan communities in the municipality of Sablayan. Findings suggest that the range of activities implemented before, during and after a disaster are generally perceived to be beneficial by both females and males from the Alangan and Tau-buid tribes. However, both tribes also feel these existing interventions do not provide long-term solutions to underlying causes of risks, such as poverty and historical marginalization, which continue to make them vulnerable every time a disaster strikes.

“We are thankful for the assistance provided to us. But we are not satisfied in terms of the quantity and the process of implementation.” (FGD with Alangan men)

In the Alangan tribe, men and women shared they are grateful for the assistance provided to help them prepare and recover from disasters. The economic, material and financial support they received from the duty-bearers, particularly government, helped them in addressing their immediate needs. However, many of them remain dissatisfied in terms of approach and process of implementation. One of the reasons mentioned is that they do not feel everyone has equal opportunities to benefit from the interventions since not all are able to receive assistance. Men and women, including the community leaders, also expressed they are unaware of the beneficiary selection process. The Mangyan are not informed of the selection criteria and is the reason why not all affected families are included as beneficiaries. An Alangan woman claimed:

“There are outsiders who come here with a paper and ask the people to have their names listed. The process is not discussed properly in the community. That is why during the actual distribution, only a few are able to receive help despite the fact that there are many families residing in the community.” (FGD with Alangan women)

IP interviewed for this study said that such a scenario normally happens after a disaster. In the recent Typhoon Quinta, the women also shared that those who did not evacuate in the school were not able to receive relief assistance, even though they were equally affected by the typhoon. Further, barangay LGU officials failed to conduct a thorough assessment of damage and losses; as such, women felt that the officials did not really know about their needs.

Another reason behind the dissatisfaction of both tribes is that they do not feel they are able to participate fully and meaningfully in risk governance processes, from risk assessment up to monitoring and evaluation.

Alangan men shared that, in most cases, they are treated as docile beneficiaries. A concrete example of this was when IPAO provided livelihood support to Sitio Calamansian in response to COVID-19.

“There was an effort to conduct interviews prior to implementation, but there was already a pre-determined menu of livelihood interventions in which we were asked to choose from.” (FGD with Alangan men)

This was also confirmed by women who further added that lack of proper consultation with beneficiaries leads to unsustainable interventions, such as mere provision of seedlings without considering their access to farming equipment. Moreover, the Alangan tribe shared they sometimes feel ignored by the LGU.

“We once submitted a report on the damages caused by drought to the local government. We did not receive any feedback from the said office. We requested for assistance, but years had passed, and nothing was provided to us.” (FGD with Alangan men)

Women are placed in a more precarious state than the men since they have no platform to voice their opinion and views during consultations and other decision-making processes.

“In practice, it is the male sitio captain, who represents us in meetings and consultations with the barangay and municipal LGUs. We have not experienced any face-to-face consultation prior to the implementation of any disaster-related activities.” (FGD with Tau-buid women)

Usually, women are just informed by the captain of the activities to be implemented through a community meeting. The interventions are already identified without any avenue for the women to provide input or feedback. This prevailing set-up is further reinforced by the male-dominated culture of Mangyan communities, which leaves the women invisible in DRRM programming and other development agenda, as shared by a respondent from the LGU.

The dissatisfaction of Mangyan to existing DRRM strategies is further exacerbated by the fact that the presence of government leaders is only felt during the emergency phase. Government leaders are not that active before and after a disaster. The majority of the Mangyan respondents expressed they do not feel government programs truly address their needs. In addition, while the Mangyan are represented by IPMRs at the barangay and municipal levels, the Alangan women expressed they are not yet able to feel the full benefits of having IPMRs, as shown in the statement below.

“Some IPMRs are working fine, while some are not, and are just there for the salary. Some of them are only visible during the election period, and do not ask us about our needs.” (FGD with Alangan women)

In addition, the Tau-buid men shared it is also difficult for some IPMRs to influence their council members in the barangay LGU. As such, many of their agreements in the community are not approved at the barangay level.

“We are expecting that our representative [to the council] will be able to fight for our traditions and practices as well as the programs that we want to be implemented.” (FGD with Tau-buid men).

Considering the weak participation of Mangyan in the conceptualization of DRRM interventions of duty-bearers, as evidenced above, both tribes revealed current strategies are only able to address their immediate needs and offer band-aid solutions.

“The impact of government’s assistance, if ever it reaches us, can be likened to just a few rain drops.” (KII with a Mangyan leader)

They even shared they had limited knowledge on the Barangay Disaster Risk Reduction and Management Plan (BDRRMP) as well as the composition of the BDRRMC. Other than responding to their survival needs (e.g., food), the interventions remain futile in addressing the root causes of their vulnerabilities, such as their lack of access to basic services and opportunities for sustainable livelihood. With this, both tribes shared that DRRM plans should include specific activities that aim to address these root causes, such as paving and/or construction of the roads to facilitate better mobility for economic activities, health-related needs, and access to services/support from various groups; construction of an evacuation center within the sitio, especially in the case of Alangan; securing access to safe water through provision of a hose and water tanks; implementation of a livelihood project for women (e.g., cooperative for Tau-buid) and provision of farming materials, such as tractor, sprayer and carabao.

PART 3. ANALYSIS

This section presents the elements of replicable models in ICDRM that the respondents were able to identify, capturing the extent to which they think inclusion of relevant vulnerable groups, particularly the IP, were achieved. A description of each element will be presented vis-à-vis the specific DRRM needs that it can potentially address. By way of presenting how these elements may be developed further into a strong ICDRM model, recommendations on how they can be made more inclusive are also discussed. Along with the recommendations, the implications of ICDRM in broader institutional policies are also presented.

Furthermore, challenges and opportunities in replicating and/or piloting the elements are also presented in this section. In exploring better opportunities through which the elements may be developed into a strong model, the section also presents the potential role of IP in building an inclusive ICDRM model.

3.1. Elements of Replicable Models on Inclusive Community-based Disaster Risk Management

Summarized in the tables below are the elements of replicable models identified under Plan's ICDRM project in Sablayan, Occidental Mindoro. Through thematic analysis, the elements were grouped into the following domains: (1) Increase IP participation in formal DRRM structures and policy making; (2) Strengthen IP representation in risk governance processes; (3) Address IP's vulnerabilities to disasters; and (4) Increase participation and leadership of IP women in DRRM.

Within each domain, replicable elements were further categorized into three types, depending on whether they are program interventions, policy or implementation process/approach/strategy. Similarly, and taking into consideration the replicable elements, specific recommendations are presented per domain on how to make the interventions, policies or approaches more inclusive.

3.1.1. Domain 1: DRRM Structure and Policy

The enhancement of DRRM structures, both at the barangay and municipal levels, is one of the interventions under the ICDRM project identified by respondents from the MLGU and Plan International-Mindoro Field Office as replicable since it facilitated inclusion of vulnerable groups, including the IP, in DRRM programming (See **Table 5** below). Specifically, the enhancement involved the expansion of DRRM structure membership to include representatives from different sectors, such as women, youth, older persons, persons with disabilities and IP, as shown in the 2020 Municipal DRRM Plan of Sablayan. The effort to expand the membership of DRRM structures was supported by a policy through the passage of Municipal Executive Order No. 2019-029 and barangay resolutions in IP inhabited communities. Since there are already policies in place, the membership of IP and other sectors mentioned above is already institutionalized and will continue regardless of changes in government administration. The enactment of such policies helped address issues related to the absence of formal mechanisms for consultation and representation, especially among the IP and other vulnerable groups, in decision-making processes.

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Table 5. Replicable Elements for Expanding IP Representation in DRRM Structures

Domain 1 DRRM Structures and Policy	
Replicable Elements	Recommendations for Replication
<p>Project interventions:</p> <ul style="list-style-type: none"> Increase IP representation in DRRM structures. 	<ul style="list-style-type: none"> Broaden representation in DRRM structures to include IPs and their organizations. Support the formation and/or strengthening of IP-led organizations. Create better opportunities for women to take on leadership roles in DRRM. Continue advocacy work among duty-bearers at the barangay and municipal levels to institutionalize an inclusive DRRM approach. Promote the Barangay Resolution and Municipal Executive Order for the Expansion of DRRM structures to include sectoral representations.
<p>Approaches/strategies:</p> <ul style="list-style-type: none"> Expand inclusive policies for IP representation in DRRM. 	

