



Philippines ClimBeR Inception Workshop Report

6th December 2022

Luxent Hotel, Timog Avenue, Diliman
Quezon City, Philippines



INITIATIVE ON
Climate Resilience

Authors

His report was compiled by Rowena Castillo¹, Mary Anne Gutierrez¹, Rosendo Gutierrez¹, and Esther Velasquez¹

¹ International Rice Research Institute

Suggested Citation

CGIAR. 2022. Philippines: ClimBeR Inception Workshop Report. 6th December 2022. Quezon City, Philippines.

Cover photo:

Photo credit: IRRI.

Creative commons license: Some rights reserved:Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0) creativecommons.org/licenses/by-nc-sa/2.0/deed.en

The picture was taken from This work is licensed under Creative Commons License CC BY-NC-ND 4.0.

Link to original flickr set: www.flickr.com/photos/ricephotos/5780034537/in/set-721576...

Acknowledgments

We are grateful to all participating organizations for their contributions.

This work was carried out with support from the CGIAR Initiative on Climate Resilience, ClimBeR. We would like to thank all funders who supported this research through their contributions to the [CGIAR Trust Fund](#).



Contents

I - INTRODUCTION.....	4
II- WORKSHOP OBJECTIVES.....	4
III- PARTICIPANTS.....	4
IV- PROGRAM	5
V- PRESENTATIONS AND PANEL DISCUSSIONS	6
VI- WORKSHOP SUMMARY AND CLOSING REMARKS	28
VII- PHOTO DOCUMENTATION	29



I - Introduction

Building Systemic Resilience against Climate Variability and Extremes (ClimBeR) is a Climate Resilience Initiative of CGIAR which aims to transform the climate adaptation capacity of food, land, and water systems in the Philippines and 5 countries in Africa (Kenya, Morocco, Senegal, and Zambia) and Latin America (Guatemala).

Through the ClimBeR initiative, CGIAR aims to create gender-sensitive and innovative financial mechanisms, while incorporating science that combines climate information, credit, and insurance, to build resilience among agriculture actors across the value chain while recognizing that while innovative technological interventions are critical, the enabling social, institutional and governance environment drives the transformative process. ClimBeR also seeks to identify the links between climate change and human security in order to decrease the risk of conflict and displacement.

ClimBeR initiative is introduced to countries through inception meetings and workshops and attended by identified potential national partners and collaborators. The inception workshop in the Philippines was held on December 06, 2022 in Quezon City and was attended by about 50 participants from the government and non-government organizations. This event served as a launch of the initiative in the Philippines paving the way forward for collaboration and partnerships to fulfill the initiative objectives for a more climate change resilient agriculture in the Philippines. This document reports the highlights of the event, the discussions and next steps.

II- WORKSHOP OBJECTIVES

This inception workshop aimed to:

- introduce the initiative, its objectives, current activities and anticipated results
- present proposed research agenda to Philippine agencies related to the enhancement of gender and social equity, the identification of climate security risks, and the de-risking of agricultural commodities and value chains critical to the well-being of small producers
- discuss and interact with project partners and stakeholders through panel discussions
- identify potential research activities to strengthen the program in the Philippines, and clarify roles and responsibilities

III- PARTICIPANTS

The ClimBeR Inception Workshop was attended by 53 participants from the following agencies:

Department of Agriculture (DA)

Department of Finance - Philippine Crop Insurance Corporation (DOF-PCIC)

Department of Science and Technology (DOST)

Department of Social Welfare and Development - Disaster Response and



Management Bureau (DSWD-DRMB)
 Department of Environment and Natural Resources (DENR)
 Philippine Space Agency (PHILSA)
 Alliance Bioversity - CIAT
 International Alert (IA)
 International Institute of Rural Reconstruction (IIRR)
 National Economic and Development Authority (NEDA)
 Office of the President Climate Change Commission (OP-CCC)
 International Water Management Institute (IWMI)
 Ecosystems Work for Essential Benefits, incorporated (ECOWEB)
 International Rice Research Institute (IRRI)

The workshop was moderated by Ms. Maria Soccorro Arboleda of IRRI.

IV- PROGRAM

Time	Activity	In-charge
09:00-09:30	Registration	
09:30-09:40	Opening Remarks	Jon Hellin Co-Lead, ClimBer (IRRI)
09:40-10:00	Introduction to ClimBer and Social Equity	Jon Hellin
10:00-11:00	Governance for Resilience	Giriraj Amarnath IWMI – ClimBer Panelists: Dr. Gay Jane P. Perez (PHILSA) Ms. Narcie Tanchiatco (NEDA) Ms. Bess M. Lim (DRRM Consultant)
11:00-11:35	DE-RISK	Jane Girly Balanza (CIAT) Alice Laborte (IRRI)
11:35-12:05	CCAFS Experience: Climate Smart Villages	Emily Oro and Marie Cabriole IIRR
12:05-13:05	Lunch	
13:05-13:10	Summary of morning and introduction to afternoon	Jon Hellin
13:10-13:55	What is the relevance of “climate security” in the Philippines?	Francisco 'Pancho' Lara Jr. International Alert Philippines



Time	Activity	In-charge
		Panelists: Saturnina Halos (DA-CRAO Consultant) Carino Antequisa (PDA-ECOWEB)
13:55-14:40	Can data tools be used to mitigate climate security risks in the Philippines?	Adam Savelli CGIAR FOCUS Climate Security - ClimBeR Maureen Anthea Lacuesta International Alert Philippines
14:50-15:05	Message	Mercedita Sombilla Undersecretary for Policy, Planning and Regulations Department of Agriculture <i>(Delivered by Lev Nikko M. Macalintal)</i>
15:05-15:45	Climate Finance	Pedro Chilambe (CIAT - ClimBeR) Adam Savelli
15:45-16:00	Closing	Jon Hellin

v- PRESENTATIONS AND PANEL DISCUSSIONS

Opening Remarks and Introduction to ClimBeR and Social Equity

Jon Hellin, Co-Lead of ClimBeR, Country Coordinator for the Philippines, and a Climate Scientist at International Rice Research Institute (IRRI), led the opening remarks, and introduced the main elements of ClimBeR and the social equity component of the initiative.

Jon, in his opening remarks, emphasized the climate challenge that the world is currently facing. Typhoons, floods, drought, high temperatures are among the detrimental impacts brought about by climate change. Yet these challenges, with the right perspective, become great opportunities. He presented the goal of ClimBeR, which is to transform a community into a climate-resilient rice-based agriculture through climate adaptation capacity on food, land and water systems to be able to cope up with the climate challenge. ClimBeR will also increase the resilience of small-holding farming systems.

ClimBeR adheres to the concept of transformative adaptation. To be able to sufficiently respond to climate challenges, we have to move from incremental to transformative change. And with the so-called system transformation that engages different actors to work together in achieving system change, root causes of vulnerability to an event can be tackled and identified.

Huge efforts have been made over the years in terms of climate adaptation and mitigation, but with the on-going challenges, the approach shall be escalated to enabling the social, institutional and governance environment to a transformative process. This includes inter- and transdisciplinary approaches, wherein experts from different disciplines are working collectively and at same time establishing meaningful partnerships in bringing change.

