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EXPERT CONSULTATION WORKSHOPS: DEVELOPING A COMMON VISION OF CLIMATE-RELATED SECURITY RISKS

CGIAR Climate security observatory

METHODS PAPERS SERIES
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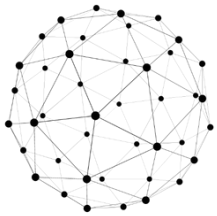
OBJECTIVES

- To present the methodology for expert consultation workshops to be conducted in each ClimBeR partner country.
- To discuss the theoretical underpinnings of the method´s phases and tools.
- To introduce each adopted facilitation tool in a practical sense.

INTRODUCTION

In strengthening scientific comprehension of climate-related security risks, four main cross-cutting priorities for research have been identified (Mach et al., 2020), including: 1) deepening our understanding of climate, peace and security links and the political and socioeconomic conditions through which they manifest; 2) integrating multiple research methods and designs; 3) systematically exploring future climate-related risks and potential responses towards mitigating them; 4) developing methods to evaluate the effectiveness of interventions looking to foster a sustainable peace through climate action. Among the main research challenges for the field remains the systematic examination of the “black box” in the climate-conflict nexus in a manner that explicitly addresses the mechanisms linking climate impacts and societal instability, the political and socioeconomic conditions in which these mechanisms manifest, and the relative contribution of climate change impacts over other drivers of conflict (Buhaug, 2015).



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The application of divergent research methods in conceptualizing and understanding linkages within climate security (CS) has led to different, and sometimes contradictory, findings. These disparities certainly contribute to a lack of consensus and lively debates among CS researchers (Selby & Hoffmann, 2014). However, this diversity of interpretations, frequently over single case studies and contexts (e.g. Ide, 2018), implies an opportunity for the comparative evaluation of results obtained through different methodological approaches. This study intends to conduct qualitative research, based on stakeholder engagement processes, to further our understanding of the climate security nexus as perceived by expert practitioners of resilience building and climate change adaptation efforts under a diversity of contexts. The results are meant to be triangulated with the country-level analyses conducted by the Climate Security Observatory (CSO), providing an ideal opportunity for a multi-methods assessment of CS drivers, and for the systematic analysis of the sensitivity of findings toward different research designs (Mach et al., 2020).

By building upon a shared and systemic vision of climate, peace, and security linkages, the method is furthermore intended to explore pathways towards fostering climate security as a policy issue of concern within national-level governance systems for climate action. Considering that climate change adaptation and conflict management policy sectors have been historically developed in siloed manners, it is reasonable to expect that a significant degree of institutional learning is required to better coordinate institutional practices with the goal of managing climate-related security risks. In addressing this challenge, the proposed methodology builds upon the literature on systems innovation for sustainability transitions (van Mierlo & Beers, 2020), which proposes that spaces that effectively facilitate social learning may lead to changes in cognitive, relational, and institutional practices that contribute towards system innovations.

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THEORETICAL FRAMEWORKS

Climate security

A recent review of the climate security literature (Buhaug & von Uexkull, 2021) proposed to conceptualize the link between climate-related impacts and conflict by accounting for three well-established fields of scientific inquiry: the determinants of social vulnerability to climate change and variability; the climatic drivers of conflict risk; and the societal and environmental impacts of violent conflict. Under this framework (Fig. 1), socioeconomic vulnerability influences risk and impacts from climatic change, these impacts in turn enhance the risk of armed conflict, and the consequences of armed conflict increase vulnerability to future climate hazards; hence potentially trapping a society in a "vicious circle" of conflict that is also influenced by institutional responses at multiple levels and throughout a diversity of policy sectors.

