

Workshop Report

***Understanding Climate, Conflict,
and Environmental Impacts in the
Bangsamoro Autonomous Region
in Muslim Mindanao (BARMM)***

November 2023

Harvard Humanitarian Initiative - Program on Resilient Communities
Mindanao State University - Iligan Institute of Technology



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About the Conveners

The **Harvard Humanitarian Initiative (HHI)** is a University-wide academic and research center in humanitarian crisis and leadership. HHI is based at the Harvard T.H. Chan School of Public Health Department of Global Health and Population and is affiliated with Brigham and Women's Hospital Emergency Medicine Department. The mission of HHI is to create new knowledge and advance evidence-based leadership in disasters and humanitarian crises. The Program on Resilient Communities within HHI has been operating in the Philippines since 2015 using evidence-based and collaborative approaches to support better preparedness for disasters.

The **Mindanao State University – Iligan Institute of Technology (MSU-IIT)** is dedicated to academic excellence with a commitment for the holistic development of the individual and the society. Founded in 1968 under the provision of Republic Act (RA) 5363, MSU-IIT is known for its excellence in science and technology and its passion for extensive research and community involvement. Its College of Arts and Social Sciences has been recognized by the Commission on Higher Education as Centers of Development in Filipino, History, and Sociology. All of its programs have also been granted Level IV Accreditation by the Accrediting Agency of Chartered Colleges and Universities (AACCUP).

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Acronyms

ANSA - Armed non-state actor

BARMM - Bangsamoro Autonomous Region in Muslim Mindanao

BIFF - Bangsamoro Islamic Freedom Fighters

BTA - Bangsamoro Transition Authority

CSO - Civil society organization

HHI - Harvard Humanitarian Initiative

IDP - Internally displaced person

INGO - International non-governmental organization

IP - Indigenous peoples

LGU - Local government unit

LLDA - Lake Lanao Development Authority

MAFAR - Ministry of Agriculture, Fisheries and Agrarian Reform

MENRE - Ministry of Environment, Natural Resources and Energy

MILF - Moro Islamic Liberation Front

MNLF - Moro National Liberation Front

MSU-IIT - Mindanao State University – Iligan Institute of Technology

NGO - Non-governmental organization

NSAG - Non-state armed group

SPMS - Shariff Aguak, Pagatin, Mamasapano and Shariff Saydona



1. Introduction

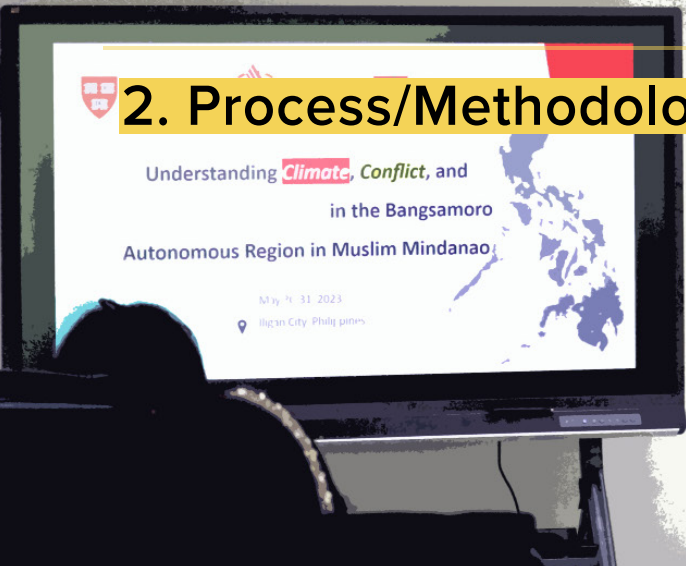
In 2022, the World Risk Report ranked the Philippines as the most disaster-prone country in the world.¹ As such, the country is highly vulnerable to climate change, under which both the frequency and intensity of disasters are projected to increase. Yet, more frequent typhoons, rising sea levels, and loss of biodiversity will have especially severe consequences for communities living in fragile contexts experiencing conflict and environmental degradation. With this in mind, HHI and MSU-IIT have established a joint research area of focus: to expand and strengthen knowledge on the intersection of climate change, conflict, and the environment. Through a collaborative research initiative that examines this intersection in the BARMM, HHI and MSU-IIT seek to better inform practice and policy across the humanitarian, development, and peace and security sectors and ultimately support community resilience in conflict-affected areas.

To launch this research initiative, HHI and MSU-IIT welcomed representatives from academia, local, national, and international NGOs, and community and local government leaders to MSU-IIT's Iligan City campus for a two-day workshop entitled "Understanding Climate, Conflict, and Environmental Impacts in the Bangsamoro Autonomous Region in Muslim Mindanao." The workshop was held on May 30-31 and aimed to achieve the following objectives:

1. Develop a multidisciplinary understanding of the complex and intersecting consequences of climate change, environmental degradation, and conflict in the BARMM;
2. Establish a community of practice and interest working at this intersection; and
3. Identify priorities and opportunities for addressing negative impacts through collaborative and complementary approaches.

Practitioners and scholars engaged in conflict-affected settings that are impacted by climate and environmental hazards may be siloed in their approaches to supporting resilience. On the one hand, this is for good reason, as these sets of actors have different objectives, organizational cultures, values, and ways of working. Yet, communities living in the BARMM experience these phenomena organically, and increasingly, their impacts are interrelated. Consequently, the workshop was intentionally designed to provide a cross-sectoral, interdisciplinary platform for discussion and to encourage dialogue between actors that may not normally have opportunities to collaborate. This report documents the process of designing and implementing the workshop, summarizes its outputs, and discusses steps for continued engagement in research and practice at the intersection of climate change, environmental degradation, and conflict.

¹ World Risk Report 2022. Bündnis Entwicklung Hilft, Ruhr University Bochum – Institute for International Law of Peace and Conflict 2022. <https://weltrisikobericht.de/weltrisikobericht-2022-e>.



2.1. Participants

A critical element of the workshop’s design was engaging a diverse group of scholars and practitioners as participants. The HHI and MSU-IIT teams identified individuals and organizations working in the fields of disaster risk reduction, humanitarian response, development, environmental protection, climate change adaptation, and conflict prevention to invite. Seventy key local and international actors working across the aforementioned fields were invited.

Of those invited to participate in the workshop, 29 organizations were able to attend in-person (See Matrix A). Some organizations expressed interest in participating in the workshop online; however, HHI and MSU-IIT felt it was important to hold the workshop in-person to remove communication barriers, establish rapport among participants, and maximize the limited discussion time allotted for each workshop session.



Workshop participants and organizers pose for a group photo at MSU-IIT campus in Iligan City, Philippines.

Matrix A.

<i>Classification</i>	<i>Name of organization</i>
INGOs (including religious groups)	<ul style="list-style-type: none"> • International Alert Philippines • The Asia Foundation* • Japan International Cooperative Agency • International Crisis Group • Climate Change Commission • Greenpeace Philippines* • ForumZFD* • Catholic Relief Services* • Community and Family Services International* • Action Against Hunger* • International Organization for Migration • CDA Collaborative* • Adventist Development and Relief Agency • ALIGHT South East Asia • Plan International • Islamic Relief Worldwide Philippines
NGOs and CSOs	<ul style="list-style-type: none"> • Al-Mujadilah Development Foundation, Inc.* • Nagdilaab Foundation Inc. • Binhi of Peace and Change, Inc. • Assistance and Cooperation for Community Resilience and Development, Inc • Balay Mindanaw Foundation Inc. • MARADECA Inc.* • Reconciliatory Initiatives for Development Opportunities, Inc.* • Tri-People's Organization against Disasters Foundation, Inc. • Support to Bangsamoro Transition (SUBATRA) • Lopez Group Foundation • The Conflict Resolution Group Foundation, Inc.* • The Oscar M. Lopez Center • Balsa Mindanao Inc. • BAPESDA, Inc. • Bangsamoro Center for Just Peace • Balay Rehabilitation Center* • Bangsamoro Women Foundation for Recovery and Development • Duyog Marawi • Ecosystems Work for Essential Benefits • Health Organization Mindanao • Initiatives for Dialogue and Empowerment through Alternative Legal Services Inc. • Integrated Resource Development for Tri-People* • Kalilintad Development Foundation, Inc. • Muslim-Christian Agency For Advocacy, Relief and Development, Inc. • Ranaw Bay Mindanao Emergency Response Network • Save Mindanao • Siyap ko Pagtaw Operations for Peoples Empowerment*

Academic institutions	<ul style="list-style-type: none"> • Notre Dame University - Institute of Autonomy and Governance • University of Hawaii - Minoa* • University of the Philippines Mindanao* • University of the Philippines Visayas* • Western Mindanao State University* • Conciliation Resources • Dansalan College Foundation • University of the Philippines Diliman - UP Resilience Institute • De La Salle Araneta University - Environmental and Climate Change Research Institute* • Mindanao State University Tawi-Tawi* • Mindanao State University Marawi* • Mindanao State University General Santos* • Mindanao State University Iligan Institute of Technology* • Ateneo de Davao University • Sulu State College*
Government / BARMM Ministry	<ul style="list-style-type: none"> • National Commission on Muslim Filipinos • Ministry of Science and Technology • Ministry of Environment, Natural Resources, and Energy • Ministry of Public Order and Safety* • Ministry of Social Services and Development • Ministry of Indigenous People's Affairs
United Nations	<ul style="list-style-type: none"> • UN High Commissioner for Refugees / UN Refugee Agency* • UN Department of Safety and Security • UN Development Programme* • UN Children's Fund / UNICEF* • UN Population Fund / UNFPA • UN Office for the Coordination of Humanitarian Affairs*

* = In attendance

2.2. One-Page Outlines

Upon confirming their attendance, participants were invited to develop a one-page outline responding to the following questions:

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?
2. What are your key concerns about these impacts?
3. How does your work relate to these concerns?
4. What information, tools, and/or resources do you need to better address these concerns through your work?

The outlines provided insights on the questions based on participants' professional experience and highlighted recurring challenges that impede community resilience in the BARMM context. The HHI team conducted a literature review to provide additional contextual information as well

as highlight conceptual themes that are discussed in the climate/conflict literature. The outlines and literature review were used to identify thematic areas to cover in workshop plenary and breakout discussions.

2.3. Workshop Program

Day One

<i>Time</i>	<i>Activity</i>	<i>Facilitator</i>
8:30 - 8:45	Registration	
8:45 - 9:15	Prayer Philippine National Anthem University Hymn	
	Welcome Remarks	Prof. Marie Joy D. Banawa Dean, College of Arts and Social Sciences, MSU-IIT
	Rationale of the Workshop	Dr. Vincenzo Bollettino Director, Program on Resilient Communities, HHI
	Inspirational Message	Prof. Alizedney M. Ditucalan Chancellor, MSU-IIT
	Cultural Performance	Kalimulan Cultural Dance Troupe
9:15-10:00	Introduction of the Participants Group Norms and Expectations	Dr. Vincenzo Bollettino
10:00-12:00	Workshop Session 1: Review of One-Pagers and Opening Questions	Dr. Patrick Vinck, Director of Research, HHI
12:00-13:30	Lunch	
13:30-15:00	Workshop Session 2: Mapping the Intersection Among Climate, Conflict and the Environment (conceptual)	Dr. Vincenzo Bollettino
	Workshop Session 3: Mapping the Intersection Among Climate, Conflict and the Environment (case studies)	
15:00-15:30	Networking Break	
15:30-17:30	Workshop Session 4: Stakeholder Mapping (case studies)	Dr. Vincenzo Bollettino

Day Two

<i>Time</i>	<i>Activity</i>	<i>Facilitator</i>
8:30-12:00	Synthesis Presentation on Climate Security Program for the BARMM	Dr. Glenn Banaguas, Climate Scientist, Environmental and Climate Change Research Institute
12:00-13:30	Lunch	
13:30-15:00	Workshop Session 5: What Questions Remain? (case studies)	Dr. Patrick Vinck
15:00-15:30	Networking Break	
15:30-17:30	Workshop Session 6: Strategies and Next Steps	Dr. Patrick Vinck and Prof. Yasmira Moner, Gender & Development Focal Person, MSU-IIT
17:30	Adjourn	

2.4. Workshop Sessions

The workshop employed a combination of plenary and breakout group discussions. Breakout groups were assigned by the workshop organizers to ensure that participants of different fields, affiliations, geographical location and gender could voice their diverse perspectives. In the first breakout session, the participants were grouped according to the type of organization they were affiliated with. Each group had a mix of local and international actors. In the second breakout session, gender balance was considered in addition to type of organization. Each group was formed with an equal number of male and female members belonging to local and international organizations. In the third breakout session, the geographical location of the participants and the type of case studies that were presented during the first breakout session were considered in the group assignments. After each breakout session, the participants convened in a plenary to report each group's inputs to the larger group. Each group presentation was followed by a question and answer session.