Currently, the municipal male IPMR from the Alangan tribe is the sole representative of Mangyan to the Municipal Disaster Risk Reduction and Management Council (MDRRMC). The municipal IPMR was chosen to represent the IP in the MDRRMC since he is also part of the Municipal Legislative Council and was endorsed by the NCIP. The representation of IP in the MDRRMC provided a platform for the Mangyan to relay their DRRM-related needs at the municipal level, which was not established before. Apart from the MDRRMC, the Mangyan are also represented by the IPMR in the Municipal Development Council and the Municipal Peace and Order Council, according to the MLGU respondents.

At the barangay level, considering the experience of the Alangan and Tau-buid tribes, the Mangyan are represented in the BDRRMC by the IPMR and elected IP barangay councilors. The elders of IP communities play a key role in the selection of the IP representatives. IP representatives are present in certain committees, such as Committees on Communication, Search and Rescue and Peace and Order.

A male Mangyan leader in Barangay San Agustin shared that IP participation in existing barangay structures is important for them to be well-informed on what is happening in the community and for them not to be left out. This is also a venue for the needs of Mangyan communities to be considered in crafting plans and programs for DRRM and other development agenda. According to him, prior to planning activity in the barangay, the IP leaders, consisting of the IPMR, barangay councilors, and *sitio* chairpersons,⁴⁰ conduct a consultation with community members to agree on the priority activities they would like to implement. The IP barangay councilor then presents the needs of Mangyan communities during the barangay council’s session. After the presentation, the council members, especially the Barangay Chairperson, review the identified needs for approval. At present, the Barangay Council of San Agustin has already approved the construction of a multi-purpose hall and meeting hall (*balay lakuy*) for the Alangan tribe in Sitio Calamansian.

“The IP leaders serve as a bridge between the Mangyan communities and the Barangay Council to make the latter aware of their needs and situation.” (KI with a Mangyan leader)

⁴⁰ The Sitio Chairperson is called a *Kuyay* among the Alangan and *Fufu Ama* among the Tau-buid.

Although the IPMRs provide an opportunity for Mangyan to have representation at various government levels, their level of inclusion in decision-making processes remains inadequate, as shared by both Mangyan leaders and community members. As mentioned in the findings section, the extent to which the IPMRs are able to genuinely represent and put forward the welfare of the greater IP population varies. According to the Mangyan respondents, especially female, some IPMRs are more proactive in initiating consultations through regular community meetings, while some are not. It was also shared that some IPMRs are less capable of influencing the Barangay Council to advance the IP agenda. In practice, the IPMR selection is also only limited to men, which takes away the opportunity for women to harness their leadership potential and be more active in community affairs.

“As to the current level of our inclusion in DRRM processes, we are like first graders considering our limitations in literacy. Our awareness on DRR still needs improvement.” (KII with a Mangyan leader)

Recommendations for Replication

➤ Broaden representation in DRRM structure to include IP and their organization

Study findings show there are evident gaps in current efforts to enhance the DRRM structure to make it more inclusive to the vulnerable groups. While the re-organization and expansion of the BDRRMC and MDRRMC membership, to include the vulnerable groups in Sablayan, is strongly aligned with RA 10121, the country’s DRRM law, the current structure shows vulnerable sectors are predominantly represented only by individual members of the sector and who are not part of an organized group within that sector.

This is an area in need of improvement. Council members should not be limited to individual representation, but rather give priority to organized groups, such as community-based organizations (CBOs), to have a more collective voice in terms of needs identification and program development. Involving a group rather than an individual in decision-making allows the identification of more responsive and sustainable interventions since it is based on a consensus and is less likely to be influenced by personal interest. Instead of appointing an individual representative, tapping existing groups familiar with the collective issues and needs of Mangyan, such as TAGMARAN, FAMATODI and CSG, to represent the Mangyan in the structure may be explored.

Further, having CBOs as DRRM council/committee members is also attuned to the provisions of RA 10121. As mandated by the law, CBOs are among the groups that can be accredited by the government to be part of the DRRM structure. The active participation of vulnerable sectors at all levels of DRRM coordination is crucial since they are knowledgeable with their context. Thus, they themselves will determine what approach or strategy is most appropriate for them (Sec. 2.d and Sec. 12.d).⁴¹

➤ Support the formation and/or strengthening of IP-led organizations

At the municipal level, the IPMR should not be the sole representative of Mangyan tribes in different government-mandated bodies. Having only one representative in all the committees/councils may lead to ineffective performance since the tasks can be overwhelming. Hence, the representative may not be able to represent the IP community at his best. Designating Mangyan representatives coming from different sectors, such as women, youth, persons with disabilities and older persons, should be

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⁴¹ Disaster Risk Reduction Network Philippines (DRRNetPhils). 2011. In Agsaoay-Sano E. (Ed.), *Primer on the disaster risk reduction and management act of 2010*. Quezon City: Christian Aid.

considered. The presence of sectoral representatives in the committees and councils is an advantage since they have clear knowledge of their context and first-hand experience of issues that affect them. Further, when the representation is not handled by only one person, conduct of regular consultations with Mangyan tribes is more feasible compared to the current situation wherein the municipal IPMR only comes to the community during special occasions. Male and female Mangyan respondents from both tribes have expressed the need for the municipal IPMR to initiate regular consultations to respond to their needs and advance their welfare.

“We are expecting that our representative [to the council] will be able to fight for our traditions and practices as well as the programs that we want to be implemented. Thus, the IPMR should proactively come to the community to check on us and learn about our issues.” (FGD with Tau-buid men)

“We recommend for the [municipal] IPMR to conduct a meeting with the [Mangyan] communities for at least once a month.” (FGD with Alangan women)

➤ **Create better opportunities for women to take on leadership roles in DRRM**

Relative to the recommendation for Mangyan to have sectoral representatives, Mangyan respondents, along with the MLGU and Plan International-Mindoro representatives, have also expressed the need for greater representation among IP women in DRRM structures, especially that IP communities are often dominantly represented by men. Although male Mangyan will have something to say about the needs of female Mangyan, they still cannot discuss them adequately. As such, it is best for female Mangyan to be given a seat in the DRRM structure and be able to speak for themselves. The opportunity to perform the IPMR role should also be opened to Mangyan women.

“Mangyan women should be given opportunities to participate toward empowerment. It is important to organize and educate them.” (KII with an MLGU representative)

Besides women, youth representation in government-mandated structures is also deemed necessary. Currently, the Mangyan have no representative in the *Sangguniang Kabataan* (Youth Council). Based on the experience of Alangan in Sitio Calamansian, a youth leader is able to help in disseminating warning information within the community. While the youth leader plays such a role, she expressed she is unfamiliar with the BDRRMC and BDRRMP. Considering this reality, the involvement of youth in DRRM-related consultation meetings and capacity building activities is crucial for them to become able members of the DRRM committee/council.

The leaders [LGU] should intensify their efforts in consulting us regarding our needs. The consultation should be conducted regularly, at least once a year. Conduct of trainings on the role of youth in DRRM and values formation sessions focusing on time management and discipline are recommended.” (KII with a female Alangan youth leader)

“I believe that the capacity of Mangyan youth can be harnessed for them to contribute in reducing disaster risks, especially since they are educated.” (KII with a Mangyan leader)

➤ **Sustained advocacy work among duty-bearers at the barangay and municipal levels to institutionalize an inclusive DRRM approach**

To support the effort of enhancing the DRRM structures, continuous advocacy work at the barangay LGUs and MLGUs is imperative for them to embrace an inclusive DRRM approach. Considering that the LGU has the authority both in administrative and financial aspects, efforts to influence them to institutionalize the

engagement of IP and other vulnerable groups in DRRM decision-making processes are crucial. Understanding the value of inclusive DRRM is essential for the LGUs to have ownership, which is crucial in sustaining any intervention. The LGUs also need to proactively perform monitoring and evaluation at the barangay and municipal levels to track their progress and address the gaps in DRRM program and policy implementation.