Introduction to ClimBeR

The Primary CGIAR Impact Area: Climate Adaptation and Mitigation
 Focal countries: Guatemala, Kenya, Morocco, Senegal, Gambia, and the Philippines

Proposed areas of work:

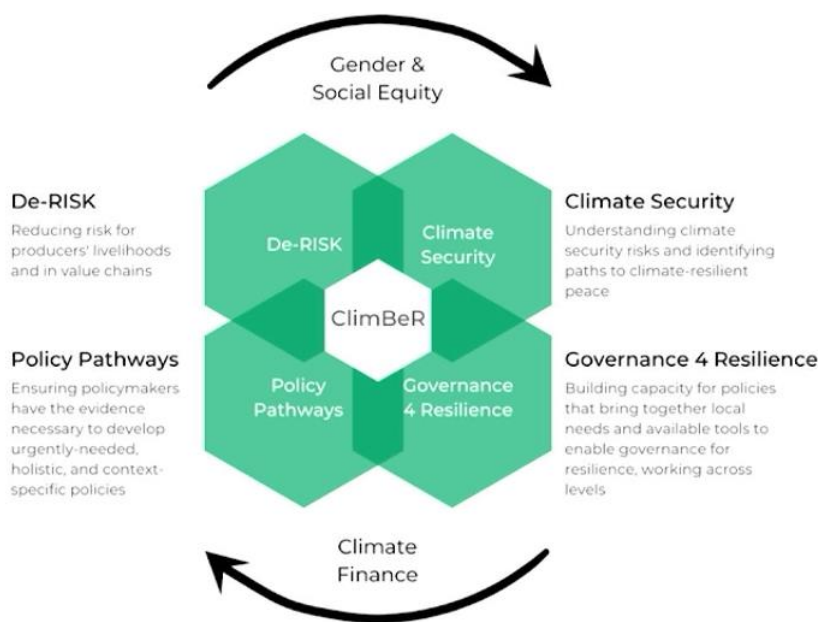


Figure 1. Work packages and themes under the ClimBeR initiative

ClimBeR has four (4) work packages and two (2) cross cutting themes as seen in Figure 1. Research activities in each country may differ from one another, depending on the local context and priorities of the government. For the Philippines, emphases are on



Climate Security, De-Risk and Climate Information Science, Governance for Resilience, and Climate Finance. Actual work and key research activities for the next 2 years were expected to be decided in the workshop.

Social equity within climate resilient agriculture

Social equity encompasses gender and youth to identify the work that needs to be done and likewise guide the efforts being initiated in addressing vulnerability, discrimination, opportunities, and inequalities. In embarking the transformative adaptation process, there would always be winners and losers, some are better positioned than others. There are working areas that benefited the wealthier and male farmers, and those benefited less are poorer, and often female farmers. Social equity lens unpack the courses of vulnerability against growing inequalities. It also heeds with the sustainable development goal of the government which is 'No one left behind'.

To ensure scaling and transforming agricultural systems and make it climate resilient, ideas and theories shall be translated into practice. Social Equity Framework is being proposed in realizing this goal.

Jon ended his presentation with images of Jig-saw puzzles, that represent the disciplinary areas of work, and/or the different components of the ClimBeR initiative, which requires working and fitting together to achieve better outcomes. Each piece has a critical role in the formation of a climate resilient community.

Governance for Resilience (G4R)

Giriraj Amarnath, Lead of ClimBeR component on Governance for Resilience, Country Coordinator for Zambia, and a Research Group Leader on Water Risk to Development and Resilience at International Water Management Institute (IWMI), presented a brief introduction on Governance and Resilience and introduced the panelist for the session.

Giriraj began his discussion by saying that accelerated efforts for adaptation imposed by the government in many parts of the world for climate resilience. Hence, there are still gaps that need to be addressed, which includes: a) weak governance and b) power imbalance across all levels (national to community levels).

Governance for Resilience or the Work Package 4 of the ClimBeR initiative, is looking at bringing a multi-level polycentric governance, considering what innovative tools that will help in shaping multi-scale, multi-level, and multi-sectional thinking, and also ensuring local adaptive capacities through local adaptation programs that can be initiated in different countries, like the Philippines.

This initiative is represented by four pillars:



- a. Improving coordination - communicating with stakeholders, understanding gaps in adaptation, reviewing the adaptation innovations that have implemented, and making the existing procedures transformative
- b. Enabling responsiveness - anticipating reactions to climate-risk severities; promoting short-term adaptive response through disaster mitigation
- c. Facilitation planning - includes long term adaptation investment priorities and working with partners like NEDA, listening to voices of local levels, bringing top-down climate uncertainties and identifying root causes of vulnerabilities.
- d. Champions of Change - involving the stakeholders to be Ambassadors for ClimBeR; bringing the local communities to come up with local adaptation programs.

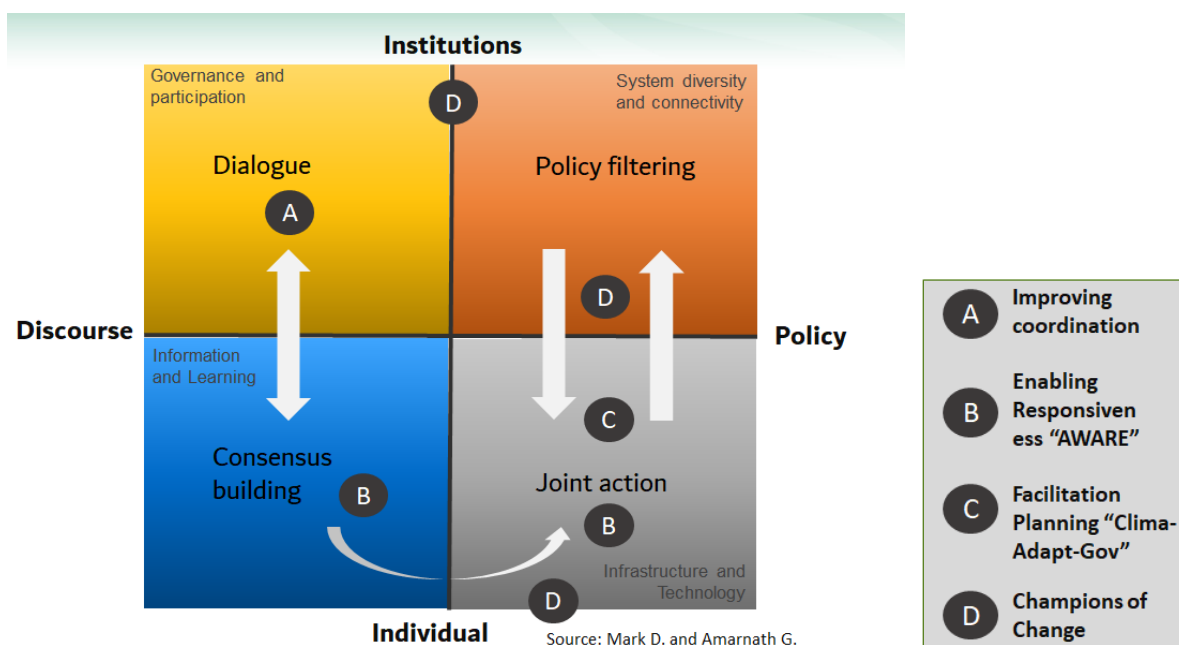


Figure 2. “Action on Transformative Adaptation” concept

Figure 2 shows the framework of the Climate Resilience program comprising four (4) fundamental concepts namely, individual, institution, discourse and policy. For individuals and institutions, dialogues and forums are conducted to initiate and strengthen programs. There may be duplication, in technologies or interventions, but consensus among the key players will be considered and identified, while performing joint actions from all levels - national to local. Furthermore, the different adaptation programs that will be implemented shall undergo policy filtering. If the aforementioned 4 pillars are critically conceptualized in the framework, there would be a transformative action-oriented program aimed in Work Package 4.

Proposed activities for the Philippines which are aligned with the 4 pillars is shown in



Table 1.

Table 1. Proposed activities related to climate resilience for the Philippines

Pillar	Identified activities*
Improving coordination	<ul style="list-style-type: none"> • learn the adaptation interventions • conduct institutional mapping and innovation inventory • develop a simple multiscale polycentric tool guide that will trigger timely action and finance in response to extreme events • identify potential partners in the Philippines
Enabling responsiveness	<ul style="list-style-type: none"> • anticipate reaction framework for early warning, early action and early finance • define action protocols • identify potential partners in the Philippines
Facilitation planning	<ul style="list-style-type: none"> • assist policy makers in the development, implementation, M&E, of the climate changes adaptation strategies and plans • strengthen linkages with partners
Champions of Change	<ul style="list-style-type: none"> • involving the stakeholders to be Ambassadors for ClimBeR; bringing the local communities to come up with local adaptation programs.