2.4.1 Group Norms and Expectations

Understanding the complexity and sensitivity of the discussion topics, the participants underscored that there must be a conscious effort to maintain a safe yet brave space during the workshop. They emphasized that accepting diverging perspectives and embracing discomfort are key to creating a culture of healthy dialogue. They also mentioned meaningful participation shall be upheld for everyone.

At the onset, the participants expressed interest in establishing a community of practice. They also agreed that the outcomes of the workshop should be foundations for long-term, sustainable

solutions, recommendations, and best practices for more informed programming in their respective organizations. There was also a call to engage Indigenous communities in future dialogues to learn from Indigenous knowledge and practices on disaster risk reduction and environmental protection which can help address climate change.

2.4.2. Review of One-Pagers and Opening Discussion Questions

Dr. Patrick Vinck, HHI Research Director, briefly reviewed themes that emerged in the one-page outlines submitted by participants. The following questions were then posed to the group to begin the workshop:

1. What do you think are the commonly identified impacts of climate change?
2. What are the immediate and long-term impacts of conflict?
3. How do you think climate change affects conflict?
4. How does conflict influence climate change?

2.4.3. Mapping the Intersection of Climate Change, Conflict, and the Environment

Next, workshop participants engaged in a conceptual mapping exercise to explore the complex intersection and interactions among climate change, conflict, and the environment. Participants were assigned to one of five breakout groups for the mapping exercise. Groups were organized by sector or type of organization. The breakout groups were provided with poster paper and markers and had 30 minutes to map conceptual linkages among climate change, conflict and the environment. After the 30-minute session, each group selected a representative to present what they had discussed in plenary. A plenary discussion followed.

2.4.4. Further Exploring the Intersection Using Case Studies

After mapping the conceptual connections among climate change, conflict and the environment, breakout groups were asked to examine these connections as they appear in specific geographic areas or cases in the BARMM. The group assignments remained the same as in the previous session and each group discussed at least one case study. Similarly, at the end of the breakout session, groups returned to plenary and presented the salient points of their discussions.

2.4.5. Stakeholder Mapping (Case Studies)

Using selected cases from the previous session, groups were asked to identify and map the relevant stakeholders involved in addressing climate change, environmental degradation, or conflict in those geographic areas.

2.4.6. Identifying Remaining Questions (Case Studies)

During this session, a representative from each group remained at their respective breakout stations while the rest of the group members moved to each of the other stations. At each station, the representative recapped their group's case to the members of other groups. This exchange provided an ample time for workshop participants to ask questions, seek clarification, offer recommendations, and further build on insights initially shared during the plenary workshop.

2.4.7. Strategies to Address Remaining Questions

The closing session of the workshop was an opportunity to brainstorm strategies to explore remaining questions from each of the case studies and think more broadly about next steps following the workshop. Participants returned to plenary for this session and Dr. Vinck and Professor Moner facilitated an open group dialogue.

2.4.8 Methodological Limitations

One of the limitations of the workshop was the absence of local residents who could have shared important community perspectives. In particular, the critical perspectives of Indigenous communities and other vulnerable groups were not represented. Participants also noted that the workshop would have benefitted from the participation of religious leaders and members of the private sector for a more holistic discussion.

Another limitation was the electronic method of invitation. Participants were invited to the workshop through email and social media, so those without access to these platforms could not be reached. The traditional way of inviting (visiting office and speaking to officials) could have been more successful given limited internet access in some areas of the BARMM.

Outputs



The following sections summarize the outputs from the breakout groups as well as key observations from plenary discussions.

3.1. Conceptual Connections Among Climate Change, Conflict, and Environmental Degradation

The relationship among climate change, the environment, and conflict remains opaque. Primary reasons for this ambiguity include a scarcity of empirical research explaining the interrelation of these factors and disparate academic and professional groups working on issues related to climate, the environment, or conflict in isolation. A primary objective of this workshop was to bring different professional and academic disciplines together into a discussion to identify common ground for inquiring about the conceptual links between climate change, conflict, and the environment, and to identify commitments to continued dialogue and research that will build an evidence base for understanding these links.

The breakout groups addressed these linkages by:

- Discussing how to integrate the varied disciplines addressing climate, conflict, and the environment;

- Identifying shared avenues for inquiries to conceptually link climate change, conflict, and the environment; and
- Seeking to derive research questions and foster continuous dialogue that establishes an empirical connection between these domains.

Participants noted that some of the direct impacts of climate change have indirect consequences for conflict. For instance, natural resources sensitive to climate variability may be depleted, causing increased competition. Resource scarcity can escalate tensions and conflicts. Furthermore, direct and indirect displacement from climate change can amplify social vulnerability and potentially trigger conflict.

Participants also discussed the cyclical nature of conflict and climate change. For example, climate-induced environmental degradation can escalate conflict. Conflicts can erode governance, fragment social cohesion, and lead to territorial disputes, thereby reducing adaptability to climate change. Finally, some conflicts can paradoxically preserve the environment by limiting resource accessibility.

Another important observation was that climate change is sometimes overshadowed by

immediate community concerns such as presence of armed groups, land tenure disagreements, poverty, and existing social tensions. These concerns affect community responses to climate change and conflict and may also influence how communities perceive adaptation and prevention measures implemented by humanitarian and development organizations. Climate discussions are often elite-centric, excluding grassroots communities due to jargon-heavy dialogue. Climate change adaptation measures are often modeled based on external practice and fail to be community-centered or account for historical injustices. There is minimal engagement of socially excluded and vulnerable communities and their knowledge systems and practices.

In addition, poverty is a significant barrier to community engagement in environmental conservation and climate action. In poverty-stricken areas, development might exacerbate environmental harm and climate change. Traditional development often necessitates resource-intensive infrastructure, harming the environment and thwarting climate change adaptation measures. Further, misaligned development projects, insensitive to local cultures or needs, can foster conflict.

Matrix B shows one breakout group’s illustration of the intricate web connecting climate change, its immediate effects, the long-term consequences, the absence of mitigating factors, and the onset of conflict in the BARMM.

Matrix B.

<i>Manifestations</i>	<i>Effects</i>	<i>Gaps</i>	<i>Results</i>	<i>Conflict</i>
Typhoons		Weak governance	Exploitation/human trafficking	Clan conflict (Rido)
Flooding	Landslides	Poor implementation of policies	Discrimination	People engaged in conflict with government
Drought	Scarcity of resources	Failure to integrate climate change into planning	Engagement with extremist groups	Host community conflict with indigenous groups
El Nino	Loss of income	Poor service delivery	Dependency on aid	Indigenous persons and Moro and settlers
La Nina	Psychological well being undermined		Mistrust	
Increased temperatures			Loss of ancestral domain	
			Political patronage	

The groups identified points for further exploration including, balancing development and environmental protection, the role of climate justice, disparities between community perceptions and government dialogue, and addressing challenges rooted in historical injustices for effective response.

3.2. Mapping Connections Using Case Studies

The BARMM is an ethnically, religiously, and geographically diverse area that encompasses both municipalities and rural villages and is rich in natural and mineral resources. The political geography is equally diverse. In many respects the BARMM overlays a set of complex relationships between climate, the environment, society, and the economy that are unique to different geophysical areas of its jurisdiction. To begin to understand the complex ways in which climate, the environment and conflict interact requires an examination of these unique sub-geographies. After mapping the conceptual connections between climate change, conflict and the environment, breakout groups were asked to examine these connections as they appear in specific provinces or cases in the BARMM.

3.2.1. Basilan

The province heavily relies on agriculture and fisheries as the main sources of income; however, extreme weather events caused a significant decrease in crop and fish yields in recent years. This has led to increased vulnerability of farmers and fisherfolk to be recruited by violent extremist organizations (VEOs) in the region.

3.2.2. Sulu

The province is believed to be the most impacted by climate change in the BARMM. Its geographical

location makes it susceptible to natural and man-made hazards; whereas, poverty and armed conflict slow down the disaster recovery process. Climate change has also impacted agriculture and livelihoods, but there are existing efforts to mitigate its effects.

3.2.3. Tawi-Tawi

Tandubas municipality, located in the northeastern part of Tawi-Tawi, provides an example of how the economic and social impacts of sea level rise can contribute to conflict. Sea level rise has contributed to an increase in soil salinity and a decrease in the quality of fresh water. In addition, sea temperature changes have impacted timing and quality of fish catches leading some fishing communities to migrate inland. Rising sea temperatures result in lower yields and quality of seaweed farming. Migration inland, due to storm surges and elevated sea levels, has led to an encroachment on ancestral sites which has led to land disputes, cultural conflict and increases in crime and violence. Migration off island to Zamboanga and Sabah has also been observed. Similar impacts of climate change are being observed in Sulu where reduced agricultural outputs and lower living standards have made reintegration of former combatants more difficult. In Basilan, reduced livelihoods of fisherfolk have promoted increased recruitment into armed groups.

3.2.4. Lanao del Sur

Illegal activities such as mining of black sand in Malabang and deforestation then subsequent decreasing forest cover in Ragain have been undermining and weakening environmental stability in the province, thus resulting in more frequent flooding and landslides.

In Marawi City, climate change is perceived to

have led to resource depletion through drought. Resource scarcity exacerbates historical clan feuds (*rido*), which together have driven migration to areas not well-equipped to receive around 500,000 migrants from nearby towns. Newly displaced populations find themselves in congested areas with poor infrastructure and impacted by health issues related to poor waste management. Displacement and migration have also contributed to tensions between host communities in Marawi and migrants with different cultural norms and practices. Local governance mechanisms and resources are insufficient to support growing populations as a result of migration. Around 7,000 households in Marawi have reportedly resorted to deforestation and other environmentally destructive activities to supplement livelihoods. Unstable livelihoods create an environment where recruitment of young people into armed groups further exacerbates conflict and undermines effective governance.

Climate change has also led to resource and species depletion in and around Lake Lanao. The BARMM government established the Lake Lanao Development Authority to “oversee the use, exploration, development, protection, restoration and maintenance of Lake Lanao and the area’s natural resources.”²¹ Workshop participants discussed creating metrics to evaluate the environmental, economic, and social impacts of the development of the Lake Lanao area. There was also a call to ensure that non-Moro populations, women, religious leaders, and traditional leaders are included and represented in LLDA.