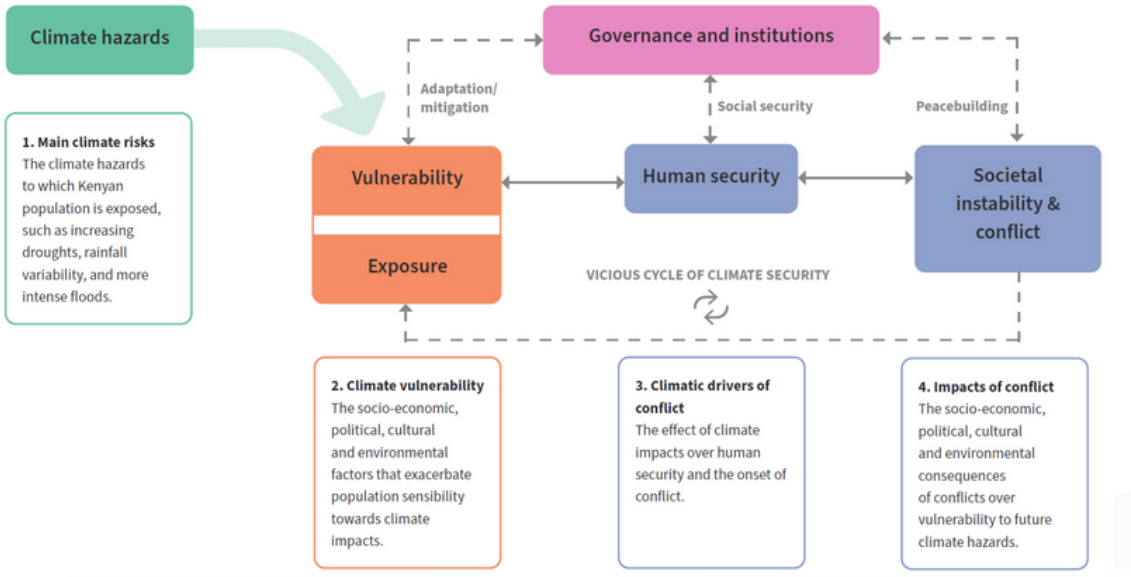

FIGURE 1. CLIMATE SECURITY FRAMEWORK SHOWING THE VICIOUS CYCLE BETWEEN VULNERABILITY AND CONFLICT.

This theoretical framework will be used throughout the stakeholder engagement process to identify climate security drivers as defined by five main conceptual categories: 1) climate change hazards; 2) underlying drivers of environmental and social vulnerability to climate hazards; 3) potential impacts of climate change over human security; 4) climatic drivers of societal instability; 5) impacts of societal instability over vulnerability to climate hazards. A holistic interpretation of the climate security nexus adopts an understanding that causal correlations between climate change impacts and societal instability are not linear, direct, nor proportional, and builds upon this complexity to identify opportunities to create positive feedback loops that transform underlying socioeconomic, ecological and political sources of vulnerability to climate change and conflict. By assessing these dimensions through a facilitated process of collective inquiry, it is expected that participating stakeholders will develop a shared vision of the climate security nexus under a diversity of settings within their country, and will be able to identify points and strategies of intervention for resilience building that fosters a sustainable peace.

Social Learning for systems innovation

The deployment of participatory instruments for collective deliberation can support the emergence of networks, conformed by interdependent actors, that learn to act in more synergistic manners, thus effectively "becoming a system" (van Mierlo et al., 2010, 320). In seeking to modify the functioning of systems (e.g. fostering climate security programming), governance efforts must adopt conscious strategies to develop multi-actor agreements around models of reality and perceptions of social-ecological problems, along with suitable and feasible opportunities for action. Dialectical and reflective approaches that are explicitly situated in place-based analysis, as proposed by social learning theory (Ison & Blackmore, 2014), are considered a main route toward system-level change.

Learning area/Social level	Actor	Network
Single loop – aspirations and knowledge	Changes in problem definitions and perceived solutions regarding pre-existing goals.	Common vision on problem definitions and perceived solutions regarding pre-existing goals.
Double loop – aspirations and knowledge	Changes in goals, values, norms or perceived interests, going along with radically new problem definitions and search directions.	Agreement on a desirable future image based on changed goals, values, norms or perceived interests.
Perception of own role and that of others	Increase in feelings of involvement, urgency and responsibility. Enhanced belief in own competencies and freedom of manoeuvre.	Collective engagement and responsibility in the network. Mutual feelings of dependence. Trust in the efforts, competencies and capacities of members in the network.
Actions and behaviour	Changes in behavioural patterns of individuals or internal organisational adaptations.	Increased coordinated or collective action.

TABLE 1. AREAS AND LEVELS OF LEARNING IN THE SOCIAL LEARNING FOR SYSTEMS INNOVATION FRAMEWORK. EXTRACTED FROM (VAN MIERLO ET AL., 2010).