*Timeline for these activities to be completed is 2022 -2024.

Panel discussion

The esteemed panelists provided insights on what they thought about the interventions and on-going efforts happening in the Philippines, and how these lessons can be adopted. The discussion was also moderated by Dr. Giriraj Amarnath.

Panelists:

Dr. Gay Jane P. Perez, Deputy Director General, Philippine Space Agency (PHILSA)

Ms. Narcie Tanchiatco, National Economic and Development Authority (NEDA)

Ms. Bess Lim, DRRM Consultant, Department of Agriculture (DA)

Table 2. Panel discussion highlights and keypoints (G4R)

PANELIST /QUESTIONS	RESPONSE
	Relevant programs and activities related to climate resilience of their organizations.
Dr. Gay Jane Perez (PHILSA)	PhilSA is a central agency addressing all national issues and activities related to space science and technology applications. One of their flagship programs is the Satellite Data Mobilization which utilizes space data. In terms of building climate resilience, these space data are very



	significant since essential variables can only be measured in space.
Ms. Bess Lim (DRRM)	<p>The Department of Agriculture instituted several projects and programs on climate change and other hazards. The food security framework of DA is hinged on achieving resilience. There are 4 specific initiatives for disaster resiliency, these are as follows:</p> <ul style="list-style-type: none"> a. Science-based tools and decision support systems <ul style="list-style-type: none"> - ePRIMA project which encourages enhanced informed decision making for national, subnational and field levels. - SARAI which focuses on reducing climate risk by providing site-specific crop advisories b. Digitalization and knowledge management <ul style="list-style-type: none"> - iFarm, a web-based farm information system where data on georeferenced farm parcels, planting and harvesting, damages and losses due to typhoon and extreme events, and rehabilitation and recovery interventions can be accessed c. Strategic multi-sectoral partnership and collaboration d. Mainstreaming CRA technologies and approaches
Ms. Narcie Tanchiatco (NEDA)	NEDA is the premiere socio-economic body of the government. They do macroeconomic forecasting, policy analysis and research, conduct policy reviews, and provide high level advice to policymakers. In terms of disaster reduction and management, they are leading the post rehabilitation recoveries and plans at national and regional levels, and local government units as needed.
Giriraj Amarnath (ClimBeR): How often NEDA reviews program policies? How does NEDA achieve and target strategies?	
Ms. Narcie Tanchiatco (NEDA)	NEDA does not directly deal with local communities, yet we take part in the preparation of a 6-year framework (Philippine Development Plan) that guides the development on the sub-national level hoping the LGUs use it for their local development plans. Regional Development Council (RDC) is the link for the national and local approach.
Giriraj Amarnath (ClimBeR): How do you see the collaboration of PhilSA with ClimBeR? What are the possible contributions and opportunities?	
Dr. Gay Jane Perez (PHILSA)	<p>As mentioned, one of the flagship programs of PhilSA is the Satellite Data Mobilization which includes the national, LGUs, civic societies, private sectors, and academe.</p> <p>Works on several key developmental areas</p> <ol style="list-style-type: none"> 1. Access to historical (decade-worth) of data. From space, get



	<p>access to comprehensive coverage – global and local scale, wherein we are able to analyze and better understand the changing climate.</p> <ol style="list-style-type: none"> Assess the impacts of climate change, both the natural and man-made environment by using satellite images in assessing damages brought by drought, flood, and other related hazards. We can use this as a basis for recovery and response. Space data are also used to improve the scales of the models like sub-seasonal forecasts which can contribute in the early warning systems
Giriraj Amarnath (ClimBeR): How does DA bring the bottoms up approach, since most initiatives follow a top-down approach?	
Ms. Bess Lim (DRRM)	By enabling the farmers to provide data and inform the DA of their needs. These data are collated and analyzed and brought to national level wherein new policies can be crafted. Also, part of DA's strategic plan is to empower the farmers, provide them skills through training, and give them access to information and networks.
Sid Lucerio (Climate Change Commission, CCC): Are the science-based tools of DA accessible to the public?	
Ms. Bess Lim (DRRM)	These tools are currently under development, but the products can be accessed by request, like iFarm, where the following databases are accessible: planting/harvesting, damages/losses, rehab and recovery, and disaster risk reduction management and information system.
Nikko Macalintal (DA): Given the technologies, interventions and approaches, how can we envision the new governance system? Gaps and challenges?	
Ms. Narcie Tanchiatco (NEDA)	Building resilience means strengthening the capacities of the local communities by making them more accountable with the devolved functions and services including agriculture. With the strengthened capacities, they can advocate more of their needs which can be elevated to regional or even national level. This can be considered in policy making, and even in proposing legislative measures in the congress.
Karl Salibio (ATI): Where do we place training as the knowledge management component of this activity (ClimBeR)?	
Giriraj Amarnath (IWMI)	ClimBeR has a series of training activities and knowledge products that will be delivered during the course of the program. IRRI, CIAT and other centers will come up with a workplan for 2023 including the capacity building efforts in the next two years. There will be opportunities of transferring the tools and technologies to IRRI and national institutions.
Francisco 'Pancho' Lara Jr. (International Alert, IA): For years, a call to develop new seed varieties that are drought, salt, pest and flood resistant varieties. Looking at the budget of DA, there are no recent research funded activities of these varieties. What has been done by CGIAR	



and IRRI to cascade these new varieties pertaining to resilient agriculture ? What are the efforts of DA to distribute these new lines of seeds?	
Alice Laborte (IRRI)	DA, in collaboration with IRRI, PhilRice and UPLB, is working on a project called One Rice PH, a breeding program that looks at varieties that are well targeted in different regions, at the same supplying information using geo-spatial tools to locate the flood- and drought-prone areas.

DE-RISK

Presenters: Ms. Jane Girly Cuerdo (CIAT)
Dr. Alice Laborte (IRRI)

Ms. Jane Girly Balanza, Geospatial Analyst at the International Centre for Tropical Agriculture (CIAT) and **Dr. Alice Laborte**, Research Coordinator for the Philippines, Senior Scientist and Lead of Spatial Transformation of Landscapes at IRRI, led the presentation and discussion on De-Risk or the Work Package 1 Component of ClimBeR.

De-Risk and Climate Information System

De-Risk or the Work Package 1 of ClimBeR aims to reduce risks in livelihood and value chain by managing and reducing the impact of variable weather and extreme events in agriculture. Expected outputs include Climate Information Service Tools and Climate Risks Profiling. **Ms. Jane Girly Balanza** shared the on-going activities related to the Climate Information System (CIS) of CIAT that can be aligned with ClimBeR.

De-Risk in Asia, is an on-going project of CIAT, funded by International Climate Initiative (IKI). Pilot countries include Laos, Myanmar, Cambodia and Vietnam. The project aims to develop tools and applications that provide climate information needs, and disseminate agro-climatic advisories, bulletins, and seasonal forecasts for different crops. Inspired by this project, CIAT together with the DA and other agencies, initiated Climate Action projects in the Philippines, such as:

- a. Agro-Climatic Advisory Portal (ACAP-Bicol) - an automated scalable climate service platform for resilient agriculture in Bicol region;
- b. Climate Change and Food Security Analysis (CCFSA) - funded by World Food Programme (WFP) which aims in validating Livelihood Zones Map that can be used in assessing climate risks for all the 17 regions in the country;
- c. Developing technological and science-based solutions for strengthening AMA Villages in the Philippines which focuses on mitigation of greenhouse gasses; and
- d. "Helping Cooperatives and Agripreneurs Build Resilient and Sustainable Communities and Climate Action through Digital Solutions" - aims at developing a seasonal agro-advisory and climate insurance-based portal

Figure 3 shows a flowchart on how information was derived using the ACAP-Bicol portal. Using the data from PAGASA, stage of the crop/ crop calendar, given a certain scenario, real time recommendations can be generated tailored-fit to the



crop. Additionally, vulnerable areas under the changing climate can also be identified using this portal.