Other stakeholders identified included local government units, the MENRE, MAFAR, BTA, and civil society organizations, and local NGOs.

While not chosen as a case study for this exercise, the 2017 Marawi Siege was a consistent point of discussion among multiple groups. The Siege illustrates a confluence of environmental, climate and conflict-related challenges which has implications for the BARMM at large. During the Siege, nearly 350,000 people were displaced. Despite the BARMM government’s promise to rehabilitate the Massively Affected Area (MAA) through Task Force Bangon Marawi and the Marawi Compensation Bill (Marawi Siege Victims Compensation Act of 2022), the majority of IDPs have not yet been able to return and reclaim and rebuild their homes. IDPs remain in the evacuation area or have moved in with family members. The evacuation area is located on hinterland, which was deforested so temporary homes could be built. The area still lacks proper waste disposal and a clean source of water, negatively impacting the health of the residents as well as the environment. The legacy of the Siege and the resulting social and environmental challenges continue to influence policy and governance throughout the BARMM. As this remains an important issue, research should be undertaken to better understand how social, environmental, and political challenges intersect with climate change in Marawi and surrounding areas.

3.2.5. Maguindanao (SPMS box)

The SPMS box, a military term referring to the contiguous towns of Salibo, Pagatin, Mamasapano, and Shariff Aguak, has enduring land disputes over areas in the Ligawasan Marsh, most especially in Pawas. The Ligawasan Marsh is located in the south of Mindanao and covers a large area that spans the provinces of Cotabato, Maguindanao, and Sultan Kudarat. It is the source of livelihoods and natural resources for many. It also includes designated protected areas for

21 Cayon, Manuel. “Development Agency Sought for Lake Lanao Management.” *BusinessMirror*, February 13, 2023. <https://businessmirror.com.ph/2023/02/13/development-agency-sought-for-lake-lanao-management/>.

birds and other wildlife. Because of the fertile land around the marsh, more than 100,000 residents rely on it as the primary source of livelihood; however, lack of clear ownership over the area often leads to rido among residents. In addition, armed conflict among NSAGs, ANSAs, and law enforcement operations, as well as flooding and clan feuds, trigger displacement in the SPMS. Till this day, these areas are among the poorest communities in the province. As a result, the presence of armed groups has become more prevalent, and farmers are more vulnerable to being recruited for violent extremism, making it a concentration point of BIFF.

3.3. Stakeholder Mapping

3.3.1. BARMM, at large

The climate change-conflict-environment nexus brings together a complex and diverse group of stakeholders in the BARMM. Both the national and BARMM governments hold policy making power. The regional government enforces national-level policies and mandates but also oversees the implementation of local government programs, projects, and activities in the BARMM. The Mindanao Humanitarian Team, with joint coordination at the region through the BARMM Rapid Emergency Action on Disaster Incidence (READi), is already in place. The private sector and non-governmental organizations are active service providers as well. Participants noted the important role that faith-based and traditional/religious leaders can play in consensus-building around climate action and environmental protection, as well as in local conflict resolution in the BARMM. Community members and traditionally underrepresented groups, including older people, IPs, women, youth, children, farmers and fisherfolk, and persons with disabilities are critical stakeholders and must be included in decision-making processes. NGOs and CSOs must prioritize accountability and incorporate

community feedback in programming. Groups of stakeholders in the BARMM have varying levels of influence and interest in climate, environmental and conflict issues. Additionally, participants noted that there are often power dynamics at play. These dynamics need to be identified as they may impact what is prioritized in terms of policy, but also in terms of resource and service distribution. In some cases, these dynamics may further entrench conflict roots or become triggers for new conflict.

3.3.2. Maguindanao

In Maguindanao, the BARMM government and political clans hold both the highest influence and interest among all stakeholders with regards to issues surrounding climate change, conflict and the environment. The leaders of the Moro Islamic Liberation Front (MILF) as well as Local Government Units (LGUs) also hold high influence and interest because they continuously advocate for autonomy and self-determination among the Moro communities. CSOs and NGOs have high interest, but lower influence. Peace actors hold high interest and influence, but are currently less involved in the area as other stakeholders. Similarly, faith-based leaders are currently less involved in the climate change-conflict-environment discussion, but could have high influence among communities as peacemakers. The Bangsamoro Islamic Freedom Fighters (BIFF) are additional stakeholders.

Displaced persons, INGOs, and Indigenous groups were seen to have great interests in Maguindanao but low levels of influence over what happens in the region. For example, the Teduray, an ethnic minority group, inhabit the area, and there are questions raised about the inclusion of Teduray ancestral lands in the provincial and municipal land use plans of the BARMM.

Foreign investors have played an important economic role in the area, particularly by filling in service gaps that are sometimes overlooked by the national and BARMM governments. According to the MHT, 37 development and humanitarian organizations have programmatic work in the province to help address these issues. On the other hand, the private sector at large contributes to environmental degradation through mass production. The sector has both interest and influence in the area, but remains on the sidelines of climate change, conflict and environmental issues.

Academic institutions have high interest, but mid-level influence as they do not hold formal policy-making power. Instead, their influence lies in engaging youth in awareness raising and advocacy for climate action, environmental protection, and peace. Women are another important stakeholder group, though historically have held less influence. Other historically underrepresented groups, especially the Indigenous People (IPs) and internally displaced persons (IDPs), hold highest interest since the impacts of climate change, conflict and environmental degradation directly affect their lives and livelihoods. However, these groups hold the lowest influence and are often left out of the conversation.

3.3.3. SPMS Box

The SPMS Box has a complex landscape of stakeholders addressing challenges in silos. Many stakeholders have divergent interests. Within the government, there has been a lack of political will to converge efforts of different agencies in addressing climate change, conflict and environmental degradation. At the community level, tensions and differing interests among ethnic groups has hindered conflict resolution initiatives.

3.3.4. Lanao del Sur

The creation of the LLDA is viewed as vital to regulate, rehabilitate, and restore ecological balance in the lake so that agriculture, fisheries, and livelihood activities are sustained, thereafter promoting economic development. This LLDA will also enforce measures to stop activities that are destructive to the lake, such as illegal logging. For this case, the Philippine Congress holds high influence and influence because of its policy-making power. Likewise, the National Power Corporation (NPC), National Grid Corporation of

the Philippines (NGCP), and the security sector hold high influence and interest. The municipal-level LGUs along the Agus River system also hold high influence and interest over the approval and implementation of the LLDA's operational programming.

The national and BARMM governments, including its regional ministries, have high influence but low interest because the creation of LLDA is currently not in their top priorities. Thus, sustained dialogue with the upper-level governments shall be pursued insofar as raising their interest about the LLDA.

The MENRE, Lanao del Sur Electric Cooperative, Inc. (LASURECO), local chief executives, academic institutions, municipal LGUs outside the river system, farmers and fisherfolk, residents in Marawi area, FBLs, CSOs, are MSMEs are highly interested in the creation of LLDA, but they hold low influence over it. Whereas, non-state armed groups have high interest because it may be considered a scheme for VEG recruitment once things fall apart.

MAFAR, Climate Change Commission (CCC), city disaster risk reduction and management offices (CDRRMOs), municipal interior and local

government offices (MILG), and IDPs have low influence and interest.

Multinational corporations are treading a fine line between their influence and interest over the creation of LLDA. While their power is hidden, they hold a significant role in breaking the status quo once tapped.

3.3.5. Other Bangsamoro communities/ areas

Teduray

- Stakeholders: MILF, BTA, Timuay Justice and Governance (TJG), and the National Commission for Indigenous People (NCIP)
- Actions to be taken: CADT, provisions should be followed, such as reconciliation committees
- Excluded: Lambangian, Dulangan, and Manobo communities

Ligawasan Marsh

- Stakeholders: MILF, Bantay Pawas, residents
- Actions to be taken: Understand the power dynamics of the area
- Excluded: custodians of the Pawas area

Panglima Sugala

- Stakeholders: MILF, MNLF
- Actions to be taken: Include narratives in the informal economy and infrastructure development
- Excluded: Illicit economy actors

Datu Paglas

- Stakeholders: Datu Paglas and family, former MILF combatants, MILF leadership, uni frutti
- Actions to be taken: Provide funds for BARMM to open banana farms; government intervention post-peace agreement
- Excluded but should be present: national government

3.4. Remaining Questions and Closing Observations

***How and from whom do we extract data?** The stakes are incredibly high, but we lack data. Currently, mapping and data from BARMM and MENRE are not accessible. It is noted that data from local newspapers are most accurate, but how do we involve the media in the dialogue? Moving forward, how can we sustain building evidence as a group?*

***How do we involve other stakeholders in addressing the nexus?** Women, traditional leaders, security sector, indigenous people's communities, youth*

***What intersecting factors can we include in the current discourse?** In itself, the nexus is already complicated and layered, but how can we look at the nexus in the lens of gender and sex, behavior, transitional justice, and politics?*

***How do we mainstream climate change when its impacts are not immediate and imminent?** How can we influence and inform local households in taking climate action when the term is too abstract?*

***How do we bring the BARMM government into the conversation?** What current policies and practices can workshop outputs be plugged into? How can the current dialogue shape or formulate policies, programs, and projects to address multipronged concerns?*



4. Conclusions and Next Steps

4.1. Addressing Data Needs

The workshop underscored the need for sufficient, substantial data and statistics from the government and other reliable sources to understand past events, extract future projections, and provide accurate context of climate change and its impact to the country, with a particular emphasis on the BARMM. Participants noted that the impacts of climate change are unknown and unpredictable, so having baseline data is key, especially in understanding the newly emerging nexus of climate change-conflict-environment. Once available, these data will also shape long-term, sustainable programmatic work on climate action in the region.

4.2. Breaking Down Silos Through Multidisciplinary Discussion

The workshop demonstrated the value in convening a multidisciplinary group of academics, practitioners, and other stakeholders to discuss climate change, conflict, and environmental degradation in the BARMM. Several participants noted that these issues are too often discussed in silos. Participants called for continued multi-stakeholder dialogue that brings together representatives from all BARMM provinces.

Participants also acknowledged that some stakeholders were missing from the conversation, including representatives of indigenous communities, religious leaders, and BARMM representatives. It was also noted that there is interest in climate, conflict and environment-related issues in the BARMM from stakeholders outside of BARMM, suggesting that the ways in which climate change, environmental degradation and conflict are addressed in the BARMM have implications for stakeholders and communities elsewhere in the Philippines.