“It is important to intensify awareness raising among the LGUs on inclusive DRRM. Make them realize that vulnerable groups especially the IPs have an important role to play in resilience building.” (KII with a Plan staff)

3.1.2 Domain 2: Risk Governance Processes

The second domain of the replicable model is the Risk Governance Process (**Table 6**). Respondents from the MLGUs and barangay LGUs recognize the efforts made under the ICDRM project to promote the participation of IP in risk governance processes such as risk assessment and DRRM planning. To a certain extent, this led to an increased recognition among local government actors of the capacity and potential of IP to be part of resilience-building efforts.

Table 6. Replicable Elements for Increasing IP Representation in Risk Governance Processes

Domain 2 Risk Governance ⁴² Processes	
Replicable Elements	Recommendations for Replication
Project Interventions <ul style="list-style-type: none"> Conduct risk assessments and DRRM planning with IP representation. 	<ul style="list-style-type: none"> Strengthen community-based interventions and approaches to enable greater participation among women, girls and boys, older persons and persons with disabilities in risk governance processes. Mobilize the IP community in the implementation and monitoring of DRRM actions. Support the implementation of effective and inclusive communication strategies to increase access to DRRM information. Conduct project interventions at the sitio level. Engage IP political structures to support inclusion.
Approach/Strategies <ul style="list-style-type: none"> Increase reach of interventions. Increase IP engagement in risk governance. 	

According to the Plan International-Mindoro Field Office, these efforts were done by conducting the hazards, vulnerabilities and capacities assessment (HVCA) and DRRM and contingency planning workshops in both barangays, with participation from the Alangan in Sitio Calamansian and Tau-buid in Sitio Malatongtong. In the municipal-level workshops, the Alangan and Tau-buid tribes are represented by the municipal IPMR and the TAGMARAN. In the barangay level workshops, the Mangyan are represented by their respective barangay IPMRs, IP officials who are elected in the barangay council and officials of the sitio-level IP political structure. The sitio officials are led by an elected male *Kuyay* (Alangan) and *Fufu Ama* (Tau-buid), serving as the sitio chairperson, and often referred to as *Kapitan*. Along with him are the elected *Nayon*, who then serve as the sitio councilors or *Konsehal*.

⁴² GNDR. 2018. Risk governance processes refer to mechanisms put in place to foster full and meaningful participation of relevant stakeholders at all levels of the disaster management and preparedness cycle.

“Involving IP leaders is integral, not only in Mangyan communities’ acceptance of the project intervention, but also in enabling their support during implementation of actions.” (KII with a Barangay LGU representative)

The MDRRMO of Sablayan shared that, as a result of the DRRM planning workshops conducted with IP representation, the LGU’s 2020 DRRM Plan and Municipal Development Plan were able to include interventions that directly target the Mangyan, such as the construction of a farm-to-market road, building of IP schools, installation of solar lights for IP households, support to IP livelihood projects through the LGU’s Local Economic Investment Promotions Office and IPAO and support to locally paid teachers in IP schools, among others.

In the case of Barangay San Agustin, one of the interventions included in the 2021 Barangay DRRM Plan and Annual Investment Plan that can help address a key concern of the Alangan is the construction of a Level-2 Water System in Sitio Calamansian. As noted in the study findings, one of the key issues encountered by the Alangan in Sitio Calamansian is the lack of access to adequate and safe water before, during and after a disaster, as they rely mainly on water supplied by springs in the village. This intervention will enable access to water through public water faucets.

In terms of the conduct of project interventions under the ICDRM project, both Alangan men and women affirmed Plan’s approach of conducting activities, such as the family-level preparedness training and simulation exercise, at the sitio level.

“We recognize Plan’s efforts to reach out even to those who are living in the mountainous areas. They go directly to us and use a face-to-face approach in consulting us about our needs.” (FGD with Alangan men)

Conducting the project activities at the sitio level also provided opportunities for the other members of the IP community to participate. Not only do they not need to travel away from their community, but doing the activities in a familiar place and in proximity to their day-to-day life also enabled them to take part in discussions more comfortably. Activities under the project were often conducted in the school building within the sitios, making it easier for community members to attend, especially for women who are rarely able to represent their community in barangay-level activities.

“We were able to participate in the typhoon drill since it was conducted within our sitio. Otherwise, our sitio officials will be the only ones to attend activities at the barangay.” (FGD with Alangan women)

Members of the Tau-buid tribe also affirmed Plan’s initiative to consult IP leaders about the relevance and appropriateness of the project intervention at the onset of the implementation.

“Plan took the time and effort to set a separate meeting and orientation with us. They asked us about our needs. Based on [our] experience, this is how it should be done.” (KII with male Tau-buid leader)

Additionally, a male Alangan leader shared that consulting them, as the leaders in the community, not only helps in coordination of activities during project implementation, but also helps in facilitating a collective decision, as they are the ones who relay the information to and from the other community members in their regular meeting.

Recommendations for Replication

While the abovementioned risk governance processes and implementation approaches were identified as replicable, they still offer very limited opportunities for IP inclusion, especially for vulnerable groups such as women, girls and boys, older persons and persons with disabilities among IP. Evidently, IP representation in formal decision-making bodies, as well as in community-level activities, is still limited to IP leaders, who are also mostly male.

The recognition of government actors of the potential of IP to contribute to risk governance is an important gain toward upholding IP's rights to self-determination and collective action. However, this recognition should be translated into more concrete steps to enable IP to fully and meaningfully participate in risk governance processes and to ensure DRRM programs and interventions are truly responsive to and inclusive of their collective needs and aspirations.

As discussed in the previous domain, more effective representation in local DRRM structures needs to take place to ensure the voices of vulnerable groups such as women, girls and boys, older persons and persons with disabilities will not remain unheard. In a similar way, greater participation of the said vulnerable groups in risk governance processes also need to be more enabled, within or outside the context of these formal structures. In this regard, the following recommendations are presented:

➤ ***Strengthen community-based interventions and approaches to enable greater participation of IP women, girls and boys, older persons and persons with disabilities in risk governance***

In the previous domain, emphasis is given in terms of “who” should represent the IP in formal decision-making bodies. Equally important, however, is the question of “whose” voices are being represented and heard in these formal structures and processes. For IP representation to achieve its desired impact in the context of risk governance, mechanisms must be in place for IP to have better opportunities to engage collectively in the assessment of risks faced by their communities, in the identification of plans and policies to address those risks, as well as in the implementation and monitoring of DRRM plans and actions. This entails the need to strengthen community-based approaches in the conduct of risk assessment, DRRM and contingency planning and implementation and monitoring of DRRM actions so that the most vulnerable members of IP communities will have an equal opportunity to participate in risk governance and not just the IP leaders.

Using a community-based approach means that risk governance processes need to be conducted where the people are. Since Mangyan live in remote areas, respondents from both tribes articulated that the proximity of the venue of activities to their sitio should be a major consideration among duty-bearers and project implementers to allow other members of the IP community to participate.

As affirmed by the findings, IP are better able to participate in DRRM interventions if they are conducted in such a way that is accessible to them. Compared to other interventions done outside of the sitio, vulnerable groups such as women, boys and girls, older persons and persons with disabilities will have better chances of being included in activities done within the sitio. This is especially so with the implementation of COVID-19 health protocols, which further limit the mobility of children, older persons and people with critical health conditions.

“Conducting project activities within the sitio should be a key consideration among organizations, especially if they want to ensure the inclusion of women, especially those who have little children to care for [breastfeeding mothers].” (IDI with a female Alangan)

“More women are able to attend activities if these are conducted in the sitio itself.” (KII with a male Taubuid leader)

Respondents from the Plan International-Mindoro Field Office also supported this by emphasizing the importance of sustaining sitio-based trainings and orientation among Mangyan considering their upland location.

The community-based approach also involves the employment of participatory tools and strategies that are sensitive to factors such as age, language, culture and ability. It ensures the implementation of risk governance processes is responsive to the context of the community.

“DRRM activities must be conducted in such a way that is easy for us [Mangyan] to understand. Language used during trainings must enable us to communicate easily.” (FGD with Mangyan CSOs)

“IP prefer learning by practice, rather than theoretical. Sometimes, we find trainings to be too slow because of too much lectures. We learn faster during actual exercises.” (FGD with Mangyan CSOs)

In the conduct of community risk assessment and planning, participatory tools may be used to capture the varying perceptions and experiences of IP about disaster risk. Greater participation of the most vulnerable members of the community enriches the quality of risk data gathered in such a way that an analysis of HVCA results may be disaggregated based on factors such as age, gender, disability and ethnicity, among others. This can aid in better targeting of DRRM interventions that are responsive to and inclusive of the needs and capacities of each group.