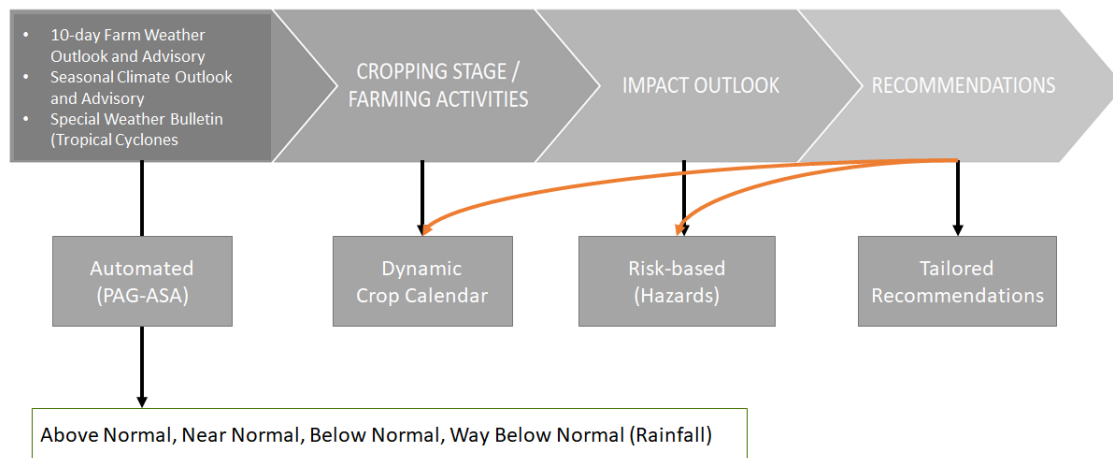


Figure 3. Information flow and derivation of outputs for ACAP-Bicol project

ACAP-Bicol will be turned over to DA this 2022, and among the next steps include the extension of this initiative to other regions, not only for rice but also for other crops.

Other CGIAR Initiatives in Asia

Dr. Alice Laborte put emphasis on the tremendous amount of data that are readily available and can be utilized under this initiative. Effort needed is to convert these data into actionable information, identify the gaps, to help the farmers, and also the policy makers to make farming more resilient.

The following are other CGIAR Initiatives and projects in Asia that can be aligned with ClimBeR:

- a. Asian Mega Deltas (AMD) - uses high resolution imageries to map current and possibly future land use patterns, looking at the deltas that are most affected by salinity.
- b. Philippine Rice Information System (PRISM) - satellite based information system, co-designed and co-developed by IRRI and PhilRice and was institutionalized at PhilRice since 2018. It provides monthly and seasonal data for rice area using Sentinel 1-A, crop calendar data, and mid- and end-season forecasts on yield using crop models. Moreover, PRISM also provides information on areas at risk due to typhoons by producing a map of rice areas along the tropical cyclone that are most likely to be

affected, and a map of rice areas that are affected after the typhoon event. These data were submitted to the DA for planning and further decisions. A map of flood-prone rice areas is illustrated in Figure 4. It shows rice areas that are frequently affected by typhoons over the years (2015-2020). Information like this is very important in targeting appropriate technologies and adaptation options, such as identifying flood tolerant varieties suitable in the area.

c. Alternate Wetting and Drying (AWD) - reduces the greenhouse emission in rice production. It uses GIS and participatory research to determine the suitability of this technology to target locations.

d. Climate Related Risk Maps and Adaptation Plans (CS Map) - collaboration with the provincial and regional stakeholders in Vietnam. It uses GIS and Remote Sensing (RS) technologies in determining climate related risks in developing adaptation plans. This project was already institutionalized in Vietnam.

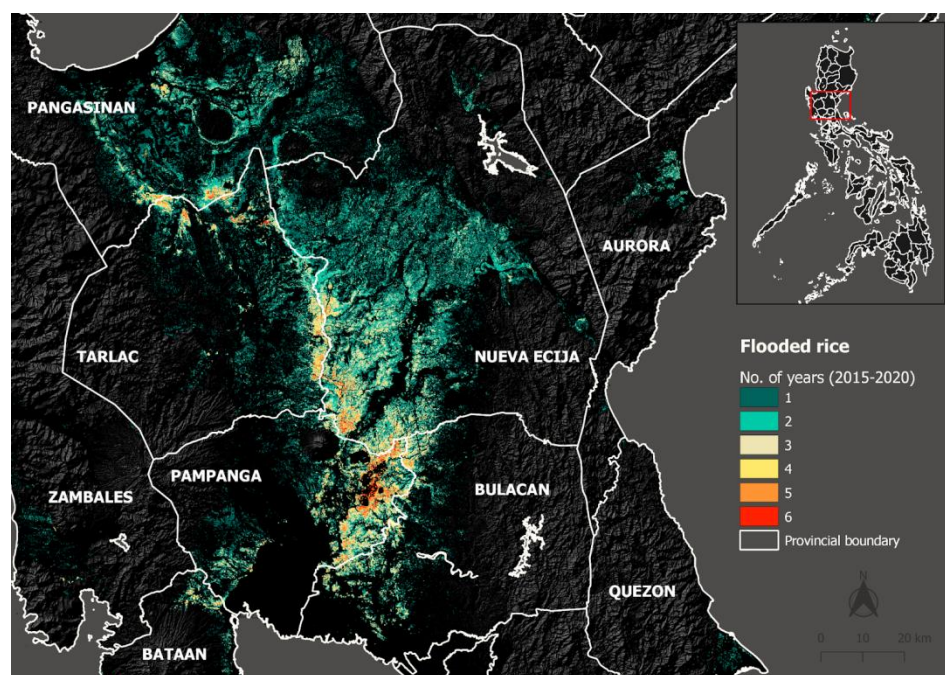


Figure 4. Flood-prone areas in Central Luzon from 2015-2020.

Table 3. Discussion and relevant questions raised about De-Risk

PRESENTER /QUESTIONS	RESPONSE
Pancho Lara (International Alert): Does the increase in rainfall trigger insurance payment to participating municipalities in the project?	
Jane Girly Balanza (CIAT)	The insurance payment is under the IBIZA project wherein farmers can apply for insurance if they anticipate heavy rainfall in the area. They are not using the climate forecast in PAGASA.



Mylene Claudio (CCC) on the Assessment of the information generated from the projects were actually used by the recipients.	
Alice Laborte (IRRI)	DA is using the outputs of PRISM in terms of harvest projection and decision making. At the regional level, partners were capacitated on how to use the data, like comparing the yield generated from PRISM with PSA data and identifying areas that needed to be targeted; PhilRice also used PRISM data to identify areas where seeds can be distributed as part of RCEF.
Jane Girly Balanza (CIAT)	For the ACAP-Bicol, a beta-testing activity will be conducted that would include a feedback mechanism as a validation tool to improve PAGASA's forecasts. 14 AMIA villages in Bicol are using the ACAP data, and the beta testing will be very helpful to determine if they are giving the exact recommendations to farmers. For the Climate Risk Vulnerability Assessment (CRVA), the outputs are used for the commodity invested planning to identify what are the vulnerable crops and which crop/s to be invested.

CCAFS Experience: Climate Smart Villages

Presenters: Emily Monville Oro (IIRR)
Marie Cabriole (IIRR)

Ms. Emily Monville Oro, Country Director for the Philippines and the Acting-Director of International Institute for Rural Reconstruction (IIRR) Regional Center for Asia, and **Ms. Marie Cabriole**, Country Lead Researcher (IIRR), provided a presentation about their program on Climate Smart Villages in the Philippines and how it is linked with ClimBeR.