4.3. Engaging the Private Sector

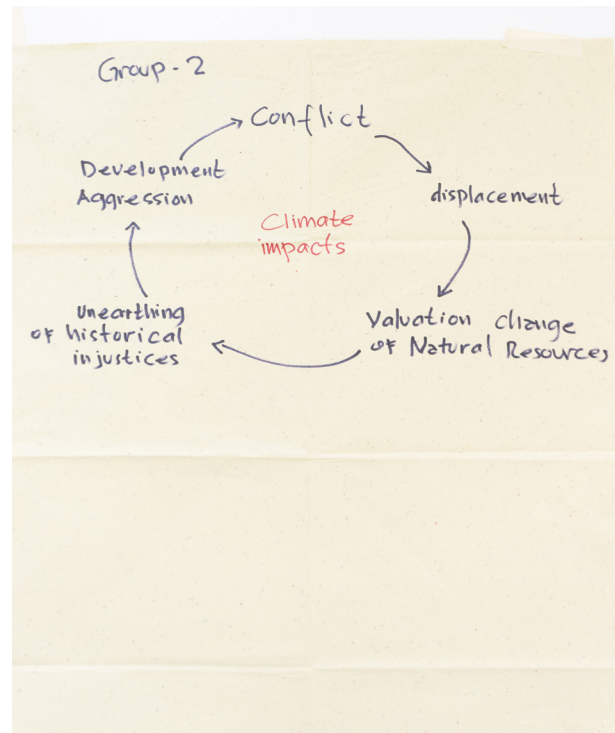
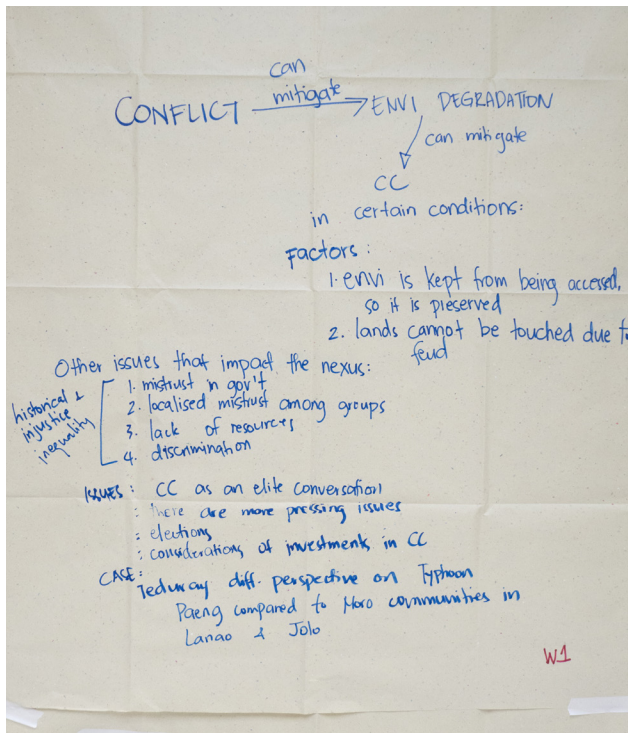
It was discussed that the private sector may be a previously untapped and missing link in addressing climate change. While the sector is primarily responsible for the acceleration of anthropogenic climate change, there has been limited engagement between humanitarian and development actors and key players in the private sector in the BARMM. Several participants expressed their interest in involving the private sector in the next conferences to explore the sector's potential in affecting positive change on these issues.

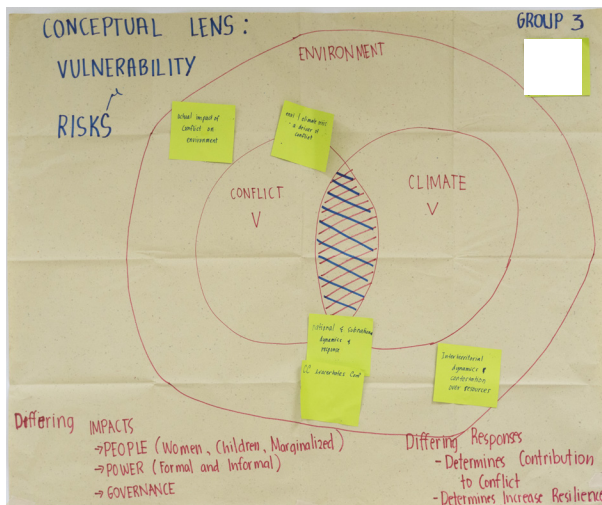
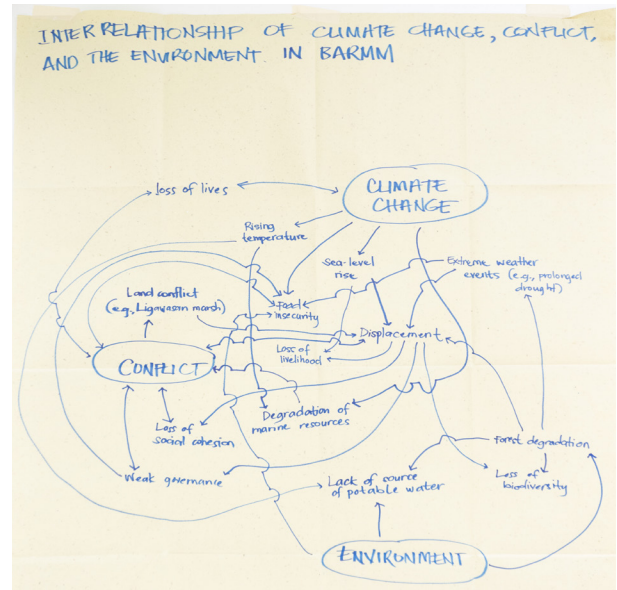
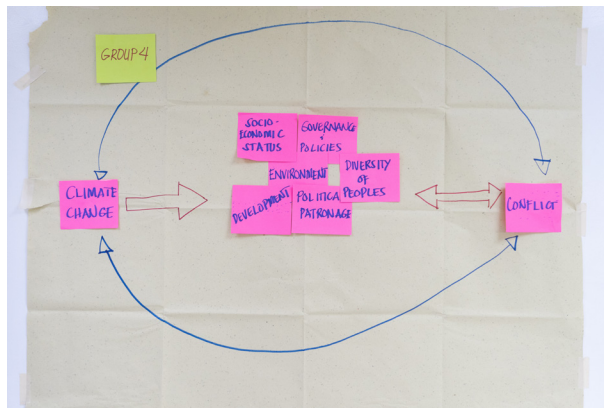
5. Appendices

5.1. Poster Images

[Click here to view images via external link](#) or click each image below.

Workshop #1





Workshop #2

→ The case of the Teduray

→ Marine sanctuary in Panglima Sugala & the MNLF

→ Envi protection of Liguasan marsh

→ Investment in Datu Paglas & Wao & the role of private sector

→ Tans in Jolo and reforestation = incentivising political clans (link ancestral lands & preservation of environment)?

→ self-determination - role in envi preservation, CC mitigation, & the role of community & conflict management

GROUP 1
W2

Group - 2

Tawi-Tawi Story (Tandubas)

1. slow onset impact due CC

↳ sea level rise → salt water intrusion → loss of water & of water

① encroachment on ancestral sites (social impact)

↳ Land disputes, Cultural disagreements, ↑ Crime/Violence

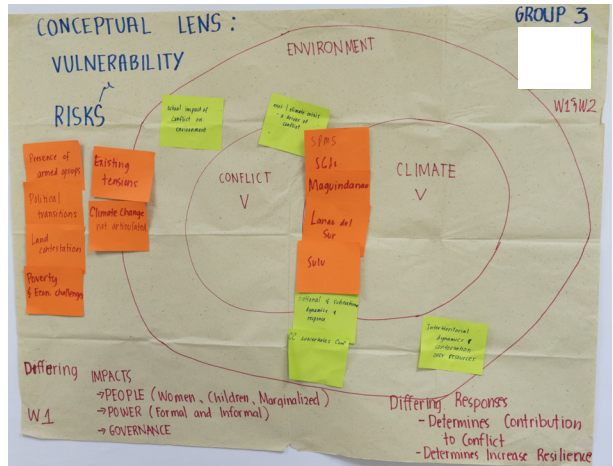
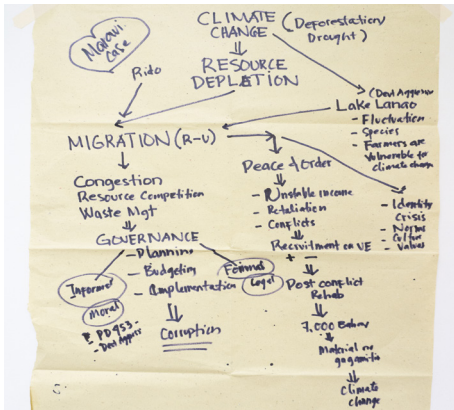
② changing season of fish catch (environment impact)

↳ livelihood disruptions

↳ focus on Agri use of Fertilizer (chemical)

↳ health impact

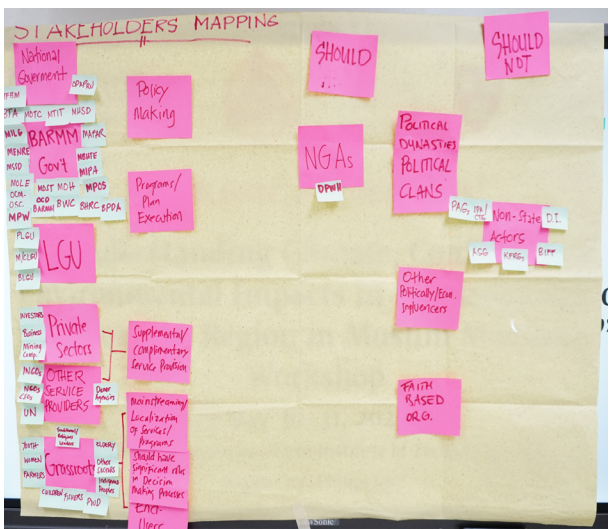
↳ Migration to Sabah or Zamboanga



Manifestations	Effects	GAPS	Results	Conflict
<ul style="list-style-type: none"> Typhoons Floods Drought landslide El Nino La Nina High heat index 	<ul style="list-style-type: none"> Shrinking of land Scarcity of resources displacement Loss of income livelihood Psychosocial well being 	<p>A- Governance</p> <ul style="list-style-type: none"> Weak implementations of policies lack of political will in mainstreaming CC issues. <p>B. Socio Economic</p> <ul style="list-style-type: none"> Poor service delivery system 	<ul style="list-style-type: none"> Exploitation/ Human trafficking Discrimination Loss/Engagement with Violent Extremism Dependency to govt, CSOs, to aid Frustrations of mistrust Diminishing claims ancestral domain Land grabbing Political Patronage 	<ul style="list-style-type: none"> People VS People (RPOD) People VS authority/ Govt Host comm. VS IDPs IPs VS Moro VS Settlers IBs VS Govt VEs VS Govt

Tawi-Tawi	Sulu	Pasigan	Maguindanao
<ol style="list-style-type: none"> Influx of migrants and returning residents resulting in worsening solid waste problem and increases vulnerability to storm flooding & coastal flooding Impact of CC on seaweed farming (low quality & yields) vs. in economic security 	<ol style="list-style-type: none"> CC impacts on agri & livelihood vis-a-vis reintegration efforts 	<ol style="list-style-type: none"> Decreasing yield of fisherfolk due to CC, leading to increased vulnerability of fisherfolk to VED recruitment 	<ol style="list-style-type: none"> Conflicting claims over Peoples of Ligawasan Marsh Impact of typhoon Paeng on JP Disruption of farming activities due to presence of armed groups and incidence of violence resulting in increased vulnerability of farmers to impacts of CC & VE recruitment Recurring displacement in SPMS base

Workshop #3

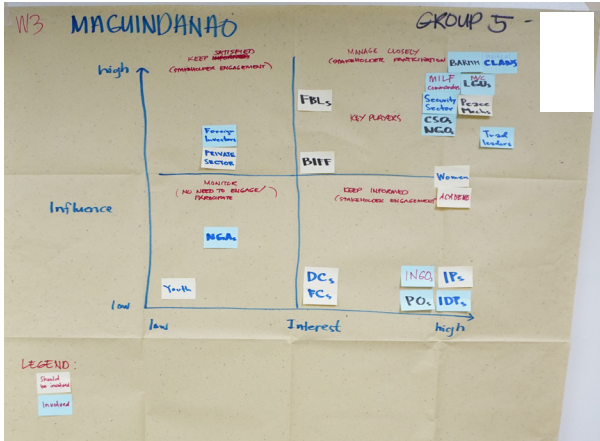


SOUTH UP, MAGUINDANAO/TEDURAY
 Stakeholders: MILF, BTA, TJG, NCIP
 Actions that should've been taken: CADT, provisions should be followed such as reconciliation Committee
 Excluded: Labangan, Dalangan, Manobo Communities