➤ **Mobilize IP communities to implement and monitor DRRM actions**

Another area in risk governance in which IP participation can further be enhanced is their active participation in the implementation and monitoring of DRRM actions that address the risks faced by their community. As revealed by the study findings, DRRM programs still have a strong tendency to be implemented in a top-down manner, which treats IP as passive recipients of assistance.

The implementation of interventions before, during and after a disaster must enable the active participation of IP and their organizations. Aside from the fact that they know better about the context of their community, they also have existing capacities that can contribute to resilience building. For example, in the context of implementing response interventions, Alangan women and men argued that they should be part of the process of planning the response intervention, including the setting of criteria for beneficiary selection.

For them to be able to easily raise complaints, inclusive feedback mechanisms must also be made available to them. This will contribute in strengthening accountability measures whereby duty-bearers are held accountable for inclusive design and implementation of DRRM.⁴³ This also promotes partnerships and institutional mechanisms that recognize the capacities and contributions of at-risk and vulnerable groups.

“We should be actively involved in the planning process [of response interventions], including the identification of beneficiaries.” (FGD with Alangan men)

⁴³ UN WCDRR. 2020, October 20. *Governments, Communities and Groups Acting Together Issue Brief*. Inclusive Disaster Risk Management. <https://www.wcdrr.org/uploads/Inclusive-Disaster-Risk-Management-2.pdf>.

“The criteria for beneficiary selection must be determined and discussed with us. It is also important to set up a process through which we can raise our concerns.” (FGD with Alangan women)

It is also necessary to pay attention to existing community-led interventions and structures in DRRM. Implementation of DRRM actions must be able to help strengthen and support these efforts and initiatives not only for the purpose of further developing the capacities of IP for resilience building, but also in ensuring ownership and sustainability of gains from DRRM efforts.

As revealed by the study findings, both the Alangan and Tau-buid tribes have local and indigenous knowledge for disaster preparedness that can be better integrated in their EWSs and typhoon contingency plans, for instance. In the absence of immediate life-saving support from LGUs, they also have community-based response mechanisms in place, such as enabling access to food through a *sari-sari store* among the Tau-buid in Sitio Malatongtong, and the women-led CSG among the Alangan in Sitio Calamansian.

“Our aspiration is to be able to stand on our own two feet. Instead of being just passive recipients of interventions from government and NGOs, we want to be the one to help our fellow Mangyan.” (FGD with Mangyan CSOs)

➤ **Support the implementation of effective and inclusive communication strategies to increase access to DRRM information**

Availability of adequate and relevant DRRM information is a critical aspect that communities need to have access to for making informed and collective decisions. Among the Alangan and Tau-buid tribes, this is a challenge that remains unaddressed.

During the FGD with Tau-buid men, the majority of the respondents shared they do not know about the barangay DRRM plan or the composition of the barangay DRRM structure. Among the Alangan women respondents, only one out of nine said she fully understands the EWS posted in their sitio. This limitation in access to information becomes a barrier in performing the necessary DRRM actions among community members.

“I have not really memorized the color-coding system [on the EWS] yet. Aside from the use of public address system, we were not really able to use the EWS during Typhoon Quinta [2020].” (KII with a male Alangan leader)

With further restrictions imposed by COVID-19 health protocols, there is a greater need for more effective and inclusive strategies to communicate risk information and DRRM actions among the IP. Risk communication strategies must be able to use the communications channels easily accessible to IP and use appropriate multiple and accessible formats to address communication barriers influenced by age, language, culture and disability, among others. This objective should also consider the possibility of supporting IP-led communication strategies for DRRM.

In the implementation of capacity building activities and development of IEC materials for DRRM, the use of local language and creative formats (e.g., more visual) is strongly encouraged to achieve effective communication among the Mangyan tribes. As shared by Tau-buid women, the use of vernacular language will help prevent shyness on their part and allow them to participate actively in the discussions. This was affirmed by a Barangay LGU representative in San Agustin, who emphasized the importance of using Alangan language in conducting trainings and crafting of IEC materials for the IP to really understand the message.

➤ **Conduct project interventions at the sitio level**

As mentioned in the previous domain, the family disaster preparedness and simulation exercises are two of the activities under the ICDRM project in which more people in the community were able to attend. This is because these activities were conducted at the sitio level. Those who were able to participate in these activities from both tribes consider them as replicable interventions for ICDRM. The participation of Alangan and Tau-buid tribes in these activities specifically helped increase their capacity to prepare for hazards such as typhoons, especially at the household level. The family disaster preparedness plan details the roles of the different members of the family before, during and after a disaster. It also indicates the alert level in the EWS when the family needs to evacuate, where to evacuate and the pick-up point for evacuation. Emergency contact numbers of key agencies, such as the barangay LGU, MDRRMO, Municipal Health Office, Philippine National Police, and Bureau of Fire Protection, are also listed in the plan.

“We learned about what emergency supplies to prepare, and where to evacuate during typhoons. With the family disaster preparedness plan, we also learned about the importance of working collectively inside the family.” (FGD with Tau-buid women)

Among the Alangan women, some of those who were able to attend the simulation exercise shared that being able to experience “actual” emergency scenarios also increased their awareness of how they should prepare during emergencies caused by typhoons.

Family disaster preparedness training is one of the project interventions already adopted by the MDRRMO. Rollout was already being done in some barangays within Sablayan not covered by the ICDRM project. However, the rollout initiative had to be postponed due to the pandemic.

Domain 3: IP Vulnerability to Disasters

Another replicable intervention identified is the ICDRM project’s support to reducing IP vulnerability to disasters. (Table 7) This was done through the provision of DRRM materials and equipment that help the

Table 7. Replicable Elements for Reducing IP Short- and Long-Term Vulnerabilities to Disasters

Domain 3 IP Vulnerabilities to Disasters	
Replicable Elements	Recommendations for Replication
<p>Project Interventions</p> <ul style="list-style-type: none"> Build IP capacity to conduct preparedness activities. <p>Approach/strategy</p> <ul style="list-style-type: none"> Focus on short- and long-term strategies to reduce vulnerabilities. 	<ul style="list-style-type: none"> Continue capacity building of family disaster preparedness and community-level simulation exercises. Provide relevant materials and equipment to support DRRM actions. Support efforts toward risk-based and culture-sensitive DRRM programming. Support measures that strengthen poverty reduction measures among IP.

communities to better implement DRRM actions. For both Sitios Calamansian and Malatongtong, this specifically included the provision and installation of solar-powered round horn and portable speakers, which now serve as their main public address system. The solar-powered public address system aids in the efficient dissemination of community advisories, including early warning information.

“It is better now compared to when our only option is to do house-to-house visit on foot, with just the help of a megaphone.” (KII with Alangan male leader)

This was affirmed by Alangan women during the FGD, adding that the use of the public address system makes it easier for community leaders to disseminate information not only during emergencies, but also during non-emergency situations, such as the announcement of information on upcoming community meetings.

A Tau-buid male leader reflected there are many times when they are unable to optimize the full benefits of their learnings during trainings and seminars (e.g., livelihood trainings) because when they go back to their community, they are still unable to provide the necessary tools and equipment to apply and sustain their learnings. As such, he found the support to the provision of DRRM materials and equipment as necessary to complement trainings.

Recommendations for Replication

The identified elements of the replicable model, while helpful in terms of raising the awareness of and, to some extent, equipping the Mangyan about disaster preparedness actions, they are unable to address underlying causes of risks that often subject IP to the detrimental impact of hazards.

As revealed by the study findings, more than their physical exposure to hazards, such as typhoons, Alangan’s and Tau-buid’s vulnerability to disasters is deeply influenced by factors such as poverty, exclusion in DRRM and development processes, especially among women, and their historical marginalization and discrimination on the basis of their ethnicity, geographic location, culture and economic standing, among others. As such, the following recommendations are presented to help ensure DRRM programs and interventions address the root causes and drivers of risks among the IP.