The International Institute of Rural Reconstruction (IIRR) focuses mainly on participatory action research, community development, capacity building, and more importantly working on the ground at community level. They envision in empowering rural people to build resilient communities and attain socioeconomic equity through creative and community-led action. Climate change, disaster risk reduction, and governance are cross-cutting themes in the development of the 5 focus areas of IIRR which includes education, economic, empowerment, health, environment, and food systems. IIRR's impact sectors are the most vulnerable; among these are women, children and the youth. Their key programs are built on addressing the needs of these people, such as the Climate Smart Villages (CSVs). CSVs look at building adaptive capacity by promoting climate resilient agriculture. It is a platform which ensures that farmers are able to understand their risks, and allows them to develop options in addressing those risks.

IIRR and IRRI, through the ClimBeR initiative, are collaborating to advance the design and implementation of ClimBeR in the Philippines with IIRR's long-term presence in Guinayangan, Quezon and Ivisan, Capiz. This project will cover a period of 2 years, from Nov 2022 to Dec 2024. A special site in General Emilio Aguinaldo, Cavite will also be



initiated to establish 6-10 coffee nurseries in Brgy. Narvaez and Dalusag. IIRR will support the ClimBeR objectives by establishing proof of concepts building on past and current community programs in Guinayangan and Ivisan in the Philippines. Moreover, it will support the enhancement of the knowledge in the areas of resilience, equity and inclusiveness, and women's empowerment based on the past efforts on climate adaptation.

The overall goal of the IIRR-ClimBeR program is to generate further evidence on how small farms contribute to more sustainable and resilient food systems. The specific objectives and the methodologies to be used are shown in Table 4.

Table 4. Objectives and methodologies for IIRR-ClimBeR Project

Specific Objectives	Methods
<p>Objective 1: Identifying approaches/methods for removing barriers to fostering transformative adaptation (undertaking socially-inclusive and gender-transformative climate-adaptation actions)</p>	<ul style="list-style-type: none"> •Data mining and literature review for the barriers and root causes of social and gender exclusion and vulnerability •Development of case studies and/or stories through FGDs and KIIs
<p>Objective 2: Developing and advocating women-focused climate adaptation measures recognizing women as active agents in resilience building</p>	<ul style="list-style-type: none"> •Provision of livelihood support (materials, cash, and training) to two women's groups (50 women) •Conduct of regular FGDs, KIIs, and tracking of the economic performance of women's livelihoods
<p>Objective 3: Garnering best practices from past work to compile relevant reference and reading materials in the form of briefs and a sourcebook on resilience, equity and empowerment in smallholder agriculture</p>	<ul style="list-style-type: none"> •Development of sourcebook •Development of thematic briefs

Target outputs and outcomes for the IIRR-ClimBeR program includes different knowledge products (working papers, case studies, briefs) and research reports on how women- focused livelihoods contribute to women's empowerment using the Women's Empowerment in Agriculture Index or WEAI tool.

Table 5. Discussion and relevant questions raised about CSVs and IIRR-ClimBeR project



PRESENTER /QUESTIONS	RESPONSE
Nikko Macalintal (DA): What are the necessary institutional arrangements to scale up the CSVs? What are the current capacities of LGUs and the national agencies in embracing this methodology of delivering climate support services in the community?	
Ms. Emily Oro (IIRR)	The scaling pathway was discussed with the Climate Change Agriculture and Food Security (CCAFS) network. The scaling happened with the government since they have the mandate and mechanisms for implementation. IIRR also had an opportunity to link with DA-BAR and Climate Change Office during the conceptualization of AMIA Villages. Knowledge sharing and demonstration helped as to how CSVs can be operationalized.
Ms. Gem Trespalacio (DOST-PCCARD): Is it true that the decline in coffee production in Cavite is due to the decrease in population in the forest as a result of land use change? If yes, efforts to establish coffee plantations in Gen. Emilio Aguinaldo will be more likely affected?	
Dr. Julian Gonsalvez (IIRR)	There are 7 barangays in the municipality and all of them continue to plant coffee. These areas practice Maltese Story cropping system, a classic climate resilient approach. This system should be saved and conserved because it is rapidly losing in other parts of Cavite.
Alyssa Sahali Tan (DA-International Affairs): Does IIRR partner or work with municipalities located in rural far flung coastal areas because there is a need for creation of Climate Smart Villages? Do you also have projects in the Bangsamoro Region?	
Ms. Magnolia Rosimo (IIRR)	Guinayangan and Ivisan project sites of IIRR are both coastal areas, doing mangrove rehabilitation and addressing issues on coastal households' livelihood. Additionally in Ivisan, disaster risk reduction by facilitating DRR plans in their barangays. Currently, no project is established in BARMM but the methods/models can also be adapted in other areas.

What is the relevance of “climate security” in the Philippines?

Moderator: Francisco 'Pancho' Lara Jr. (International Alert Philippines)

Panelists: **Saturnina Halos**, Technical Advisor of DA-CRAO, Designer of AMIA Project
Cariño “Rockrock” Antequisa, Climate Change Focal Person in Mindanao,
Program and Project Development Advisor of PDA-ECOWEB

The session on Climate Security was introduced by **Adam Savelli**, Regional Focal Point in Southeast Asia Climate Security Team, Lead of Finance for Climate Security Research Initiative (WP2-ClimBeR), and Climate Risks Specialist at Alliance Bioversity -CIAT.

Climate Security (CS) is a new and emerging topic globally. According to the



Intergovernmental Panel on Climate Change (IPCC), climate change is associated with the onset of conflict, civil unrest and changes in duration and severity of violent conflicts. These conflicts and their interaction with climate define the Climate Security Nexus, which differs from one location to another. Competition over land and water resources, livelihood and security, migration and displacement, extreme weather events and disasters, to name a few, are some climate conflict pathways or event sequences that would increase the likelihood of promoting conflict that are happening at a global scale. In the Philippines, most common conflict pathways include:

- decrease rainfall leading to increase conflict incidence by non-state armed groups
- issues on environmental management resulting to conflict over resources in Mindanao and Luzon
- extreme storms and flooding contributing to socio-economic inequalities
- depleted livelihood brought about by climate change which facilitates recruitment of militant groups
- depleted fishing stocks amplifying international attentions

To address issues on climate security and identify evidences of climate conflict pathways in the Philippines, additional research is needed with the help of leading group of experts in the country.

The panel discussion was moderated by **Dr. Francis ‘Pancho’ Lara**, Professor at University of the Philippines- Diliman, and Peace and Conflict Advisor at International Alert - Philippines. The objective of this discussion is to examine the Philippine Climate Security in the Philippines and how this would affect the country in the future. It also aims to build a common definition of CS in order to identify the entry points for policies and interventions that would eventually address the communities that are most affected by the changing climate.

Dr. Pancho Lara, set the tone of the discussion by presenting three (3) assumptions on Climate security; (a) climate security is affected by climate change, thus it bears the threat of violent conflicts when combined with other risk factors; (b) there are pathways on which these conflicts are seen, measured and harnessed as caveat for immediate action, and (c) adaptation and mitigation development strategies can (themselves) provoke conflicts (e.g., big renewable energy projects, human settlements).

Table 6. Discussion and relevant questions raised on Climate Security in the Philippines.

PANELIST /QUESTIONS	RESPONSE
	Dr. Pancho Lara (IA): What are the key climate security issues in the country, the community, and DA’s programs? What are the opportunities for positive actions?