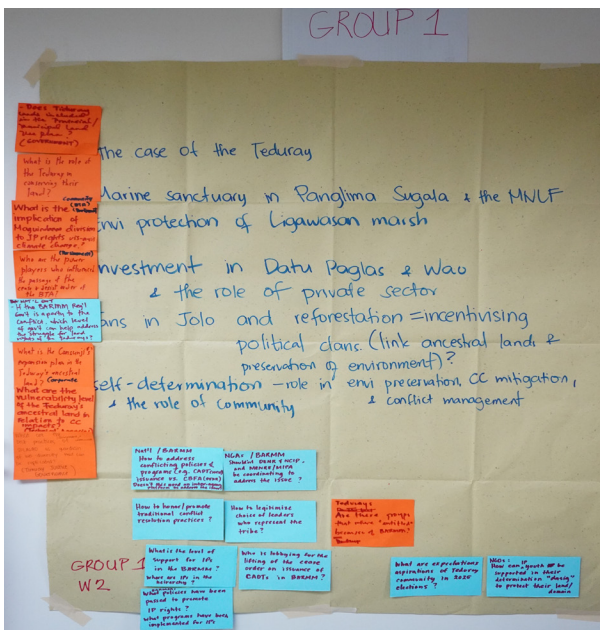
PANGUMA SUGALA
 Stakeholders: MILF, MNLF
 Actions that should've been taken: inclusion of narratives in the informal economy; infra
 Excluded: those in the illicit economy

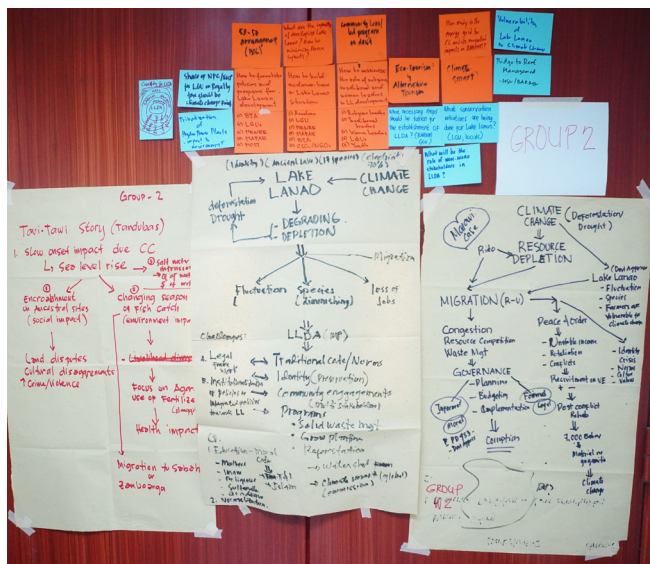
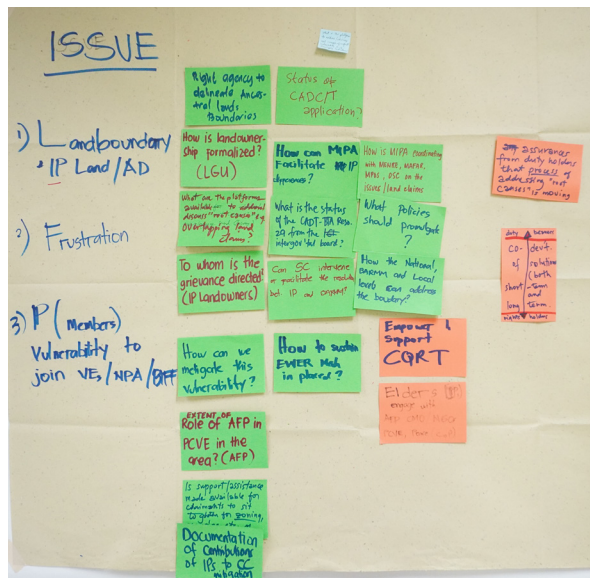
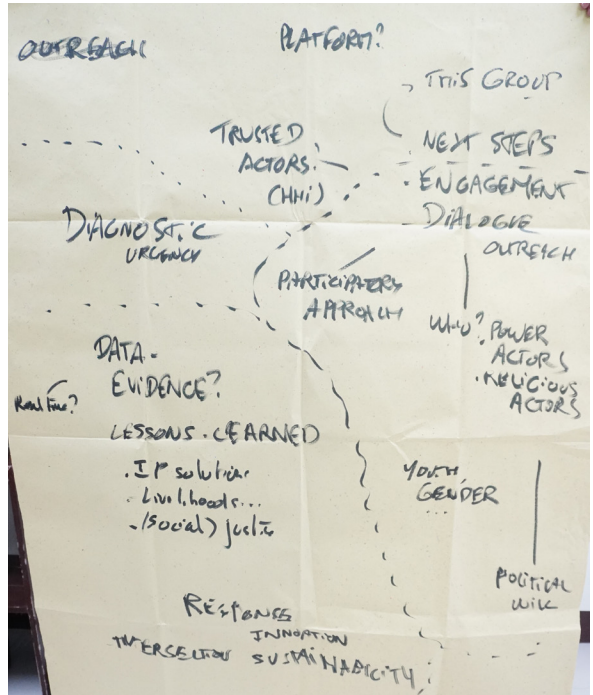
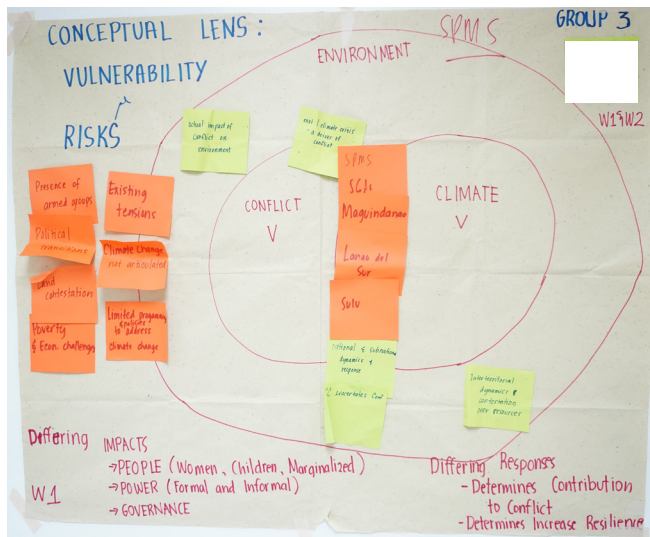
LIGAWASAN MARSH
 Stakeholders: MILF, Bantay Pawa, Residents
 Actions that should've been taken: understand the political dynamics of the area
 Excluded: custodians of the Pawa

DATU PAGLAS
 Stakeholders: Datu Paglas & family, former MILF combatant, MILF leadership, Uni-Fruiti
 Actions that should've been taken: provide funds for BARMN to open banana farms; gov't intervention post-peace agreement
 Excluded but should be present: National Government



Workshop #4





5.2. One-page Outlines

Participant 1

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

The anticipated impacts are connected to the intensification of already existing drives of conflict and the emergence of new ones. Internal displacement caused by conflict and climate change will become a persistent issue, and the scarcity of habitable and productive land will exacerbate land grabbing in the region. This will also allow private and state-owned corporations, as well as prominent families, to profit from the absence of law by diverting natural resources away from local people.

2. What are your key concerns about these impacts?

Communities already affected by decades of violent conflict and poor governance are worse prepared to deal with the consequences of climate change and degradation. Because all three aspects are so intertwined, violent conflict in the region may change its reasons over time, but it will always be present, giving the civilian population no hope for the future and, in many cases, the conviction that they have no choice but to resort to violence themselves in order to gain an advantage in it. As a result, the cycle of violence would never be broken.

3. How does your work relate to these concerns?

Our approach is centered on nonviolent conflict transformation, which focuses on transforming and healing relationships between people involved in a violent conflict so that violence does not return. In order to ensure that civil society has a voice in decision-making processes and to prevent them from becoming passive recipients of the effects of climate change, environmental degradation, and conflict, we also strengthen civil society organizations so they can be constructively critical and watchdogs of policymakers.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

Overcoming silos in this field of work is of the utmost importance. Although there are many resources available because to the high concentration of INGOs, NGOs, CSOs, and international organizations like the UN and others, the influence of peacebuilding activities is overstated if everyone works in silos. It is crucial to have a solid platform that can unite all of these organizations and allow them to examine potential areas of collaboration.

There is a lack of information and on the correlation between conflict, climate change and environment degradation and tools to measure these impacts (not only quantitatively, but also how they impact behavior).

Participant 2

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Vulnerable tribes are in diaspora in search of resources and means to sustain their daily needs and subsistence.
- Resources are becoming scarcer and limited to sustain the BARMM constituents.
- Maintaining the lifestyle of the BARMM constituents at the poverty threshold

2. What are your key concerns about these impacts?

- More and more BARMM constituents are continuously moving out of the region in quest for a good life.
- BARMM remains one of the poorest regions in the country.
- Peace in the region would remain elusive.

3. How does your work relate to these concerns?

- As an academician teaching in the college focusing on forestry and environmental studies, my work would be great in suggesting a solution particularly in mitigating the impacts of climate change and environmental degradation.
- As a professor in the higher educational institution, we are bound to conduct

researches, and the outputs of the researches could be used as scientific basis in the formulation of decisions and policies as regards the ongoing problems of climate change and environmental degradation.

- The institution where I am affiliated is advocating programs towards green environment to mitigate the impacts of climate change and environmental degradation.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Research and extension works.
- Knowledge sharing to young people such as students from various regions including BARMM.

Participant 3

1. What are the anticipated impacts of climate change, environmental degradation, and conflict in the BARMM?

- Climate change and environmental degradation may lead to resource scarcity such as water stress and decrease in natural resources among others, which:
- Can cause civil conflicts and intercommunal conflicts.
- Can induce crimes similar with cases in India.
- Can prolong existing conflicts.
- Can intensify existing economic vulnerability (poverty).
- Can increase terror attacks.
- Lead to more military-insurgent encounters
- Climate change can decrease yield. Agricultural ventures end up into “failures”, which can intensify cycle of debt among poor farmers with little income and/or land.
- Land disputes may intensify.
- Conflicts may induce governments to increase, intensify, and further punitive policies such as increase in military presence, which may lead to human rights abuses, violence, gendered violence, sexual harassment, hamleting, unjust arrests, physical harassment, and intimidation among others.
- May further and justify imperialist agendas through Balikatan exercises as well as economic, political, and military dependence to the US.
- Increase instances of bakwit (evacuations, evacuees) and displacement
- Loss of ancestral lands

- Loss of resources for medicine, water, and timber products among others.
- May affect identity and self-determination, which are intimately tied to land.
- Media exposure of conflicts may increase visibility and public awareness.
- Conflicts, through media, may bring to light issues such as negative impacts of climate change and environmental degradation as well as demands (e.g. social services, ancestral lands, self-determination, control of resources).
- Civil conflicts may possibly lead to peace talks and state compromising to demands of different sectors depending on political will of government.

2. What are your key concerns about these impacts?

- Human rights violations.
- Larger population and scale of people affected.
- Possible elite capture of peace talks and development.