The proposed methodology for stakeholder engagement builds upon social learning theory in that its different phases and tools account for multiple areas of learning and social levels in which learning occurs (Table 1) toward the effective integration of the climate security nexus in governance systems for resilience building, otherwise referred here as climate security programming. Areas of learning include changes in cognitive, aspirational, relational, and action dimensions; while social levels account for individual actors and networks. Given that the proposed method is meant for a one-off engagement event, changes in stakeholder actions are not accounted for throughout the method. It is rather implicitly assumed that identified opportunities for synergy and collective action pathways will have a future influence on behaviors.

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METHODOLOGY

The theoretical framework presented in Table 1 will be adopted as a base to design a facilitated process of co-inquiry with expert stakeholders. The workshop will take place throughout three sessions, each with the respective objective of 1) understanding the complex interlinkages between climate and security; 2) exploring the way multiple stakeholders could better collaborate with each other in addressing climate-related security risks, and 3) identifying priority areas of intervention towards mainstreaming climate security sensitiveness in climate action. Each session adopts a set of facilitation tools meant to comply with its objectives (Table 2). Each workshop component is described in detail below.

Session	Name	Goals	Tools
1	A common vision on climate and security	Participatory assessment of CS drivers.	Causal Loop diagrams and Causality matrix
2	Actors at the intersection of climate and security	Map the governance system for CS	Multi-level governance map
3	Towards a Community of Practice for Climate Security	Define governance recommendations for climate security action.	Action planning

TABLE 2. SUMMARY OF WORKSHOP PHASES AND METHODS.

Session 1: A common vision on climate and security

During session 1 of the method, a participatory process will be conducted to develop a conceptual system dynamics model of the climate security nexus under multiple thematic case studies, in which selection and framing are advised by CSO´s Climate Impacts Pathways. System Dynamics Modelling (SDM) encompasses a set of tools and methodologies meant to capture the non-linear behavior of complex systems by graphically representing structural relationships between a diversity of system variables, along with positive and negative feedback loops (Ford, 2010). This phase is meant to develop a shared understanding of the climate security nexus under a diversity of settings and as perceived by expert stakeholders.

The adopted tools are intended to trigger learning as a change in the cognitive perception of the CS nexus and its manifestation at both individual and collective levels. As such, this phase will enhance the "Aspirations and knowledge – single loop" area of learning, as presented in the social learning for systems innovation framework.

Learning area/Social level	Actor	Network
Single loop – aspirations and knowledge	Enhanced understanding of the climate security nexus and its manifestation under specific settings.	Common vision of climate security drivers and their complex dynamics of interrelation.
Double loop – aspirations and knowledge		
Perception of own role and that of others		
Actions and behaviour		

TABLE 3. LEARNING OUTCOMES FROM SESSION 1. PARTICIPATORY SYSTEMS MODELING.

Causal loop diagrams (CLD) are graphical representations of complex systems meant to communicate a large amount of information on causalities within the system. These have been widely used in SDM approaches as a simple and useful way of mapping non-linear feedback relationships (Sterman, 2002). Altogether, CLDs indicate an array of drivers of change in a social-ecological system, along with the manner in which this excerpt influence over each other. Each individual link in a CLD is meant to evidence a causal relation between variable A and variable B. This relationship is represented by a unidirectional arrow, which can furthermore be complemented with a valence (+, -), an indicator of strength, and an indicator of time. Additionally, CLDs offer the opportunity of identifying feedback loops acting within the system. These can be particularly relevant when using CLDs to identify effective points of intervention, as proposed by purposeful program theory (Funnell & Rogers, 2011). See Fig. 2 for an example that includes all of these elements.