<p>Ms. Saturnina Halos (DA-CRAO)</p>	<p>Climate security issues in the Philippines include limited supply or source of water, hot temperature, and inequitable distribution of assistance by the government, and adverse impact of climate to livelihood, which increases the number of poor people, hence forcing people/community to join the other side.</p> <p>One adaptation measure is to ensure better water management by promoting projects that would store rain and flood water that can be used for irrigation and the like. Other measures are, increasing the income as well as construction of a common facility that will shelter the community during very hot temperatures. For the inequitable distribution of assistance, governance can be possibly handled by LGUs. Possible avenue for research is to look at involving the community in organizing and identifying different climate risks.</p>
<p>Mr. Cariño Antequisa (ECOWEB)</p>	<p>ECOWEB is a non-government organization that dwells on development and humanitarian programs. One important strategy that the agency has been implementing for the past years is the ABABACOCOFA, which stands for Abaca, Banana, Bamboo, Coffee, Coconut, and Falcata. This focuses on Conflict and Climate Resilient Commercial Crops. Based on the analysis of their studies, there are 4 major social problems in Mindanao namely, poverty, strained social relations, poor governance and environmental degradation. Environmental degradation is eventually linked with issues on climate change. The key strategy of ECOWEB to address these rising issues is sustainable livelihood by helping people develop cash crops along with food crops, coming up with the idea of conflict resilient crops. Many communities in Mindanao are fighting over important crops like coconut, coffee and abaca resulting in livelihood and displacement conflicts. In this project, we have discovered that conflict resilient crops are also climate resilient crops. It is very important to determine these crops to achieve sustainable livelihood.</p> <p>Some of the Challenges based on ECOWEB experience</p> <ol style="list-style-type: none"> 1. Lack of knowledge among farmers and other vulnerable sectors, NGOs and LGUs on climate-smart practices 2. Lack of funding support for locally-led innovators 3. Weak implementation and lack of investment on CA policies of local governments 4. Absence of local policies, programs and research on the nexus of climate and conflict. 5. Climate smart livelihood strategies and practices are not included in school curriculum
<p>Dr. Pancho Lara (IA): Is there an office in the government which handles disputes related to climate change?</p>	



Mr. Nikko Macalintal (DA)	Most of the conflicts are being handled by Regional Field Offices, but there is no particular office mandated to address issues on climate change. The Legal Services of DA can be tapped for advice and possible action.
Comment from Ms. Alyssa Tan (DA-IAD)	Tawi-tawi is starting to experience adverse impacts of climate change, they are not usually hit by environmental catastrophes, yet recently they were hit by typhoons that caused casualties, damages to livelihood and infrastructures. Integration of climate measures with national policies to address issues on climate security is very important. Climate security is also food security, and agriculture and food are the gateways for peace in the Bangsamoro region.
Dr. Adam Savelli (CIAT): Are there climate change action programs on mitigation and adaptation that are disrupted by conflicts and the potential to happen in the future?	
Mr. Cariño Antequisa (ECOWEB)	ECOWEB introduced a modified abaca fiber equipment to farmers but then soldiers suspected and arrested these farmers of supporting armed groups due to the presence of abaca in their homes (which were also found in NPAs households during one of their raids).
Ms. Saturnina Halos (DA-CRAO)	The government relocated people in landslide-prone areas due to operations in the military, which put them in a vulnerable situation when a typhoon hit the area. No work has been done in BARMM because they consider themselves independent from DA.

Can data tools be used to mitigate climate security risks in the Philippines?

Presenters: Adam Savelli (CGIAR FOCUS Climate Security – ClimBeR)
Maureen Anthea Lacuesta (International Alert Philippines)

Adam Savelli, ClimBeR WP2 Lead (CIAT), together with **Ms. Maureen Lancuesta**, Lead of the Critical Event Monitoring and Early Response Network Program at International Alert (IA), introduced some of the data tools used to mitigate climate security risks in the Philippines. Mr. Savelli also moderated the discussion.

There are several important data tools used to monitor climate, weather and security conditions. Hence, there is also an underlying challenge in integrating and turning these available data into climate action. Under CGIAR, a decision tool called Climate Security Observatory (CSO) was developed to provide stakeholders with climate security analyses. On the other hand, International Alert has also developed observational and real-time mitigation tools in addressing conflict and security issues particularly in the Bangsamoro region.



Ms. Maureen Lancuesta began her presentation by providing a brief overview of their organization. International Alert is a peace-building organization that focuses on solving the root causes of conflicts. They have issued publications on analyzing trends on conflicts in Bangsamoro. Among their key strategies include extensive research, issue-based dialogues, constituency and capacity building to LGUS, academe, and private sectors. In several years of research, they found out that there are four (4) resilient markers of fragility or the predominant causes of conflict:

- a. presence of rival holders or the armed groups;
- b. shadow economy in the form of illegal use and trade of drugs and firearms;
- c. issue in property rights including land and resources; and
- d. vulnerability brought by pandemic (recent observation)

To address these continuing issues in Bangsamoro, IA developed platforms that are evidence-based, participatory, solution-oriented, conflict-sensitive and interoperable in nature. The platforms and their corresponding descriptions are listed in Table 7.

Table 7. The interoperable platforms developed by International Alert Philippines.

Platforms	Description
Conflict Alert	<p>CA is a subnational conflict monitoring system that tracks incidence of conflicts and its causes in Bangsamoro region. Outputs are published reports that aim to contribute in policy development strategies and peace-building approaches through relevant and reliable conflict data. Data sources are from PNP reports and media, and will be validated by a multi-stakeholder group. This will be sorted as violent and non-violent conflicts, and further analyzed in terms of its severity and magnitude. Visualization is through tables, charts and graphs which will be disseminated to government agencies, LGUs, private sectors and academe.</p> <p><u>Achievement:</u> Helped informed advocacies on national legislations on land use and anti-discrimination, and also other peace-process issues; helped in the formation of Indigenous People's code; contributed on conflict development plans, zoning and physical framework plans, solid waste management plans; as well as addressed gender-based violences.</p>
Critical Event Monitoring System (CEMS)	<p>CEMS monitors real-time data through SMS and high-frequency radio-based reports that captures conflict incidences and tensions in the area. The objective is to be able to have a quick and context-specific response to tensions and critical events.</p> <p><u>Achievement:</u> Responded to human-induced disasters and natural disasters like flooding, landslide and earthquakes; developed radio program to harness broadcast media as a form of early response;</p>



	avoided inaccurate spread of news during the pandemic
Resource Use Management Planning (RUMP)	RUMP identifies resource of mapping claims and conflict timeline and develops strategies for resource use. It also traces and analyzes conflict dynamics. They make use of GIS technology. <u>Achievement:</u> Produced 28 RUMP processes covering ancestral domains and LGUs in Bangsamoro and other parts of Mindanao; helped in identifying hazard-prone and high risk areas to implement risk reduction and management plans; produced general reference and thematic maps overlaid with conflict data; helped in the formation of Land Policy action group.

Climate Security Observatory

Adam Savelli introduced the Climate Security Observatory which is the key output of CGIAR's Climate Security team (CST). He also provided a brief walkthrough of the beta-version of CSO in Kenya which is targeted to be launched in the first quarter of 2023. The CGIAR's CST aims to address the knowledge gaps between climate and security by aligning evidence from the fields of climate, land, and food systems science with peacebuilding efforts, and inform peacebuilding initiatives to ensure climate action is climate-security sensitive. To achieve this, CSO was developed as an evidence-based decision support tool helping researchers, policy makers, local communities, stakeholders, development humanitarian peace building practitioners working at the intersection of climate, peace and security to understand and respond to these hazards.

There are four (4) key questions that CSO needs to answer:

1. How does climate worsen the root causes of conflict?
2. Where are the areas that are most vulnerable to climate security risks?
3. Who are the vulnerable groups that need to be targeted for programming and interventions?
4. What needs to be done to break the cycle of climate and conflict?

To be able to answer these research questions, a number of analyses and approaches have been consolidated (see Table 8).

Table 8. Different research approaches and analyses conducted under CSO.

Research analysis	Description
Climate Security Pathway analysis	It's a mixed-method analysis based on machine assisted literature review and expert knowledge gained through workshops, key informant interviews and fieldwork.