3. How does your work relate to these concerns?

- Research and advocacy
- Grassroots engagement (albeit not in BARMM specifically)

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Funding to conduct further research and grassroots programs.
- Network with other academics, experts, policymakers, development workers inside and outside the country (e.g. sharing of best practices, research collaborations)

Participant 4

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

Increases in the intensity and incidence of climate-related disasters in the Philippines, and in particular in Mindanao, will inevitably have dramatic consequences on ongoing conflict in the BARMM. Efforts to respond to a greater number of emergencies will apply pressure on newly created and relatively fragile structures of governance within the BARMM. This will perhaps lead to weak, ineffective, delayed, or poorly designed responses – putting a greater number of people’s lives at risk. Weak response mechanisms may lead efforts to quickly becoming conflict insensitive – inciting conflict between groups or worsening existing dynamics; and/or this absence may generate a leadership vacuum which might be quickly filled by illicit groups. These issues are further compounded by the lack of tools and frameworks that integrate conflict sensitivity and DRR that are employed by national and international aid agencies and humanitarian responders. Finally, I am quite concerned about conflict as it relates to the upcoming elections (2025), and I feel that the BARMM is at a tipping point – where areas could backslide into greater issues of active violent conflict even with a seemingly unrelated issue such as a climate-induced disaster or issues of environmental degradation.

2. What are your key concerns about these impacts?

My key concerns about these impacts relate to the unintended negative outcomes that might come from weak governance and the tools that are inadequately adapted to respond to both climate-induced crises and conflict. Conflict issues in Mindanao are always present – whether active

or latent – and therefore, they are easily triggered. I am quite concerned that with greater incidence of climate-induced disasters and weak response structures at the regional and local levels, issues of conflict are going to occur with increased frequency.

3. How does your work relate to these concerns?

I am a researcher and expert in conflict sensitivity, and thus these concerns are quite pressing given the need to focus more attention at the nexus of conflict sensitivity and climate change. In particular, the clear gap in tools that are capable of responding to emergencies that occur at this nexus. Greater integration of conflict sensitivity needs to be embedded into our emergency response mechanisms – particularly during natural disasters – and these tools and resources need to be built with and upon local capacities and features of community resilience.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

I think the development of tools that integrate both conflict sensitivity and DRR response frameworks would be useful for the community more broadly. It would be really useful to know where the BARMM is in terms of these tools and response mechanisms and the approaches they are employing at the local level with local leadership and communities.

Participant 5

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

-When the sea rises due to climate warming and melting of the glacier the people in the sea shore will go uphill creating conflict on land and other resources.

-Deforestation and destruction of watershed due to development project will affect the lake Lanao level, the Agus river and eventually will affect our energy supply-electricity in Mindanao.

-Strong storms

-Flooding

-Displacement due to the impact of food and water scarcities.

-Economic impact: damages to agricultural crops

-Adversely affecting the movement of the people (to the job site or location) when roads and bridges are impassable.

2. What are your key concerns about these impacts?

There is no systematic program of the BARMM in addressing environment, though there are ongoing initiatives in tackling the impact of climate change.

Another displacement for indigenous people who were already marginalized

Impact on the livelihood of the Maranaos and other depending on the lake and Agus river.

3. How does your work relate to these concerns?

Were non-government organization (NGO) workers that can introduce environmental project.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

Funding the environmental project.

Participant 6

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- The anticipated impacts of climate change, environmental degradation and conflicts in the BARMM to the communities are vast in all aspects Economically it will make the communities poorer, livelihood will disrupt or may loss. For example, in the environmental degradation like flood or drought agricultural products will be affected in terms of yield.
- Migration is also one of the impacts of climate change, environmental degradation and conflict. For Meranao community when there is family conflict, family migrate to other community or place.
- Multiple Burden among women is also one of the impacts of climate change, environmental degradation and on-going conflict in the BARMM. When there is conflict women's household works increases. This was one of the results of the Rapid Gender Analysis, Al Mujaadila conducted.

2. What are your key concerns about these impacts?

- Multiple Burden among women that cause violence against women. The role and contribution of women is unrecognized and undervalued. It has negative effects to the lives of women.
- Conflicts cause impoverished situation in the communities.

3. How does your work relate to these concerns?

- As a development worker, we need to understand the nexus of peace in the development. Empowering women and men in the communities and promoting peace in the communities include addressing the root causes of conflict such as gender inequality.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- More capacity-building to be able to train more women and strategize addressing the concerns on gender inequalities and conflicts.
- More resources to do project initiatives in empowering women and men in the communities.

Participant 7

1. Concerns. A general assumption – shared by divergent forces (from international aid agencies, government planners, civil society groups, and insurgent movements) is that an end to conflict protects the environment better. On the contrary, peace in Moro Mindanao had created the opportunity for the wanton, unfettered exploitation of the BARM ecosystem by legal and illegal enterprises. This began with the forested areas before possibly moving to veins of minerals under the soil.

2. But this was not always the case. The ARMM's forest cover grew by 6.8% in late 2015 when a better-managed ARMM government (under then-Governor Mujib Hataman) implemented an effective anti-illegal logging program. The fact that large swaths of forest lands were in MILF authority may have also kept the legal and illegal timber enterprises from entering these areas.

3. Research Work. I had been studying how the intertwined licit and illicit sectors had contributed to Mindanao's growth, curious if the Portuguese phrase, *Rouba mas faz* ("he steals, but he gets things done)," can apply to Mindanao. In the case of BARMM, I had wondered how a polity riven by corruption, conflict, criminality, extreme poverty, and weak state capacities can still bring about development. Perhaps a possible answer may lie in reorienting the idea of rebel disarmament. Instead of turning guns into plowshares, can the MILF be turned into the guardian of the environment? From "Arms into Farms" to "Farms with Arms" program, as it were?

4. Information, Tools, and Resources. There is a need to create a database on the BARMM's socio-ecological landscape that would combine geo-mapping, the detailed tracking of incidents (political, social, and criminal), and selected ethnographic studies. This study must cover a wide zone – from the regional government to the smallest village, from the private sectors to civil society organizations, and across the different Moro ethnic groups. Compiling this comprehensive database of Moro Mindanao has never been done before. But it will be a critical factor in BARMM's pursuit of its development programs, particularly as these pertain to the environment. This is imperative given the rate at which forests in the Philippines are disappearing; Moro Mindanao's timberlands will likely be the next, especially as the MILF-led BARMM consolidates its authority.

Participant 8

1. *What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?*

- The detrimental effects of climate change, environmental degradation, and ongoing conflicts in BARMM extend beyond the physical health of the population. These phenomena affect mental health as well. For example, research indicates that natural disasters such as floods, drought, and rainfall are associated with psychological distress, an increase in suicide rates, and an increase in hospitalization rates for those with psychiatric symptoms (Charlson et al., 2021). The Mindanao survivors of armed conflict and natural disasters also exhibit these symptoms. According to recent interviews with flood survivors, anxiety, depressive symptoms, and sleep difficulties have been reported.

- Internally displaced survivors of Marawi siege reported PTS symptoms, depression (both soldiers and civilians)

- As per Unified Bangsamoro Development Plan of the Bangsamoro autonomous government, there is only one open dumpsite in the whole BARMM region which is the one in Barangay Papandayan, Marawi City. This is problematic since the population of the province, which is directly proportional to Municipal Solid Waste, is growing aside from the fact that the said dumpsite is within the Agus River watershed.

- In 2015, the population was around 1.045 million which is forecasted to reach 1.861 million people by 2040. Per capita average waste generation is 0.34 kg/capita/day which means that the population may produce around 632 tons of waste per day in 2040. Increase of population which create high degree of pollution and wastes that can result to a negative effect on the social, physical and economic well-being of the populace. Problems in solid waste management is less of a priority of residents due to lack of awareness and information what negative effects may bring to them.

- A 2015 study shows that Lake Lanao waters reached Class A grade as per DENR standards for fresh surface water (Angagao et al., 2017). Despite this, increasing population will impact water resources especially that none of the coastal towns surrounding the lake has a functional sewage system that filters waste. Waste matters from sewers, garbage, and open dumpsite get into canals, creek, stream, and which, in turn flow into the lake as catch basin. Surface waters such as Lake Lanao is experiencing high nutrient loading causing proliferation of water hyacinths in the lake and high algal growth in several areas. Water quality indicator bacteria in Lake Lanao goes beyond the accepted value of the heterotrophic plate count or HPC (HPC >500 CFU/ml) and the total coliform most probable number or MPN (MPN >16/100ml (Satar, 2020). This poses a problem since people in coastal communities along Lake Lanao still drink water from the lake.

2. *What are your key concerns about these impacts?*

- A dearth of resources, knowledge, and community-based mental health programs make it difficult for disaster survivors to seek assistance

- The effects of climate change on mental health, particularly in Mindanao, are understudied. This dearth of empirically-based interventions has implications for the diagnosis and treatment of disaster survivors.

- Climate change exacerbate horizontal conflicts in the BARMM due to the widening discrepancy of the haves and have nots amidst the fragile peace condition in the region.

- BARMM is still experiencing disasters in two fronts-human-induced (low level intensity conflicts causing continued displacements such as what is happening in Pikit, North Cotabato) and natural disasters (i.e. flash floods, landslides and earthquakes)

3. How does your work relate to these concerns?

- Raise public awareness on mental health issues and connect those with MH issues with the appropriate specialists. For instance, visiting communities affected by armed conflict or man-made disasters and training first responders and aid workers in fundamental early psychosocial interventions. (According to interviews with DR personnel, including first responders and soldiers (who responded to both manmade and natural disasters), there is a lack of trained personnel on the ground who can assist individuals exhibiting early symptoms of distress. Consequently, conducting trainings that empower communities and their constituents are imperative)
- Empowering people to be proactive and not reactive
- Action and policy-oriented researches that will also serve as instructional materials for instruction and capacity sharing with partner communities.

4. What information, tools/ resources do you need to better address these concerns

- Research funding on the risk and protective factors, as well as the factors that influence disaster survivors' help-seeking behaviors.
- Trainings to enhance skills and cultural sensitivity in dealing with Muslim survivors
- Research on psychometrically valid, context-specific questionnaires to examine the specificity and sensitivity of symptoms in BARMM disaster survivors
- Training workshop on citizen-science to help BARMM on their need to come up robust data for their policymaking at the ministerial level including the LGUs.

Participant 9

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Damage to crops due to frequent flooding especially when there is heavy rain. Failure of
- crops harvest resulted in a food crisis. The two provinces of BARMM (Maguindanao and Lanao del Sur) are flood prone areas.
- Landslide due to denuded forest. Last incident of landslides in BARMM (Maguindanao province) was on October 28, 2022 that killed many lives of Indigenous Peoples of BARMM.
- There were instances that the Internally Displaced Persons (IDPs) were affected by both flooding and armed conflict. A number of communities were displaced due to armed conflict and when they were at the evacuation centers, a flood strike forced them to evacuate again to higher and safer areas. These situations created more risks to the affected populations.

2. What are your key concerns, about these impacts?

- The food security of the affected population is at stake. Poverty strikes anywhere, cases of kidnapping, looting and killings happen everywhere in the locality.
- Peace and order and security is unstable. Fear occurs, people cannot focus to look for means of survival.

3. How does your work relate to these concerns?

- We are working with these vulnerable communities, the cycle of poverty repeated. The assistance provided to these communities cannot assure sustainability due to these many factors (climate change, environment degradation and armed conflict).
- Advocacy work at the community level for them to realize that climate change, environment degradation and armed conflict contribute to their current situation.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- We need to develop the risk and vulnerability mapping in BARMM
- We need to know what are the types of livelihood that are susceptible to flooded areas. Need to expose the communities to the successful initiatives through experiential learning.
- Theory of change, how to change the mindset of the communities that the natural disasters sometimes due to human activities that destroy the environment.
- Sustainability is the challenge here, there are a lot of initiatives but still not enough to ensure sustainability of the efforts.