➤ Support efforts toward risk-based and culture-sensitive DRRM programming

Risk-informed programming aims to strengthen resilience to shocks and stresses by identifying and addressing the root causes and drivers of risk, including vulnerabilities, lack of capacity and exposure to various hazards.⁴⁴ Thus, the availability of robust risk information is critical to ensuring the responsiveness and inclusivity of DRRM programs.

This then requires focusing on specific risks faced by IPs, while taking into consideration the intersectionality of factors such as age, gender, ethnicity and disability, among others, on how IPs are

⁴⁴ UNICEF. 2018. *Guidance on Risk-Informed Programming*. New York, USA. [unicef.org/media/57621/file](https://www.unicef.org/media/57621/file).

affected by these risks. As such, making available disaggregated risk information can be one of the concrete steps in ensuring DRRM interventions are formulated and implemented based on what is required by the condition of the most vulnerable population. Similarly, DRRM plans, policies and programs must also be developed and implemented in the context of addressing the different socio-economic and cultural barriers to inclusion or the root causes of exclusion.

The implementation of DRRM measures must remain culturally appropriate and promote collective rights to self-determined development.⁴⁵ They must also build on the existing capacities of IP by recognizing that they contribute to sustainable and resilient development through their diverse lifestyles, knowledge systems and sustainable resource management, as well as conservation practices. This is especially so because their identity, cultures and livelihoods are strongly constituted by land, forest and waters.⁴⁶

➤ **Support measures that strengthen poverty reduction measures among IP**

Based on the study findings, poverty resulting from social exclusion remains as one of the key drivers of risks among the IP. Hazards, such as typhoons, disproportionately affect IP communities primarily because they have long been restricted in accessing the means to prepare for, cope with and recover from disasters. This perpetuates their impoverished condition further and leaves them trapped in the vicious cycle of poverty.

Recognizing this, DRRM programs and strategies must be developed and implemented within the broader context of sustainable development. Greater focus must be placed in addressing underlying causes of risks, such as poverty reduction measures, and addressing barriers to equal access to social services, along with measures for disaster and emergency preparedness. This highlights the need to link DRRM with long-term interventions by espousing a stronger focus on prevention and mitigation, and disaster preparedness measures that can help minimize the socio-economic costs of disasters.

Upholding IP's collective rights to self-determined development and informed by adequate risk data, DRRM measures must ensure economic protection for IP and support the creation of opportunities for a sustainable and resilient livelihood. This may require increasing IP's access to livelihood options and supporting measures to protect their livelihood from the impact of hazards, including access to opportunities for livelihood diversification that recognizes IP's capacities and potential. Moreover, these efforts should promote IP's rights to enjoyment and use of their lands and its resources.⁴⁷

Additionally, to help IP families cope with the possible economic shocks brought about by disasters, accessible social protection measures must also be made available for them, such as financial systems that provide incentive and capacity to reduce risk, including community-managed savings schemes, revolving loan funds, micro-credit and insurance.⁴⁸

⁴⁵ Asia Indigenous Peoples Pact. 2017. *Leaving no one behind: Practical guide for indigenous peoples*. Chiang Mai, Thailand.

⁴⁶ Ibid.

⁴⁷ UN High Commissioner for Refugees. 2014. *Indigenous peoples in natural disasters: Protection in Super Typhoon Haiyan*.

⁴⁸ Brown, D., and D. Dodman. 2014. *Understanding Children's Risk and Agency in Urban Areas and Their Implications for Child-centered Urban Disaster Risk Reduction in Asia: Insights from Dhaka, Kathmandu, Manila and Jakarta*. London: International Institute for Environment and Development.

Domain 4: Women’s Advocacy and Leadership

The fourth replicable domain speaks specifically to increasing Mangyan women’s leadership and advocacy in DRRM (Table 8). In Sitio Calamansian, a CSG was formed in 2018 for families to have a secure source of funds in times of emergency. Each of the 20 members (19 women and 1 man) saved up at least PhP5 weekly for their contribution to the CSG. The women get their contribution from the money they earn from selling vegetables and other root crops. Through the assistance of the Plan International-Mindoro Field Office, they were able to organize themselves and formulate their own policies in the savings group. In 2020, members of the savings group were able to withdraw their savings since 2018 to provide for their families’ needs because of the COVID-19 pandemic and the recent Typhoon Quinta. With their savings, they were able to purchase food and hygiene supplies, which enabled them to survive considering the multiple disasters that significantly affected their means of livelihood.

Table 8. Replicable Elements for Increasing IP Women’s Participation and Leadership in DRRM

Domain 4 Women’s Advocacy and Leadership in DRRM	
Replicable Elements	Recommendations for Replication
Project Intervention/s <ul style="list-style-type: none"> Form women’s CSGs. Approach/strategy <ul style="list-style-type: none"> Encourage women’s advocacy and leadership. 	<ul style="list-style-type: none"> Strengthen organizing work among IP women through advocacy and capacity building activities. Implement advocacy work among stakeholders, especially duty-bearers and male IP, to advance women’s participation in DRRM. Provide opportunities for IP women to perform a more proactive role in DRRM, such as engagement in education and awareness-raising activities.

Even though the CSG is currently inactive due to depletion of their savings, the group president shared they intend to start saving again soon as they have seen its benefit, especially during emergencies. Most women also felt proud that, through the savings group, they are able to help their husbands put food on the table, even though they are mostly stayed at home. With these reflections, the CSG formation could be instrumental in helping break gender and cultural barriers in IP communities such as in Sitio Calamansian, as expressed by these Alangan women:

“The community savings group is worthy of replication. It will help you survive since you have available funds to meet your immediate needs.” (IDI with a female Alangan)

“The presence of CSG helps women to contribute to her family especially during emergency situations.” (FGD with Alangan women)

The CSG challenges the predominant patriarchal culture of Mangyan that deprives women of the opportunity to engage in DRRM and community development. As presented in the study findings, decision-making manifested in the existing structures and mechanisms at the barangay and municipal levels is primarily dominated by men. Women have never been chosen or elected as officers or members of any committee or council. Through the CSG, women are provided with an opportunity to discover and harness their leadership skills since they are elected as officers and perform management roles to ensure the smooth operation of the group.

The replication of CSG is also supported by the Mangyan since it also offers a platform for women to defy their traditional domestic roles, such as housework and childcare. Based on the experience of Alangan and Tau-buid women, the highest role women portray in the community is being a teacher or a health worker, both of which are still nurturing in nature. With the help of the CSG, women are able to contribute to providing the economic needs of their family, as demonstrated during the lockdown due to the COVID-19 pandemic and Typhoon Quinta. The Alangan men support involving women in the CSG.

“My husband appreciates the CSG’s initiative of providing women the opportunity to have savings.” (KII with a female Alangan leader)

Further, the CSG was identified as a replicable element to achieve women’s inclusion since it also helps in addressing the barriers to participation related to isolation and language. The meetings and other activities of the CSG are held within the sitio, which makes them very accessible to women. In terms of language used in communication, since the officers and members of the group all belong to the Alangan tribe, they use the vernacular. This allows women to be confident and active in discussions since they are able to express themselves well.

Recommendations for Replication

➤ Strengthen organizing work among IP women through advocacy and capacity building activities

For the CSG to really thrive in advancing an inclusive approach for the vulnerable groups, especially women, further steps are recommended. Strengthened organization of work among women is one intervention that can help promote their inclusion in DRRM, as expressed by both female and male Mangyan respondents. This can be done through a combination of advocacy and capacity building activities for women to understand and appreciate their significant role in DRRM. Equipping women with the necessary knowledge on DRRM and inclusion principles and mechanisms through trainings can offer opportunities to continuously influence duty-bearers and male Mangyan to provide an enabling environment for their participation. Organizing women offers a platform for them to become more visible in the community. A livelihood initiative can be a starting point for organizing work since both men and women have expressed their desire to form a group and be involved in income-generating activities.