	Information gathered was discussed and validated. Additional details will be included in the initial results.
Network analysis	A quantitative analysis that gives insights into the underlying structure of the climate, conflict and socio-economic system. Identify all the potential links within the climate security nexus.
Econometric analysis	A quantitative analysis which aims to quantify if and how nutrient-related variables channel the effects of climate variability into violent conflicts.
Spatial analysis	A quantitative analysis which identifies hotspots of climate hazards, and socio economic vulnerabilities. Used GIS with public available data. Sample map showing confluence of various socio-economic vulnerabilities overlaid with conflict occurrences and hazards is shown in figure 5.
Social media analysis	A quantitative analysis that aims to explore the gaps by employing an online mapping approach relying solely on social media as an alternative way for wider public engagement. Use tweets from twitter app on climate & conflict (in Kenya).
Policy coherence analysis	Assess the extent to which climate policies are engaged with climate security. Identify and understand climate security risks and how these risks can be addressed.

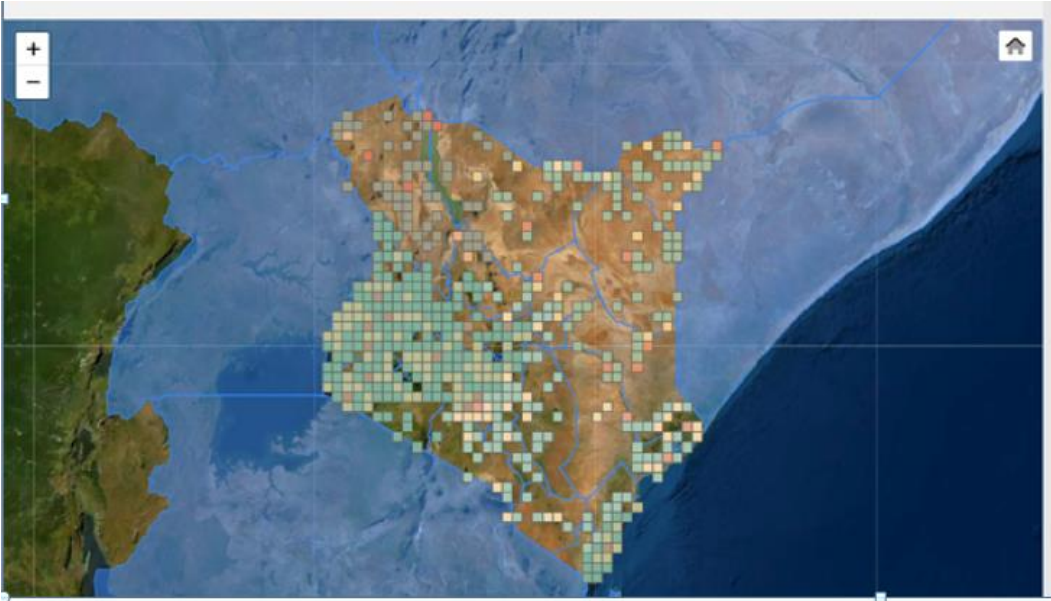


Figure 5. Output map from spatial analysis showing climate security risks, a case in Kenya.



Next step for the Philippines. The different approaches of Climate Security Observatory will also be applied by exploring the technological landscape of the country. Identify possible collaborations with various actors and stakeholders. Moreover, identify organizations (governmental, peace building, multilateral/international organizations) for user and usability workshops.

Table 9. Discussion and relevant questions raised about IA's data tools and CSO

PRESENTER /QUESTIONS	RESPONSE
Nilkko Macalintal (DA): How to handle sensitive data? Are these data available and accessible?	
Adam Savelli (CIAT)	The data used in CSO are once CSO and are publicly available; In terms of the sensitivity of data, our team is considering that especially on the effect of identifying an area as a climate security hotspot.
Maureen Lancuesta (IA)	In conflict data, we adhere to strict data confidentiality and sensitivity protocol. We use only processed data, and do not publish the names of people involved and other sensitive data. Processed data are available publicly.
Jon Hellin (IRRI)	Complementation of works to avoid violent conflict; synergies to approaches
Magnolia Rosima (IRR): Are the tools developed by International Alert scalable? Can these tools be used by the local government and other agencies?	
Maureen Lancuesta (IA)	Yes, our data is available in the conflict alert website, and can be accessed at https://conflicalert.info All our tools and platforms are in collaboration with a lot of LGUs in that Bangsamoro region.
Likha Alcantara (NEDA): How does CEMS interact with early warning systems?	
Maureen Lancuesta (IA)	Initially the CEMS platform was made for man-made disasters, but now we are looking at climate risk in Bangsamoro, so we are working with our partners in DRRMO.

Message from Usec. Mercy Sombilla, Undersecretary for Policy, Planning and Regulations, Department of Agriculture was delivered by **Mr. Lev Nikko Macalintal**, Development Management Officer, DA-Policy Research Service.

In her message, she gave emphasis on the natural calamities that the country is experiencing due to the effect of climate change and it is expected to worsen in the coming years. These natural hazards have great socio-economic implications, with the farmers mostly affected. To be able to respond to the adversities of climate change, she urged the agricultural sector to become proactive in developing adaptation and

mitigation plans and enabling the policies to support the implementation.

She extended her appreciation for including the Philippines as part of ClimBeR and that the DA will continue its support to CGIAR to transform climate resilient agriculture by co-developing climate adaptation innovations.

Climate Finance for De-risking Agricultural Production Systems

Presenters: Pedro Chilambe (CIAT – ClimBeR) via online
Adam Savelli (CIAT-ClimBeR)

Pedro Chilambe, Climate Finance Specialist at CIAT, presented and introduced the cross-cutting thematic areas of Climate Finance within the ClimBeR Initiative. He joined the workshop via Zoom.

Pedro highlighted the role of CGIAR in supporting the national government in the creation of evidence-based and climate rationale for the development of Climate Finance proposals. Figure 6 shows the inter-linkages of climate finance within different work packages of ClimBeR to guarantee micro and macro finance to support agro-finance systems. This will also focus on Climate Security Investment planning. These activities will be implemented across the six (6) priority countries including the Philippines.

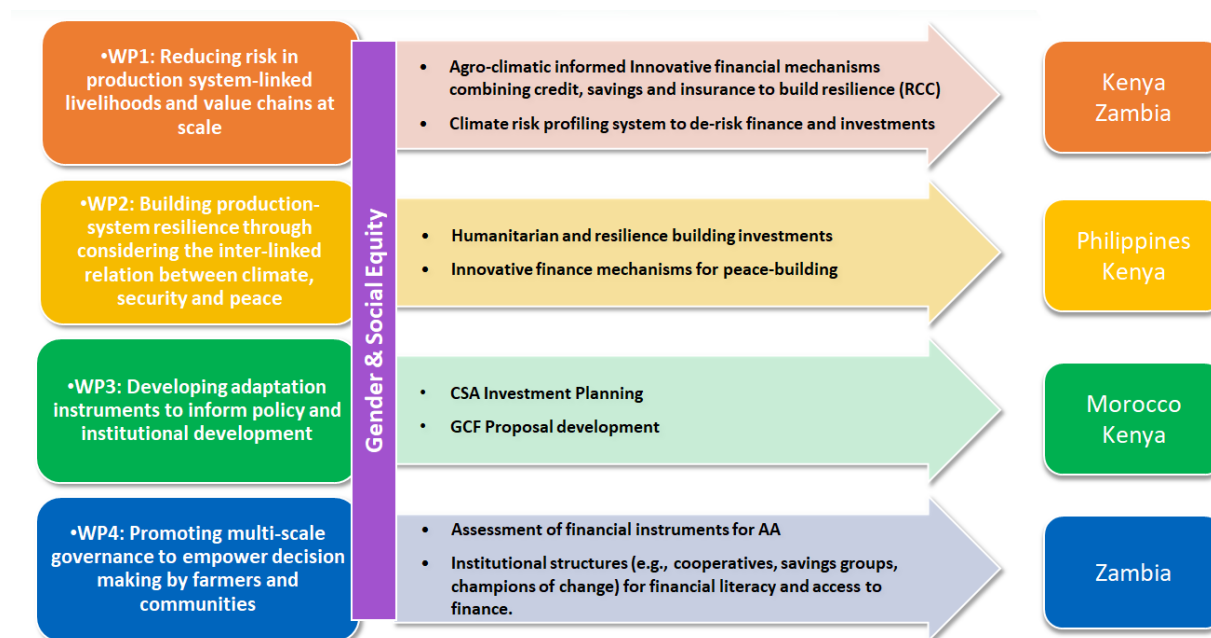


Figure 6. Cross-cutting roles of Climate Finance in different work packages of ClimBeR



Adam Savelli, on the other hand, explained in detail the methodology on Climate Security Investment Planning (CSIP). The goal of CSIP is to ensure international climate finance organizations extend their reach in countries, communities and even households that have been impacted by climate and security risks. Figure 7 captures the step by step procedure on how CSIP is implemented.