Participant 10

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Disruption of water resources, with increased competition over limited freshwater sources exacerbating tensions and conflicts among communities
- Potential exacerbation of social inequalities and marginalization, as vulnerable groups such as women, children, and indigenous communities bear the brunt of climate change impacts and ongoing conflict
- Ongoing conflict and insecurity in the BARMM region are likely to be compounded by the effects of climate change and environmental degradation, further straining social cohesion and exacerbating displacement and poverty.

2. What are your key concerns, about these impacts?

- **Humanitarian Crisis:** The combination of climate change impacts and ongoing conflict can lead to a humanitarian crisis with widespread displacement, loss of livelihoods, and increased vulnerability to poverty and food insecurity.
- **Environmental Degradation:** The degradation of natural ecosystems and loss of biodiversity can have long-term consequences for the region's ecological balance and resilience. This can further exacerbate the impacts of climate change and limit the ability of ecosystems to recover.
- **Economic Impacts:** The BARMM region relies heavily on natural resources for its economy, particularly in agriculture and fisheries sectors. Climate change and environmental

- degradation can lead to significant economic losses, reduced productivity, and increased poverty, affecting the overall stability and development of the region.
- **Limited Resources for Adaptation and Mitigation:** The BARMM region may face challenges in mobilizing resources for effective adaptation and mitigation measures, given the competing demands of addressing conflict, poverty, and development needs. This can hinder efforts to build resilience and reduce the region's vulnerability to climate change impacts.

3. How does your work relate to these concerns?

- Water, Sanitation and Hygiene is a fundamental component in addressing the concerns related to climate change and conflict in BARMM. Through the provision on access to safe water, sanitation facilities, and hygiene promotion, WASH interventions also contribute to health, well-being, social stability, environmental conservation, and economic development in the region

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Updated Data and Research
- Monitoring and Evaluation Tools
- Technical Expertise and CC guidelines

Participant 11

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Extreme climate events that are new to the region thus increasing vulnerabilities and tension
- Displacement brought by both weather events and conflict situations
- Food security concerns impacting not only BARMM but the rest of the region & parts of the country (which brings in governance into the fold; not just climate and conflict being a root of food insecurity)

2. What are your key concerns about these impacts?

- Local leaders are unaware of the linkages of climate and conflict (along with other critical concerns like gender) and they solve issues in silo using separate lens
- There is limited institutional capacity and education to mainstream one segment, let alone several in concert with other (I believe there are individual capacities within the BARMM but has not had the platform for sharing and conversation)
- Return to an era of insurgency remains a fear

3. How does your work relate to these concerns?

- Bring people and ideas together through dialogue, and facilitate an empowerment process to allow them to act with collaboration and compassion, #valuesbridgeus

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Data that local leaders will pay attention to and rely on
- Platform for educating and supporting people
- Opportunities to build individual capacities on the linkage between conflict and climate, and platform to allow them to impact their institutions

Participant 12

1. *What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?*

Climate Change:

- **Rising temperatures:** Climate change is expected to lead to higher temperatures in the region, which can have various consequences such as heat-related illnesses, reduced agricultural productivity, and increased demand for cooling systems.
- **Increased rainfall variability:** Climate models suggest that the region may experience changes in rainfall patterns, including more intense rainfall events and longer dry periods. This can lead to water scarcity, reduced crop yields, and increased risks of floods and droughts.
- **Sea-level rise:** The region is characterized by low-lying coastal areas, making it particularly susceptible to sea-level rise. This can result in coastal erosion, saltwater intrusion into freshwater sources, and increased vulnerability to storm surges and tidal flooding.

Environmental Degradation:

- **Deforestation:** The BARMM region has experienced significant deforestation, primarily driven by illegal logging, slash-and-burn agriculture, and the expansion of palm oil plantations. Deforestation contributes to soil erosion, loss of biodiversity, and disruptions to local ecosystems.
- **Loss of biodiversity:** Environmental degradation can lead to the loss of plant and animal species, affecting the ecological balance and potentially reducing the availability of natural resources upon which local communities rely.

- **Water pollution:** Unregulated mining, improper waste management, and agricultural runoff can result in water pollution, compromising the quality of drinking water sources and aquatic ecosystems.

Ongoing Conflict:

- **Displacement of communities:** The region has a history of conflict and violence, resulting in the displacement of communities. Displaced populations face numerous challenges, including limited access to basic services, increased vulnerability to climate-related impacts, and heightened competition over scarce resources.
- **Impeded development and resilience-building efforts:** Ongoing conflict can hinder efforts to address climate change and environmental degradation, as resources that could be allocated to adaptation and mitigation measures are often diverted to address immediate conflict-related needs.
- **Social and economic instability:** Conflict exacerbates social and economic vulnerabilities, making it more difficult for communities to cope with climate change and environmental challenges. It can hinder economic development, disrupt livelihoods, and create conditions that perpetuate poverty and inequality.

2. *What are your key concerns about these impacts?*

- Perpetuation of a “culture of poverty and a poverty of culture;” and continuing rise/dependence on a “shadow economy” that thrives in violence

- Continuing poverty resulted in stunting for almost half of the children in the BARMM, leading to the emergence of a “lost generation” – young people devoid of the capacity for active citizenship - that may impact democratization and peacebuilding in the BARMM.
- Further vulnerability of BARMM residents to natural hazards, violent extremism, and other "entrepreneurs of violence."
- The convergence of climate change, environmental degradation, and conflict will impact the conduct of the 2025 BARMM elections.

3. How does your work relate to these concerns?

- As peace advocates, our advocacy covers protecting the environment, addressing human security, and the need for transitional justice.
- As a researcher – currently studying the issue of transitional justice among the “guardians” of the Ligawasan Marsh, including the understanding of the health and well-being of residents, ongoing policy research on the problem of disbandment of private armed groups; and just concluded the stocktaking for the Philippine case study on the role of security sector in climate and environmental security.
- As part of the peace process component – I am involved in the ongoing decommissioning of MILF combatants and their weapons and the conceptualization of assistance in transforming MNLF communities.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Need to do a stocktaking of the nutrition status of children, not just on the current state of malnutrition, but as part of understanding intergenerational poverty and the production of ‘lost generation’ to develop a comprehensive policy to address the issue beyond mere feeding programs.
- Develop a Ligawasan Marsh-wide study on the convergence of environment, climate change, and transitional justice (people, planet, and governance) for policy development in a singular bioregion traversing different governance jurisdictions (e.g., BARMM, North Cotabato, Sultan Kudarat).
- Need to deepen understanding and develop programs on transitional justice at the community level and help in the capacity building of teachers for peace education imbued with global citizenship, tailored to local conditions.
- Possible development of a program for decommissioned combatants as forest guards/rangers to protect and regenerate forest covers.
- Need to develop an advocacy plan for clean and peaceful 2025 BARMM elections taking lessons from the conduct of the 2023 Barangay elections and the need for public education on the new form of governance and system of voting.

Participant 13

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- In the Tawi-Tawi context specifically, the province is vulnerable to the environmental challenge of rising temperature and sea levels.
- The aggravating plastic pollution in the ocean due to the increasing residential population in the coastal areas.

2. What are your key concerns about these impacts?

- With the current limited capacity of the province to adapt to the rising temperature and sea levels, the Sama Bajaus and other indigenous groups occupying the coastal areas will be highly vulnerable to coastal flooding. As a result, they may be forced to evacuate their current household resulting to their displacement.
- Poorly managed waste exacerbates environmental issues such that of sea-level rise, ocean acidification, and loss of marine biodiversity, which further threatens public health.

3. How does your work relate to these concerns?

- The Institute for Peace and Development in Mindanao of MSU Tawi-Tawi attunes its peace mission to the institutional mandate of MSU Tawi-Tawi on Fisheries and Marine conservation. Specifically, we make modest attempts/efforts to take environmental issues as part of our peace advocacies such as organizing fora/symposia on environmental awareness specifically on solid waste management in the coastal areas.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Strategies on how to best engage the indigenous communities in the development of community-led approaches to climate change adaptation.
- Sustainable waste management practices that may be replicated in the coastal communities of communities.

Participant 14

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Displacement due to conflict
- Low productivity and food insecurity
- Vulnerable sectors differentiated impacts: women need to complement the family income through alternative livelihoods, children will be out of school both due to incapacity for parents to provide for support as well as climate impact.

2. What are your key concerns about these impacts?

- Climate crisis aggravates that already volatile and vulnerable situation of the at-risk sectors. These compounds the differentiated impacts further without any specific action plans or roadmap.

3. How does your work relate to these concerns?

- Work with local government units focuses on systemic and institutional reforms.
- Work with local communities focuses alternative livelihoods to ensure food security and employability.
- Work on awareness on climate impacts and climate action

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Climate crisis assessments and analytical tools on differentiated impacts and actions
- Simplified capacity building tools on climate crisis
- Localized information and potential partners

Participant 15

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

a. Magnified impacts of ENSO-related phenomena due to climate change: the Mindanao region remains one of the most vulnerable areas in the Philippines to ENSO-associated impacts due to its geographical location. While ENSO states are a natural occurrence, anthropogenic climate change exacerbates ENSO impacts, which in the region means extreme drought or highly variable rainfall patterns.

b. More unpredictable and severe extreme weather events: the IPCC AR6 report makes it clear that extreme weather events bear the thumbprint of climate change because of increased unpredictability and severity of cyclogenesis due to rising sea surface temperatures. There have also been studies showing a pattern of more Philippine-bound tropical cyclones tracking more southward than ever before, placing the region of Mindanao in the crosshairs of these extreme weather events.

2. What are your key concerns about these impacts?

a. The effects of climate change will exacerbate already existing socioeconomic and political asymmetries in the region and might reify existing unjust power structures: climate impacts will put pressure on already-strained systems because of historical conflicts, deep inequality, and uneven geographical development. There is also a chance that these impacts will also reify existing

patronage structures because of asymmetrical access to resources, goods, and services. All these contribute to climate injustice.

b. Cultural and knowledge loss as it relates to local knowledge on agroforestry, fisheries, and indigenous risk adaptation systems: Loss of culture is an inevitable consequence of climate impacts because of increased in-and outmigration, further exacerbated by gentrification in highly urban areas, more opportunities and access to other forms of livelihood not connected to agriculture, and physical changes to the natural environment and pattern changes in the general climate, some of which are irreversible due to slow-onset impacts of climate change. Some of these cultural practices are critical for mitigation (sustainable agriculture), adaptation (indigenous DRR systems), and building community resilience. The loss of these cultural resources can also mean increased vulnerabilities.