“We want for more women to attend in seminars and other activities in the community. We are hoping to have a project in the future such as organizing a cooperative where we can help each other and have the opportunity to earn.” (FGD with Tau-buid women)

“Currently, there is no organized group among Mangyan women in Barangay San Agustin. I support the formation of such a group since I see its value. Women can be organized and pursue livelihood activities.” (KII with a male Mangyan leader)

➤ Expand advocacy work among stakeholders, especially duty-bearers and male IP, to advance women’s participation in DRRM

Sustained advocacy work among stakeholders, especially duty-bearers and male Mangyan, is also crucial to influence them in advancing women’s active and meaningful participation in DRRM. Lobbying, educating legislators and dialogues are among the activities that can be explored to influence the target stakeholders and break the barriers to women’s participation. A respondent from the MLGU shared it is important to advocate for the implementation of gender-related programs and services for Mangyan at the barangay and municipal levels. By advancing such programs, Mangyan women will be provided with

opportunities to exercise their right to participate and better contribute in advancing a safe and resilient community.

To ensure women's participation despite their traditional role as a homemaker, a female Alangan expressed that sharing the domestic responsibility with men can be explored. She further mentioned that while it is true men are the ones who usually attend the meetings and consultations, women can also join such activities when they are well-informed. In this regard, she emphasized the importance of relaying the invitation not only to men, but also to women. For example, if there are trainings on disaster preparedness, the organizer should invite both women and men to attend. Instead of always depending on male leaders to represent them, women should be able to participate, provide input and make their voices heard.

"When the husbands are informed of what a particular activity is all about, they allow their wives to participate and take care of their children." (KII with a female Alangan leader)

➤ **Provide opportunities for IP women to perform a more proactive role in DRRM, such as engagement in education and awareness-raising activities**

Considering the current role of Mangyan women as teachers and health workers in the sitio, they can also play a more proactive role in DRRM by educating others in the community on disaster preparedness. They can organize awareness-raising activities through informal conversations in their respective communities and mainstreaming DRRM in the IP academic curriculum.

3.2. Challenges and Opportunities in Replication

While the identified elements of the replicable ICDRM model offer a promising opportunity to achieve an inclusive DRRM, especially for Mangyan and other vulnerable groups, there are significant challenges that may hamper its replication and/or adoption as articulated by respondents from both tribes, the MLGUs, CSOs and Plan. The existing challenges involve institutional, physical, economic and socio-cultural factors that confront relevant stakeholders from all levels in advancing a safe and disaster-resilient community for all.

On the other hand, amid the challenges, there are also opportunities that can be explored to achieve the replication of elements of an inclusive DRRM model for vulnerable groups, especially IP. Based on the accounts of respondents from Mangyan communities, LGUs, CSOs, and Plan, these opportunities are expected to offer a platform for stakeholders to embrace and implement a DRRM approach that is multi-sectoral and people-centered.

3.2.1. Challenges

➤ **Prevailing discrimination against IP**

The longstanding discrimination confronting the IP is a major challenge that significantly hampers the replication of an inclusive DRRM model. The prevalence of such discrimination is manifested in physical, social, economic and cultural aspects, which detrimentally affects the welfare and living conditions of the IP as seen in the Mangyan communities of Sablayan. The location of Mangyan is a concrete demonstration of geographical discrimination that they experience as a result of the encroachment of lowlanders. Mangyan live in far-flung and hard-to-reach areas, making it difficult for them to access information and exercise participation in DRRM-related activities and other development initiatives⁴⁹ initiated by the

⁴⁹ UN High Commissioner for Refugees. 2014. *Indigenous peoples in natural disasters: Protection in Super Typhoon Haiyan*.

barangay LGUs or MLGUs. In most cases, such activities are conducted in the town/barangay proper, which is far from the IP communities, as evidenced by the accounts of both tribes. This results in their minimal participation or absence in the said activities. Further, due to geographical discrimination, the Mangyan also become isolated during disasters, and this leads to delays in the delivery of response interventions.⁵⁰ The situation is worse for some IP communities inhabiting the secluded parts of the mountains since most of them are not reached by the government when assistance is provided.

Another form of discrimination confronting the Mangyan is evident in the economic aspect. As mentioned in the findings section, the traditional lands and natural resources of IP suffered from destruction due to development projects initiated by lowlanders. This has resulted in adverse consequences to their livelihood since they have to rely on limited resources. The Mangyan do not have sustainable and diversified livelihood options, and this has contributed primarily to their impoverished condition. Poverty, as demonstrated in the hand-to-mouth existence of IP, makes it difficult for the Mangyan to attend DRRM activities such as trainings, especially those that are conducted for several days. According to Tau-buid men, their participation in trainings and other activities is tantamount to economic loss since their farming activities are interrupted, and they do not have any savings to compensate the loss. Missing a day at work equates to hunger since they cannot put food on the table.

“Our livelihood is affected when we attend trainings especially when these are held for several days. We cannot go to the farm and work.” (FGD with Tau-buid men)

Social discrimination is another challenge that heightens the exclusion of Mangyan in DRRM and other decision-making processes. The prevailing male-dominated culture among Mangyan leads to unequal opportunity for women to engage in DRRM activities and be consulted in other community affairs as experienced by Mangyan women. Tau-buid women noted that, in practice, decision-making in the community is primarily done by men. Women are confined to domestic roles, such as housework and childcare.

“Information related to plans and budgets are disseminated in the general assembly. However, as mothers, we are often left in the house [to take care of our children] and the fathers are the ones who usually attend. Because fathers are busy with work, they are unable to share the information to us.” (FGD with Alangan women)

Another form of social discrimination the Mangyan experience relates to language. Often, when lowlanders such as the LGU conduct activities such as meetings, they use Tagalog (Filipino language) instead of the Mangyan language. This halts the meaningful participation of Mangyan since many of them, especially women, are not familiar with Tagalog. As a result, they are not able to actively participate in the discussions.

“When meetings and activities are facilitated by an outsider, like Tagalog, we become shy and tend not to talk since we cannot speak the Filipino language. We just let our captain talk for us.” (FGD with Tau-buid women)

Mangyan also suffer from social discrimination due to their ethnicity and literacy level. As experienced by Mangyan, they are often ignored when visiting government offices since they are perceived as people who always ask for assistance. They are also being passed off to different offices and falsely being told

⁵⁰ De Leon, R., D. Garcia, and J. Gregorio. 2016. *A case study on the Philippine government's disaster response after Typhoon Haiyan for the Indigenous Mangyan-Alangan community in Sitio Longgani, Naujan, Oriental Mindoro.*

they can get assistance from certain offices. They also experience deceit, even from the duty-bearers themselves.

Further, political discrimination is also a barrier to the adoption of an inclusive DRRM model. Based on the experience of Mangyan in Sablayan, when a particular IP community is not an ally of the elected LGU official, it is not prioritized in the delivery of services and implementation of projects. Thus, the people of that particular community are left behind in terms of access to resources and participation in DRRM and other development endeavors.

➤ **Lack of prioritization of long-term solutions to address underlying causes of risks**

Based on the accounts of Mangyan respondents, the majority of the existing DRRM interventions implemented for them by duty-bearers only address their immediate needs.

“The programs are only effective in providing immediate relief. They do not address (our) long-term needs.” (FGD with Alangan women)

As demonstrated in the experience of Mangyan in Sablayan, the government is primarily driven by a dole-out and response-oriented framework, which generally provides a temporary solution to the issues that affect their lives. While the government is able to meet the survival needs of Mangyan, the underlying causes of risks greatly exposing them to various disasters and other life-threatening events are often left unaddressed and least prioritized. These underlying causes of risks pertain to development issues already existent for a long time and have been keeping the Mangyan from protecting their wellbeing, especially during disasters. Specifically, the current DRRM programs and other development interventions of duty-bearers for Mangyan fail to address issues such as poverty, lack of access to basic services and sustainable livelihood, and historical marginalization, which continue to perpetuate their deep-seated vulnerability and leave them behind.

➤ **Funding limitations**

Respondents from Plan and Mangyan CSOs expressed that limitations in financial resources is another challenge that has the potential to impede the replication of an inclusive DRRM model. Many IP, including Mangyan, in the Philippines belong to rural and poor barangays with a small internal revenue allotment (IRA). Along with this, based on the Philippine DRRM Act of 2010,⁵¹ only 5% of the IRA is allocated as DRRM funding. In most cases, such an allocation is insufficient to address the needs of vulnerable barangays. Apart from the response-oriented approach of the government, the limited resources of LGUs also make it difficult to publicly invest in more long-term interventions, such as livelihood and infrastructure that will address the underlying causes of risks. Further, the implementation of inclusive processes requires a significant amount of funding considering the actors involved and the activities that need to be carried out, as mentioned by a Plan staff.