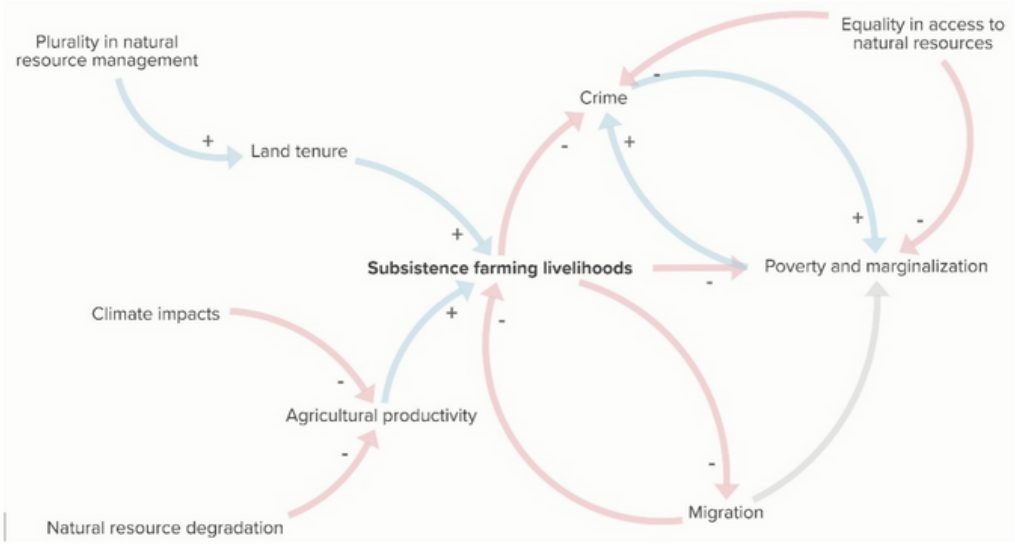


FIGURE 2. EXAMPLE OF CAUSAL LOOP DIAGRAM FROM THE CLIMBER WORKSHOP IN GUATEMALA.

Building a CLD requires two sets of data presented in a matrix form, which then serves as input data to create a causal loop diagram. The first set defines and conceptualizes the variables that conform to the system and hence determines the system boundaries. Each variable can be conceptualized through whichever factors are most relevant to the system in question. For our present purposes, variables represent climate security drivers, which can be then categorized through a social-ecological dimension (e.g. climate hazard, environmental vulnerability, socio-economic vulnerability, conflict driver, and governance). Participants engage in a brainstorming session to identify the main variables of interest when assessing the climate security nexus under a specific context. The five dimensions of Climate Security discussed in the theoretical framework above (Fig. 1), are meant as guiding conceptual categories to facilitate the discussion.

The second set of data (Table 4) defines the diversity of relations between climate security drivers. The matrix defines the relationship between each variable of interest to all other variables within system boundaries. It is also necessary to conceptualize the relation by defining the direction, polarity, strength, and timing of effect. Participants define this direct relationship by assigning, in each of the matrix cells, a 0 (no relationship), + (weak positive relationship), - (weak negative relationship), ++ (strong positive relationship), -- (strong negative relationship). An // sign is added to the correlations that are deemed of slow effect.

	Variable 1	Variable 2	Variable 3
Variable 1	X	++	-
Variable 2		X	
Variable 3		+//	X

TABLE 4. MATRIX FOR THE DEFINITION OF RELATIONAL DYNAMICS BETWEEN CS DRIVERS.

Session 2. Actors at the climate and security intersection

This session intends to guide stakeholders in 1) identifying and discussing governance-related drivers of climate security risks across the country, as well as 2) conducting a limited institutional mapping exercise to explore the governance architecture and landscape relevant to the mitigation of the climate security nexus. This second goal will be achieved by identifying the actors working at the intersection of climate and security, along with the institutional spaces in which they interact.

Participants will be asked to identify how and over which drivers in the climate security map their organization intervenes, and what level in the governance system – at the sub-national, national, and regional levels.

The following guiding questions have been designed to facilitate the discussion:

- *How do the present organizational stakeholders currently act upon these drivers or causal relations?*
- *At what policy level and phase do these actors operate?*

In documenting the discussion, assistant facilitators will stick the identified entities into a printed-out graphical representation of institutional arrangements as presented in Figure 4. Entities will be cataloged in terms of the level of intervention in the governance system (regional, national, or sub-regional level).

Learning area/Social level	Actor	Network
Single loop – aspirations and knowledge		Develop a shared vision of suitable institutional spaces to foster a climate security agenda.
Double loop – aspirations and knowledge		
Perception of own role and that of others	Foster the need to increase coordination between actors in the climate, peace and security sectors.	Develop a mutual feeling of collective engagement within the climate security nexus.
Actions and behaviour		

TABLE 5. LEARNING OUTCOMES FROM SESSION 3.

Following the identification of the actors and entities operating within the governance system, the following phase of the session focuses on identifying the main multi-stakeholder platforms that serve as interacting spaces in managing climate change and security. Multi-stakeholder platforms will be identified by sticky notes, and the participating stakeholders in each of the platforms will be marked by placing them within the platform´s sticky (Fig. 4). The main guiding questions in the phase are:

- What are some of the main processes, platforms, or spaces where cross-sectoral interaction can take place?
- Do these spaces have a focus on climate, development, or peace and security-related actors?