3. How does your work relate to these concerns?

a. Loss and damage and climate reparations: In the recent COP 27, countries agreed to begin talking about and setting up a loss and damage facility to provide a means for vulnerable countries and communities to seek justice from industrialized nations and businesses that have profited off from their climate-destructive activities. Loss and damage is the essential “third pillar” that covers what mitigation and adaptation efforts cannot address anymore, and is meant to provide reparations from losses incurred because of climate impacts. Intersectional impacts of climate change, such as the exacerbation of conflict, should be reflected upon in thinking

about a truly just reparations framework, one that does not replicate nor reify existing power structures, where communities themselves will benefit from such a framework. This is given more urgency as Mindanao is increasingly being seen as an “expansion hub” by fossil fuel companies. Mainstreaming loss and damage and reparations discourse particularly in BARMM facilitates better access to justice mechanisms especially for anticipated intersectional impacts of climate change.

b. Localized people-powered solutions:

Shortening and localizing value chains remain key sustainability principles in ensuring that the maximum benefits will be reaped not by big corporations and power brokers but by communities. Throughout the Philippines there have been sustainable efforts on the community level, with some being noticed and upscaled by their respective local governments and maintained as local government initiatives. These efforts not only build community resilience and belonging, but they also provide solutions whose benefits extend far beyond the confines of their communities, even contributing to mitigation and adaptation strategies. Working with communities with solutions work such as these serve as proofs of concept for projects and programs that big corporations and governments otherwise would pass off as unsustainable and unscalable.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

a. Longitudinal studies on attribution between extreme weather events and non-economic impacts: At present there is still a dearth of studies relating to non-economic longitudinal damages due to extreme weather events, partly because of methodological constraints as it relates to attribution science, but also because global discourse is focused on quantifying loss

and damage from extreme weather events. To gain a better picture of how reparations should be demanded, as well as providing a workable baseline for future demands for reparations, baselining and having creative mixed method research designs will enrich discourse and deepen understanding on impacts that are difficult to quantify under the current knowledge regimes.

b. Cultural mapping focused on community-based and indigenous mitigation and adaptation strategies: Taking stock of cultural practices, community-based efforts, and even indigenous cosmologies can serve as important resources not only in understanding the deeper implications of climate impacts from their perspective, but more importantly contain actual solutions and adaptation strategies which also need to be protected and enriched. Comprehensively mapping these resources will help inform local cultural institutions as well as serve as points of coordination with local disaster risk reduction offices in creating holistic and relevant programs for impacted communities.

c. Ecumenical and peacebuilding efforts centered around climate action: Religion and clan affiliation figure in the everyday lives of the people from BARMM in deep and meaningful ways, and this depth should be the starting point in any meaningful work for climate action. There also exists resources within religions that can help provide a foundation for genuine and sustainable climate action focused on human dignity and social responsibility.

Participant 16

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

On climate change, the rising temperature (and also upcoming drought) will cause some parts of the Liguasan marsh to dry up which may cause a temporary loss of livelihood to families who are dependent on fishing at the marsh. The lack of livelihood may increase the vulnerability of community members to recruitment of violent extremist (VE) groups such as the IS-inspired BIFF and other lawless elements.

A part of the partly-dried marsh, which can be planted with crop like rice, may potentially become a source of conflict. People along the marsh may have conflicts in terms of access and control to that part of the marsh.

The entry (and expansion) of plantation type of farming in some areas in Maguindanao have caused displacements among the indigenous groups. A few heightened violent conflicts (harassments and killings) affecting the indigenous groups have also been recorded in the past years.

Accordingly, a large portion of the forests of Maguindanao are now denuded. This was caused by the logging concessions in 1960s-80s and the continuing cutting of trees for charcoal making (as source of livelihood) at present. As mentioned by the residents in the area, they have observed that their water source has also been depleting. Some parts of Maguindanao have also experienced natural disasters which did they not experienced before-massive flooding and landslides.

The ongoing armed conflicts in many parts of Maguindanao have caused displaced families unable to return, this disrupts their livelihood and their children's schooling.

2. What are your key concerns about these impacts?

The lack of source of livelihood/income that will survive family's daily basic needs increases food insecurity, and vulnerability of any family member (especially men) to VE group recruitment.

Many communities in Maguindanao are now dependent on refilling stations because they have no source of potable water, especially those living near the Liguasan marsh. Those who are into farming also have apprehensions especially with the upcoming El Nifio.

Those who are affected by the on and off conflicts, particularly in the SPMS box are also affected by natural disasters (flooding). They have been displaced many times over, many of them have not yet returned due to security reasons.

Poverty and lack of good governance, compounded by on and off armed conflicts, may relate to people's low capacity to adapt to climate change.

3. How does your work relate to these concerns?

Many of my researches and project assessment/baseline studies are conducted in these areas. As a researcher, I have no direct interventions in these areas. All I can do is to recommend actions to particular stakeholders based on the analysis of the study and/or project assessment.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- More reference materials related to conflict and climate change and their relationship/ impact on one another.
- Massive information campaign on climate change and how communities can mitigate its impacts

Participant 17

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Recurring displacements of affected population
- Loss of or lesser opportunities for livelihood and sources of income particularly those that are resource-based resulting to income loss among others
- Social disintegration

2. What are your key concerns about these impacts?

- Worst effects on children and women such as on their education, health, well-being
- Sustainability of resources and its equitable distribution
- Social cohesion and protection

3. How does your work relate to these concerns?

- Conducting direct services and advocacy work on humanitarian protection, human rights and psychosocial development support
- Focusing on children and women through the framework of Children as Zones Of Peace (CZOP)
- Transformative engagement with duty-bearers (LGUs and other mandated agencies)

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Technical expertise for strengthening relevant program designing, monitoring and evaluation
- Regular and updated information on the challenges and development trends in BARMM
- Robust network of supportive organizations and agencies for our continuing organizational and program development initiatives

Participant 18

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- We know that the Philippines as a whole is vulnerable to climate change, climate-induced shocks and fragility and disasters. We also know that there are still substantial levels of sub-national conflict, particularly in Mindanao and the Bangsamoro. The key question is whether there are direct or indirect links and what kind of causation may exist or present itself in the future.
- There have been examples of climate-induced shocks as triggers for violent incidents.
- Kidapawan drought and protests in 2016
- El Nino in 2014-2016 and the impact on communities who had to suffer because of the two-fold effect of natural disasters and armed conflict.
- Direct catalyst in some incidents of feuding/communal violence: Access to water in Maguindanao
- Recent aftermath of Typhoon Paeng and what led to heightened vulnerability.
- In these cases, climate was a catalyst/trigger for conflict – not necessarily the only factor at play.

2. What are your key concerns about these impacts?

- As climate change will be increasingly a concern, the key questions are:
- Are regional/local authorities able to handle it?

- Can climate fragility lead to conflict, and if yes, why – or in which cases?
- What drives which conflict where?
- Can we expect fragility and conflict? Example: El Nino is already happening. Is there an impact on the ground? We know there is a socio-economic impact, but when does this affect the conflict landscape?
- Who deals with them? Division of labour BARMM vs. LGUs

3. How does your work relate to these concerns?

- Broadly speaking, we look at this issue as an organisation: climate change has been a constant feature of conflict dynamics in the Sahel, Horn of Africa, etc.
- As Bangsamoro has its share of conflicts, understanding the drivers and linkages of conflict is always crucial.
- We also plan to work on a short paper/essay on the linkages between climate change and conflict in the Philippines.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- Data: Do we have specific info on weather phenomena, ranging from rainfall data to soil erosion? I think we have, but levels of access and data collection may differ.
- Granularity: Do we have disaggregated data?
- Accessible so that all researchers/the public can access it?
- Similar trends in rest of the country/case studies?
- Baseline study/info on national/regional/local government capacity?

Participant 19

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

- Ongoing, simmering and potential conflicts, as well as poverty will be exacerbated by climate change and environmental degradation
- Land issues and contestation, which trigger violent conflicts in BARMM, will not be sustainably addressed if climate change and environmental degradation will continue to affect individuals and communities.
- The agriculture sector in BARMM will not grow as envisioned – this will be a challenge for the poor farmers, will potentially negate investments in infrastructure, and will be a disincentive for further investments involving agriculture production and agri industrialization.

2. What are your key concerns about these impacts?

- These impacts will have profound and long term effects in BARMM, Mindanao and the entire country
- Immediate impacts of climate change and environmental degradation seem “invisible” (especially the effects on the bodies of water and seas) and as such, are not the top priority. Addressing these impacts need the cooperation of national, regional and local governments, coordination across government agencies, and the cooperation and support of communities. This is a huge task!
- Significant and large scale investments are needed to address these impacts. Such investments must be shielded from corruption

- and poor implementation.

3. How does your work relate to these concerns?

- Most of our emergency and response programs address needs of individuals and communities affected by typhoons and flooding
- Our DRR and peacebuilding & governance projects involve working with government to help plan better to address community needs, to anticipate disasters and address conflicts in peaceful and sustainable ways
- We are strengthening the integration of social cohesion and gender, equity and social inclusion across all our programs. We work with women and youth to be better engaged in governance and civic affairs.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

- It would help to pinpoint and overlay in a GIS map the areas that are currently undergoing conflict, are experiencing extreme poverty, and suffering from environmental challenges and climate change; and those areas that are vulnerable to conflict and environmental challenges.
- A document with good practices and lessons learned for addressing the nexus of these challenges
- Clear and context-specific recommendations that may be adopted for the BARMM and other conflict affected areas in Mindanao and the Philippines, given our specific context and geographic make up

Participant 20

1. What are the anticipated impacts of climate change, environmental degradation, and ongoing conflict in the BARMM?

Scarcity of clean water: Negative impacts on availability and access to water due to warming of weather, drying of farmlands, rivers, and tributaries within the Bangsamoro, which promote competition to scarce resources and possible conflicts on who has the rights to access water.

Waste Disposal: Inability to properly dispose wastes and garbage can cause conflicts on who will host dump sites, especially in the island provinces where land is limited, and the sea is not a viable option since livelihoods of people depend on the abundance of the sea.

Declining Agricultural Yields: With climate change, erratic weather patterns, heat wave, and dwindling irrigation crops yields are decreasing among farmers, who will compensate low yield with expanding farmlands encroaching into watershed areas and protected zones that consequently further decrease water reservoir.

2. What are your key concerns about these impacts?

A few years ago, nobody sold clean water in Marawi, most residents now depend on potable water sold by water refilling stations. This further increases the cost of living and to a certain extent creates competition about where to source clean water. In some areas adjacent localities dispute who has the right access to water. As riverbeds dries, less and less water is available to ever growing population causing friction within the community.

Garbage disposal is a big issue and causes problems within the community. Lack of segregation, discipline, proper drainage, and landfills cause garbage to be thrown everywhere resulting to further environmental degradation. As result, some communities tend to throw waste into the lake or rivers, further aggravating the problems. As more garbage increases overtime community fought where the waste will be thrown. Eventually, these causes issues as garbage are

left in public lands causing conflict within the community who will be responsible to cleaning them as more and more garbage accumulates.

Lower yields among farmers cause competition for larger land to farm. These cause forest land and watershed areas to be encroached for farming resulting to massive flooding. For example, the deforestation of uplands for farming in the Municipality of Bubong caused permanent flooding to lowlands areas. Such causes conflicts as lowland residents started blaming upland community for the perennial flooding in their areas.

3. How does your work relate to these concerns?

The mandate our institution is peace and development. We focus on three components for every issue. First, the development side by doing research, and other initiatives to understand various concerns and situations in the grounds. Second, the monitoring and evaluation when something is ongoing. For example, doing socioeconomic impact assessment of pandemic in the Bangsamoro. Third, we do peace studies and conflict resolution by understanding how conflict arises, what drives it, how it can be resolved and what can be done so it will not arise again.

4. What information, tools, and/or resources do you need to better address these concerns through your work?

Financial support, capacity building, and material support (i.e., printers, laptops, office supplies, projectors, and software) are scarce. Our institution, the Institute for Peace and Development in Mindanao can only do so much given the limited budget at our disposal, which is almost negligible as we rely mainly on partner institutions and donor agencies to accomplish our mandate. If we could access more resources, we can accomplish more and contribute more in understanding the dynamics of environment and conflict. Understanding the dynamics give us ways to formulate framework and policies that could help address future conflicts caused by environmental degradation.



Workshop Report: Understanding Climate, Conflict, and Environmental Impacts in the BARMM
October 2023



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