➤ **Change in leadership**

Another challenge that may hinder the adoption of an inclusive DRRM model is a change in leadership, particularly at the local government level. As shared by a respondent from the Plan International-Mindoro Field Office:

⁵¹ Disaster Risk Reduction Network Philippines (DRRNetPhils). 2011. In Agsaoay-Sano E. (Ed.), *Primer on the disaster risk reduction and management act of 2010*. Quezon City: Christian Aid.

“Change in leadership and staffing in the local DRRM offices/committees remains a challenge in sustaining efforts toward inclusive DRRM.” (KII with a Plan staff)

In the Philippines, barangay and municipal elections are held every three years. When a new mayor or barangay chairperson is elected, the continuity of DRRM interventions, programs and projects is at stake since the LGU staff and priorities may change. The newly elected government officials may not have the necessary technical knowledge and skills related to DRRM to sustain what the prior administration has started. Further, they might also have other priority programs that are not focused on DRRM.

3.2.2. Opportunities

➤ Support rights education and advocacy

One of the potential reasons for the prevalence of practices that discriminate against IP is the lack of knowledge about relevant rights and standards involving IP. This then leads to difficulties in identifying concrete and practical steps that eliminate barriers to inclusion. As such, in working toward addressing the challenges in replication related to existing discriminatory practices, it may be worthwhile for Plan International to support the conduct of training, awareness raising and advocacy interventions that may be undertaken, primarily with LGUs as primary duty-bearers, to help broader society understand the risks that IP are exposed to before, during and after a disaster.

Efforts on awareness raising and advocacy should also aim to enable the understanding of an applicable legal framework and policies with regard to IP, particularly in the context of disasters, which is imperative for the manifestation of rights-based DRRM programming and implementation.⁵²

On the other hand, support may also be provided to IP and their organizations in terms of capacity building for them to be able to proactively claim and advocate for their individual and collective rights.

➤ Explore opportunities for funding and partnerships

Since the operationalization of an inclusive DRRM model requires a significant amount of funding due to the activities and actors involved, exploring opportunities to mobilize resources is a strategy that can be pursued. Scaling up and across an inclusive DRRM model can be done at various levels: municipal (to involve other barangays) and provincial (to involve other municipalities, regional and national) levels. Given the limited DRRM funds available to many vulnerable municipalities across the Philippines, exploring other sources of funding is encouraged. At the national level, accessing the People’s Survival Fund (PSF) may be considered as an option, especially since the risk landscape of the country remains complex as a result of diverse hazards and risks brought about by climate change, which exacerbates the difficulties already faced by IP communities and other vulnerable groups.⁵³ PSF is a national funding available for LGUs and accredited local community organizations to finance climate change adaptation projects.⁵⁴ With this, capacity building interventions, such as trainings and awareness-raising activities, should cover not only basic concepts, theories and laws in DRRM, but should also teach the LGUs and other relevant stakeholders how to access funds (e.g., proposal development).

⁵² UN High Commissioner for Refugees. 2014. *Indigenous peoples in natural disasters: Protection in Super Typhoon Haiyan*.

⁵³ Pan American Health Organization and World Health Organization Regional Office for the Americas. 2014. *Recommendations for engaging indigenous peoples in disaster risk reduction*. Washington, DC: PAHO.

⁵⁴ Green Climate Fund Philippines. 2020, December 28. *People’s survival fund*. <https://www.gov.ph/web/green-climate-fund/people-s-survival-fund>.

The funding for DRRM-related programs and services for IP can also be obtained from other budget sources available at the LGU level, such as the Development Fund and Gender and Development (GAD) Fund. As stipulated in RA 7160 (also known as Local Government Code), every LGU shall allocate at least 20% of its IRA for the development fund.⁵⁵ On the other hand, each LGU is required to allocate 5% of their annual budget appropriations to support a project, programs and activities related to GAD.⁵⁶ Considering the limited local DRRM fund of many vulnerable municipalities in the country, the duty-bearers should be more resourceful in securing a budget for the implementation of long-term interventions, such as livelihood and infrastructural projects, that will help reduce the vulnerabilities of IP to disasters.

Building partnerships within and outside the Mangyan community is also a potential strategy for the adoption of an inclusive DRRM model.⁵⁷ The different Mangyan tribes should work as a collective and pool their resources and capacities to advance a DRRM approach that addresses their exclusion. Working as a collective will give the Mangyan a stronger voice to hold the duty-bearers accountable. Besides partnerships within the Mangyan tribes, partnerships with groups advocating for the rights of Mangyan can also be explored. These groups may include civil society, faith-based community, academe, and private sector with the potential to become champions in and advocates of inclusive DRRM along with the IP community.

➤ Institutionalization of ICDRM programs through policy

The institutionalization of the ICDRM program through a legislation can be a potential strategy to address the issue of change in leadership. The presence of a policy will help sustain the gains of the ICDRM program regardless of changes in government administration. Once a policy is in place, interventions to advance an inclusive DRRM approach will continue to prosper since there is an administrative authority and funding is allocated. Activities related to awareness raising, capacity building and an advocacy campaign for inclusive DRRM are among the annual programs, projects and activities of the different offices comprising the local government. For example, since the MDRRMO is the focal LGU department that handles DRRM affairs, sustaining the capacity of its human resources in ICDRM can become a regular LGU activity. The MDRRMO has a crucial role in the replication process, especially in scaling across all other barangays. Thus, it is important to ensure they remain technically equipped.

3.3. How Can Beneficiaries Help Build the Models?

As frontliners during disasters, the Mangyan are undeniably significant actors who play an important role in advancing an inclusive model for DRRM. Amid the wide range of vulnerabilities and challenges that confront the Mangyan, they also have the potential to be active and able allies in building a disaster-resilient society that recognizes the needs and roles of everyone regardless of age, gender, ethnicity, economic status and educational background. Mangyan can be supported in harnessing their potentials to build an inclusive DRRM model through:

➤ Strengthening community organizations, including the indigenous political structures

⁵⁵ Department of Budget and Management. 2020. Local Budget Memorandum No. 80. <https://www.dbm.gov.ph/wp-content/uploads/Issuances/2020/Local-Budget-Memorandum/LOCAL-BUDGET-MEMORANDUM-NO-80.pdf>.

⁵⁶ Department of the Interior and Local Government-Bureau of Local Government and Development. 2016. Guide on the Review and Endorsement of LGUs' GAD Plan and Budget and Review of LGU's GAD Accomplishment Report. https://www.dilg.gov.ph/PDF_File/reports_resources/dilg-reports-resources-2016115_3e23ad73ac.pdf.

⁵⁷ UN WCDRR. 2020, October 20. *Governments, Communities and Groups Acting Together Issue Brief*. Inclusive Disaster Risk Management. <https://www.wcdrr.org/uploads/Inclusive-Disaster-Risk-Management-2.pdf>.

Strengthening of existing CBOs, including indigenous political structures, offers a platform to promote and facilitate an inclusive approach in DRRM. Considering the CBOs consist of vulnerable groups, pursuing efforts to bolster their operation and capacities is deemed fundamental to giving them a voice and more visible role in community affairs, including risk governance processes. Among the existing CBOs within the Mangyan communities are the CSG, FAMATODI and TAGMARAN. These CBOs recognize they have a role to play not only in DRRM, but also in community development. A CBO member stated:

“We can contribute in the development of our municipality, province and country. As Filipinos, we are allies in advancing the development of our country.” (FGD with Mangyan CSOs)

Similar to CBOs, indigenous political structures comprised of elders, a captain, councilors and IPMRs also need to be strengthened toward the realization of an inclusive approach in DRRM. Besides constant guidance and continuous capacity building, strengthening of political structures can be done through advocacy work so that the role of Mangyan leaders in decision-making processes will be recognized by both government and non-government entities. Engaging Mangyan leaders in the entire risk governance processes is key to developing responsive and sustainable DRRM strategies.