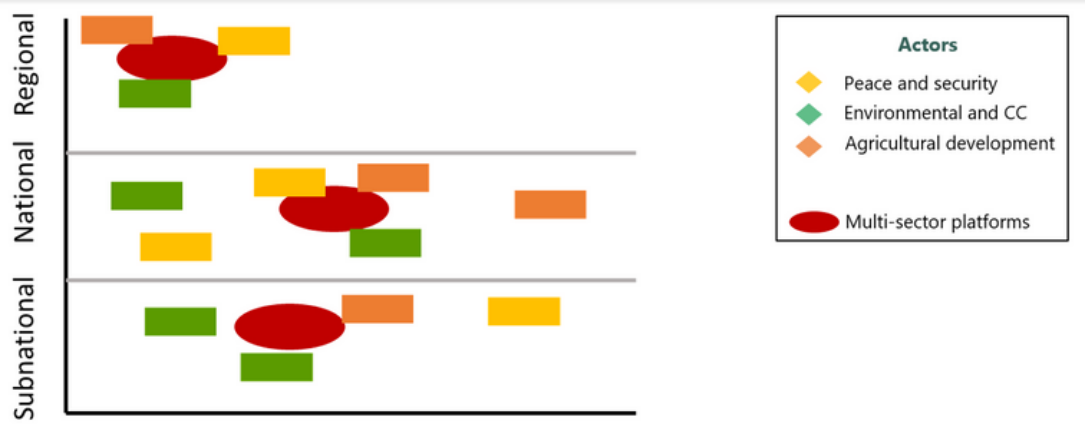
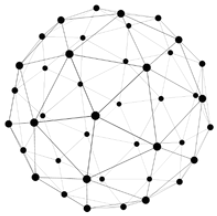


FIGURE 4. PRELIMINARY MAP OF INSTITUTIONAL ARRANGEMENTS RELEVANT TO CLIMATE SECURITY.

Session 3. Towards a Community of Practice for Climate Security

Participants will build upon the knowledge generated throughout the previous sessions in exploring a shared vision of a climate security agenda in the country. The main question with which participants will be posed is: "What is needed to develop a Community of Practice (CoP) on Climate Security in the country?" Throughout this session, participants will propose and elucidate a set of short-term actions deemed suitable to promote climate security as a relevant issue of concern for climate and peace governance systems at sub-national, national, and regional levels. In facilitating the discussion, participants will be encouraged to follow four strategic dimensions of action toward fostering a climate security agenda in the country. These dimensions are:



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- ·Evidence for peace
- ·Policy for peace
- ·Programming for peace
- ·Finance for peace

Each participant will be asked to write down one required action to build a CoP around CS in their country. Then they will be asked to choose two out of the four strategic dimensions of interest to describe climate action that contributes to building sustainable peace. For each of the chosen dimensions, participants will write down one thing that they would like to see happening in the short term to build a CoP for climate security. Furthermore, participants write down one thing that their organization could work on as part of the CoP.

Within their working groups, participants present their ideas to the other members of the group. All ideas are placed as sticky notes on the whiteboard while distinguishing between the four dimensions. Facilitators then as participants identify, for each dimension, the similarities and differences between the proposals. Similar themes are grouped and participants define an overall concept that describes each grouping (e.g. generation of alternative livelihoods; agricultural innovative practices; trust building). An open discussion is fostered around the proposals to reach a consensus regarding a future vision of a CoP for climate security in the country.

Participants will openly discuss some of the action gaps and challenges towards realizing their future vision. They will be encouraged to build upon current practices in envisioning future action. Relevant questions included:

- Which existing structures of stakeholder engagement could serve as a building base for action toward a CS agenda?
- What actions are needed to formalize and institutionalize this?

- ·Which should be priority areas of concern in this CoP?
- ·How can the ClimBeR initiative and CSO support this process?

Learning area/Social level	Actor	Network
Single loop – aspirations and knowledge		
Double loop – aspirations and knowledge	Actors develop a normative and aspirational intention of consciously manage CS risks.	Stakeholders develop a shared vision of required action to foster a CS agenda in their country.
Perception of own role and that of others		
Actions and behaviour	Individual actors increase their intention to integrate CS risks in their work.	Actors increase their willingness and intentions to collaborate in managing CS risks.

TABLE 6. LEARNING OUTCOMES FROM SESSION 3. TOWARDS A COMMUNITY OF PRACTICE FOR CLIMATE SECURITY.

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