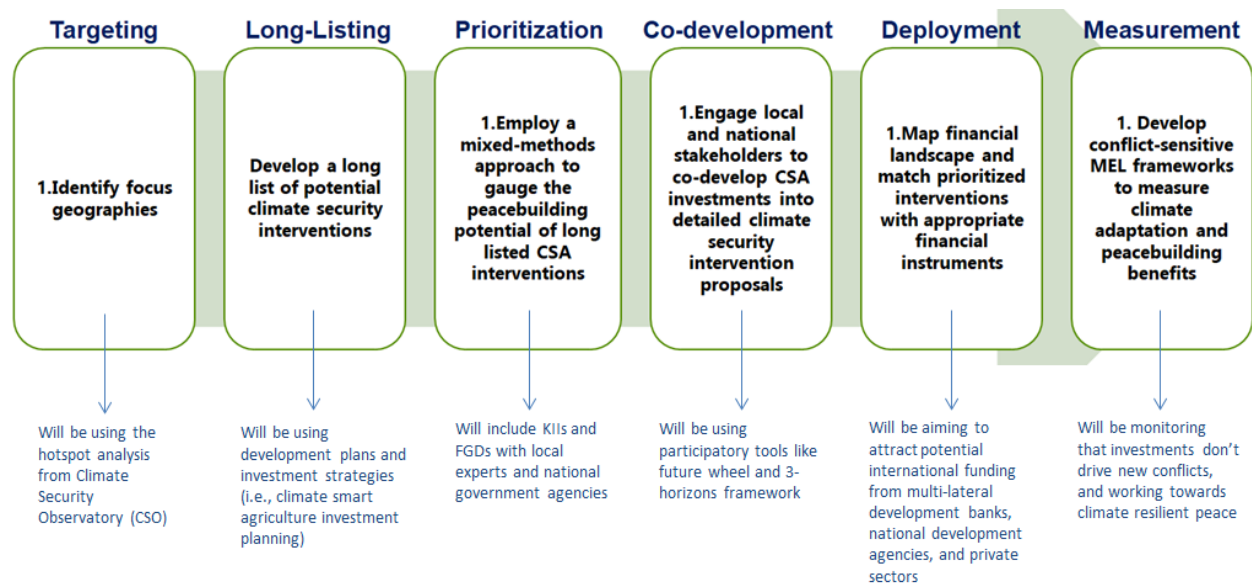


Figure 7. The Climate Finance Investment Planning (CSIP) methodology.

The co-development of CSIP is targeted in the second half of 2023 to 2024. ClimBeR wishes to recognize partnerships among different national agencies in the Philippines. Series of activities will be anticipated like workshops and KIIs, and tapping knowledge and expertise from different stakeholders regarding the development of CSIP.

Table 10. Discussion and relevant questions raised about Climate Finance.

PRESENTER /QUESTIONS	RESPONSE
Norman Kraft (Agricultural Credit Policy Council, ACPC)	suggested a possible collaboration with financial agencies like ACPC which are mandated to develop innovative financing schemes. The challenge lies in convincing the private sectors (which are traditionally conservative), and that the collaboration with ACPC might help in coming up with strategies in convincing them to provide the climate finance needed.
Pedro Chilambre (CIAT)	Private sectors can really support in leveraging large amounts of finance; It is also important to look at various public institutions that have mandates in terms of financing mitigation and adaptation activities. The suggestion is welcomed and will be taken into consideration.



Adam Savelli (CIAT)	Based on experience in climate agriculture investment plannings, private sectors are really hesitant to get involved, and the collaboration will be very critical
Alice Laborte (IRRI)	PH has a proposal with the green climate fund (GCF), with Land Bank of the Philippines (LBP) as lead agency together with DA. The aim is to come up with innovative climate financing with support from GCF. Concept note was approved in Sep 2021 with area coverage includes Pampanga, Bicol & Agusan river basins. This project can potentially be linked with ClimBeR.
Bess Lim (DRRMC)	DA-DRRM has also a proposal partnered with PAGASA entitled Adapting Philippine Agriculture to Climate Change; already submitted to GCF, and passed the initial round of study.
Nikko Macalintal (DA): What is the focus of ClimBeR, is it security risks or adaptation?	
Adam Savelli (CIAT)	There are 4 work packages in ClimBeR, and WP2 focuses mainly on Climate Security; the climate finance is cross cutting across all 4 work packages.

VI- WORKSHOP SUMMARY AND CLOSING REMARKS by Jon Hellin (ClimBeR Co-Lead)

The presentations shared in this inception workshop clearly show that there are existing programs and activities that can be utilized and adopted by ClimBeR to address key issues on climate change. There are data and geospatial tools available that can help in targeting critical adaptation areas and what has to be done. Looking at the livelihood and farming systems under the threat of climate change, voices from the bottom are very critical, which also connects to proper representations of equity.

Partnership is very important, the role of the government, from barangay to national level, the communities, as well as the private sectors. Policy implications and policy decisions also have significant roles in supporting the livelihood of the farmers around rice-based systems to ensure agriculture viability. Climate security and climate finance and external contributions are indeed important factors to consider in the adaptation and mitigation measures against the changing climate.

Jon Hellin in his closing remarks mentioned that the presentations, the panelists and the interaction from the audience captured synergy on how we can work effectively together. To be able to achieve climate resilient agriculture in the Philippines, we need the contribution of everyone and the different national agencies. Another important area is the mutual respect identifying the work that needs to be done to make the Philippines a climate-resilient country.



VII- PHOTO DOCUMENTATION



Opening remarks by Dr. Jon Hellin (IRRI-ClimBeR)



From left to right: Dr. Giriraj Amarnath (IWMI-ClimBeR), Dr. Gay Jane Perez (PhilSA), Ms. Bess M. Lim (DA), Ms. Narcie Tanchiatco (NEDA)



From left to right: Dr. Pancho Lara (IA), Carino Antequisa (PDA-ECOWEB), Saturnina Halos (DA-CRAO)



Jane Girly Balanza (CIAT)



Alice Laborte (IRRI)



Emily Oro (IIRR)



Marie Cabriole (IIRR)



Nikko Macalintal (DA)



Adam Savelli (CIAT)



Maureen Lacuesta (IA)



Pedro Chilambe (CIAT)





ClimBeR Inception Workshop, Quezon City, Philippines, December 06, 2022



ClimBeR – Philippine Team: Adam Savelli (CIAT), Alice Laborte (IRRI), Sean Mattson (CIAT), Mary Anne Gutierrez (IRRI), Esthe Velasquez (IRRI-DA), Achu Arboleda (IRRI), Rosendo Gutierrez (IRRI), Rowena Castillo (IRRI), Jon Hellin (IRRI), Lina Valencia (CIAT), Giriraj Amarnath (IWMI), Sahana V (IWMI)