“By engaging the Mangyan in the whole implementation process, the purpose of any DRRM interventions will be clear at the onset, and the leaders can help in explaining them to other community members.” (FGD with Tau-buid men)

➤ **Harnessing capacities and the potential of women and youth**

Considering the impartial impacts of disasters, everyone in the community has a role to play in DRRM, including women and youth. Based on the narratives of Mangyan communities and Plan, women and youth are also able actors in resilience-building through their participation in CSGs and dissemination of early warnings. Both can better participate in DRRM activities by conducting trainings to increase their awareness and further organizing work to better guide them in working as a collective. The role of youth in information dissemination is recognized, and this can be further harnessed through providing opportunities for capacity building and values formation. On the other hand, in the case of women, they expressed that they also have much to offer in terms of helping their family and the greater community. According to them, one of the actions that can enable them to do this is to have a women’s organization (e.g., CSG and cooperative) within their community. Through the women’s group, they will have the opportunity to be heard.

“We hope to have our own president that is separate from the men. We also have a right to speak and be heard. Women have different sentiments from men.” (FGD with Alangan women)

➤ **Increasing the representation of IP in government-mandated bodies**

Currently, Mangyan are represented in government-mandated bodies from the province down to the barangay level through the IPMRs. At the municipal level, they also sit as a member of the DRRM council and development council. Further, at the barangay level, Mangyan are part of the barangay council and barangay court or peace committee. The representation of Mangyan in such bodies needs to be maximized to really serve as the voice of the IP community and pursue interventions responsive to their needs, may it be in policy development, social protection or risk governance. The Mangyan representatives have the duty to promote the best interests of Mangyan through articulating their felt needs and ensuring the formulated programs prioritize the safety and welfare of the entire community. They should be able to actively influence the programming and budgeting processes. A Mangyan CSO respondent conveyed:

“Mangyan should not be merely treated as “hanging” passengers, they should be inside the jeepney and be able to drive.” (FGD with Mangyan CSOs)

➤ **Building local capacities to sustain ICDRM efforts and benefits through culture-sensitive trainings and awareness-raising activities**

For vulnerable groups like Mangyan to really exercise full and meaningful participation, efforts aimed at enhancing their capacities are crucial. Considering their low literacy level, capacity building activities that involve awareness raising and skills enhancement are encouraged for them to be able to actively take part in the entire risk governance processes, as shared by both Mangyan and non-Mangyan respondents.

“When Mangyan are capacitated, they will be better equipped in exercising their right to participation.” (FGD with Mangyan CSOs)

The conduct of leadership development, literacy enhancement programs and training of trainers among Mangyan adults and youth is needed for them to take on a more active role in resilience-building and development. In the creation of a learning curriculum (e.g., DRRM training), the culture, age and literacy level of the Mangyan need to be carefully considered. Further, in conducting livelihood-related trainings, it will be better if these are accompanied by livelihood materials or resources for Mangyan to apply and sustain their learnings.

PART 4. CONCLUSIONS AND RECOMMENDATIONS

The study reveals that replicable elements of a potential model on inclusive community-based DRRM are present under the Plan International's ICDRM project intervention in Sablayan, Occidental Mindoro, Philippines. Insights from the IP in Barangays Burgos (*Tau-buid* tribe) and San Agustin (*Alangan* tribe), as well as representatives from the MLGUs and barangay LGUs, civil society, and Plan International-Mindoro Field Office, point to specific project interventions, policies and implementation approaches that can further be developed to form part of a strong ICDRM model.

In reference to Domain 1, the project supported interventions enhancing the existing municipal and barangay DRRM structures, which led to expansion in membership to include representatives from vulnerable groups. In the municipality of Sablayan, this provides the municipal IPMR, as the representative in the MDRRMC, to have a platform to formally coordinate DRRM-related concerns of both Alangan and Tau-buid tribes. At the barangay level, aside from the barangay IPMR, elected IP officials in the barangay council and IP leaders, the expansion in BDRRMC membership enabled the participation of individual members of the Mangyan communities to be part of its sub-committees. In an effort to sustain the gains of these interventions, the project also supported the enforcement of legislations through the passage of Municipal Executive Order No. 2019-029 and barangay resolutions in IP-inhabited barangays, which institutionalize the representation of IP in the local DRRM structures. However, opportunities remain in terms of ensuring the IP representatives in the DRRM structures are able to genuinely and adequately represent all of IP's voices. Currently, gaps in IP representation relate to the lack of representation of women and other vulnerable groups in the structure, and the lack of IP organizations sitting as members of DRRM structures.

Through the representation in the DRRM structures mentioned previously, IP gained opportunities to take part in risk assessment and planning processes often only done by the LGUs. This led to an increased recognition among LGU actors of the capacity and potential of IP to be part of resilience-building efforts. In both municipal and barangay levels, it was also noted that IP representation in risk assessment and DRRM planning led to the development of DRRM plans with interventions directly targeting the needs of IP communities. In terms of implementation approaches, the sitio-level conduct of other project interventions is noted as replicable as it facilitated increased participation of other members of the IP community, especially women in activities such as family-level disaster preparedness training and simulation exercise. On the other hand, engagement with the IP political structure at all stages of the project implementation is noted to have helped facilitate collective decisions among IP since the IP leaders are the ones primarily coordinating community affairs. Similar to the previous domain, gaps in IP representation in risk governance processes relate to the limited representation of vulnerable groups in risk assessment, DRRM planning, implementation and monitoring processes.

For Domain 3, the study showed capacity building activities, such as family disaster preparedness and simulation exercises, are project interventions that may be replicated as they helped in raising the awareness among the IP communities and, to some extent, equipped them with disaster preparedness actions related to typhoons. The project's support to the provision of relevant DRRM materials and equipment is also noted to have complemented disaster preparedness trainings and plans. The provision of equipment, such as the public address system, supported IP communities in undertaking DRRM actions such as the dissemination of warning information. However, under this domain, gaps remain in terms of

addressing the underlying causes of risks among IP, especially those related to poverty, resulting from social exclusion, historical marginalization and discrimination.

With regard to Domain 4, while much effort still needs to be done in terms of including women in resilience efforts, the study revealed that ICDRM project’s effort to form the CSGs is an intervention that can be replicated. Based on the experience of Alangan women, Plan’s support to the formation of CSGs helped women to be more organized and to collectively work to manage their organization. Ultimately, their savings enabled them to provide for the needs of their families in times of emergencies. Currently, gaps in IP women’s participation relate to the unaddressed gender-based inequalities that limit women’s opportunities to participate in resilience processes.

In further developing these elements to form part of a strong ICDRM model, there is a need to pay attention to addressing present gaps in each domain. Summarized in **Table 9** below are the recommendations derived from the study on how to improve inclusion in each domain.

Table 9. Summary of Recommendations for Replication per Domain

Domain	Recommendations for Replication
IP Representation in Local DRRM Structures	<ul style="list-style-type: none"> • Broaden representation in DRRM structures to include IP and their organization. • Support the formation and/or strengthening of IP-led organizations. • Create better opportunities for women to take on leadership roles in DRRM. • Sustain advocacy work among duty-bearers at the barangay and municipal levels to institutionalize an inclusive DRRM approach.
IP Representation in Risk Governance Processes	<ul style="list-style-type: none"> • Strengthen community-based interventions and approaches to enable greater participation among women, girls and boys, older persons and persons with disabilities in risk governance processes. • Mobilize the IP community in the implementation and monitoring of DRRM actions. • Support the implementation of effective and inclusive communication strategies to increase access to DRRM information.
Addressing IP’s Vulnerabilities to Disasters	<ul style="list-style-type: none"> • Support efforts toward risk-based and culture-sensitive DRRM programming. • Support measures that strengthen poverty reduction measures among IP.
Women’s Participation in DRRM	<ul style="list-style-type: none"> • Strengthen the organizing of work among IP women through advocacy and capacity building activities. • Implement advocacy work among stakeholders, especially duty-bearers and male IPs, to advance women’s participation in DRRM. • Provide opportunities for IP women to perform a more proactive role in DRRM such as engagement in education and awareness-raising activities.

In undertaking the recommendations above, it is important to recognize the centrality of the role of IP in helping build this model. More importantly, actions must be founded in recognition of IP as rights holders and equal partners in resilience and development. Insights from the study involving the Alangan and Taubuid tribes reveal that IP can be better supported in taking an active role in building a strong ICDRM model through strengthening of IP CBOs, including the indigenous political structures; harnessing the capacities and potential of IP women and youth; increasing the IP representation in government-mandated bodies; and building their capacities to sustain ICDRM efforts and benefits using culture-sensitive approaches.

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