

## Step-By-Step User Guide – Replicated Methodology

### Community-Based Participatory Research on Gender-Based Vulnerabilities to Climate Change



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## I. ABOUT THIS USER GUIDE

BBC Media Action was commissioned by UN Women Cambodia through the EmPower project<sup>1</sup> to conduct in-depth community-based participatory research to understand gender-specific vulnerabilities to climate change and find out how gender norms influence household decision-making and adaptation strategies.

This user guide has been developed based on the project's experiences and its primary aim is to provide detailed guidance for practitioners/researchers who wish to conduct community-based research to understand gender-based vulnerability to climate change. It provides a detailed step-by-step guide for conducting such research, alongside insights and reflections of the overall research process to make it both user-friendly and relevant for practitioners/researchers. The research approach documented here has been contextualized for local practice, and also includes challenges and practical suggestions for researchers who wish to use and adapt the approach for their own research.

## 2. BACKGROUND AND CONTEXT

Cambodia is considered one of the most vulnerable countries in Southeast Asia to the impacts of climate change due to its low adaptive capacity.<sup>2</sup> Rural Cambodians (79% of the total population)<sup>3</sup> are highly dependent on climate-sensitive livelihood sectors – notably agriculture, forestry and fisheries. Furthermore, whilst political, economical and social development have opened up new opportunities for women and men and have challenged traditional gender roles, it is widely recognized that existing gender inequities in society – such as the cultural and social expectations that men are the breadwinners and lead the household whilst women are primarily responsible for domestic and care work – are mirrored in climate vulnerability, with women more vulnerable to the effects of climate change than men.<sup>4</sup> Previous BBC Media Action research (which was part of a research series 'Climate Asia', which surveyed several Asian countries to understand men and women's knowledge, perceptions and motivations and barriers to taking action around climate change),<sup>5</sup> found that 46% of farmers and fishermen are women.<sup>6</sup> However, their contribution is often undervalued<sup>7</sup> because many constitute unpaid workers.

Though there have been numerous studies in Cambodia to understand climate vulnerability, there has so far been a lack of community-based participatory research on gender-based vulnerability to climate change and little is known about the causes of it, how it affects the types of action that both women and men take in response to climate stressors and weather extremes, and how household decision-

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<sup>1</sup> The EmPower project works to strengthen human rights and gender equity through climate change action and disaster reduction.

<sup>2</sup> Arief Anshory Yusuf & Herminia Francisco, Climate Change Vulnerability Mapping for Southeast Asia (2009).

<sup>3</sup> Oung, T.K., Cambodia 2040 Economic Development: Chapter 8: Environment and Climate Change. KAS report. Available at: <https://www.kas.de/documents/264850/9494350/Chapter+8.pdf/cb46ca2e-6aef-b923-317b-a09b375ae193?version=1.0&t=1593966406826>

<sup>4</sup> Climate Change News (2020). Article available at: <https://www.climatechangenews.com/2020/03/08/power-structures-gender-make-women-vulnerable-climate-change/>

<sup>5</sup> Climate Asia study: Researchers interviewed 1,660 people in June 2018 in five geographic regions across Cambodia: Phnom Penh, Plain, Mountain, Tonle Sap and Coastal. All research data is available at: <https://dataportal.bbcmciaction.org/site/>

<sup>6</sup> Southall, E., Chandore, K. and Otdam, H. (2019) *How the people of Cambodia live with climate change and what media and communication can do*. BBC Media Action research report. Available at: <https://www.bbc.co.uk/mediaaction/publications-and-resources/research/report/asia/cambodia/climateaction>.

<sup>7</sup> Women's Inclusion in REDD+ in Cambodia. Lessons from Good Practices in Forest, Agriculture and Other Natural Resources Management Sectors (September 2013). Available at:

[https://redd.unfccc.int/uploads/2234\\_23\\_final\\_draft\\_cambodia\\_gender\\_and\\_redd\\_report\\_dec\\_2013\\_-copy.pdf](https://redd.unfccc.int/uploads/2234_23_final_draft_cambodia_gender_and_redd_report_dec_2013_-copy.pdf)

making influences those actions. The participatory research approach taken in this project is therefore timely as it aims to address concerns observed and fill the knowledge gaps. BBC Media Action is pleased to work with the EmPower project in Cambodia, jointly implemented by UN Women and UN Environment, to use this approach and contribute to learning in this area.

### **Potential Drivers in Gender-Based Vulnerability to Climate Change**

A comprehensive literature review identified a number of key drivers in gender-based vulnerability to climate change and helped to shape the research design. These are structured into three different sets of barriers, namely – social barriers, structural barriers and resource barriers:

- **Social barriers** – such as women and men accepting a gendered-division of labour, women being unable to influence big decisions, not wanting to try anything new, or being fearful of discussing actions with others, not fitting in with religious or community beliefs, or feeling that their family wouldn't approve of taking action.
- **Structural barriers** – such as women needing institutional support from the government or NGOs to take action.
- **Resource barriers** – such as women not having access to information, not knowing how to take action or knowing others who are, or not having enough resources to do so.

The literature review found that although women and men may be willing to take action to cope with changes in climate, they were sometimes not taking action owing to these barriers. Although there have been numerous studies in Cambodia to understand climate vulnerability, there has been a gap in in-depth research to explore the realities of gender-based vulnerability for Cambodian women and men. As such, the research study aimed to answer the following research questions, using the framework of barriers to test and explore in more depth how these played out in the research locations selected for this study:

- How are women and men impacted by the effects of climate change, and how does this differ by gender?
- What action are women and men taking to respond to climate change, and what influences them to do so?
- How does household decision-making influence the actions women and men take in response to climate change?

### **3. RESEARCH APPROACH IN THE CONTEXT OF CLIMATE CHANGE**

In the past a lack of meaningful participation of women and other marginalized groups has led to ineffective risk reduction strategies around climate change vulnerability.<sup>8</sup> This project has therefore taken a bottom-up approach to empower participants – including women – in the research process, valuing their local knowledge and enabling them to be experts based on their own experience. The study used a community-based research approach, with follow up community validation of the findings to align the work with a Participatory Rural Appraisal (PRA) approach to understand how women and men are affected by climate change, the actions they are taking, and how decision making and gender roles are influenced by prevailing gender norms. PRA is a means through which local people can

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<sup>8</sup> Morchain, D., Prati, G., Kelsey, F., & Ravon, L. (2015). What if gender became an essential, standard element of Vulnerability Assessments? *Gender and Development*, 23(3), 481–496.

determine issues of importance to them, and then share, develop and analyse their knowledge of it to help them to plan, monitor and act.<sup>9</sup>

The research approach recognizes that the ways people think and act – including the agency of women and men in responding to climate change – are influenced by many factors, including their social networks, wider communities and social structure and systems, and that these factors need to be considered in the research design. The research also acknowledges that the root causes of climate-change vulnerability are present at different socio-ecological levels and interact together to make women more vulnerable and has considered the impact on women at an individual, community and societal level.

#### 4. RESEARCH PROCESS

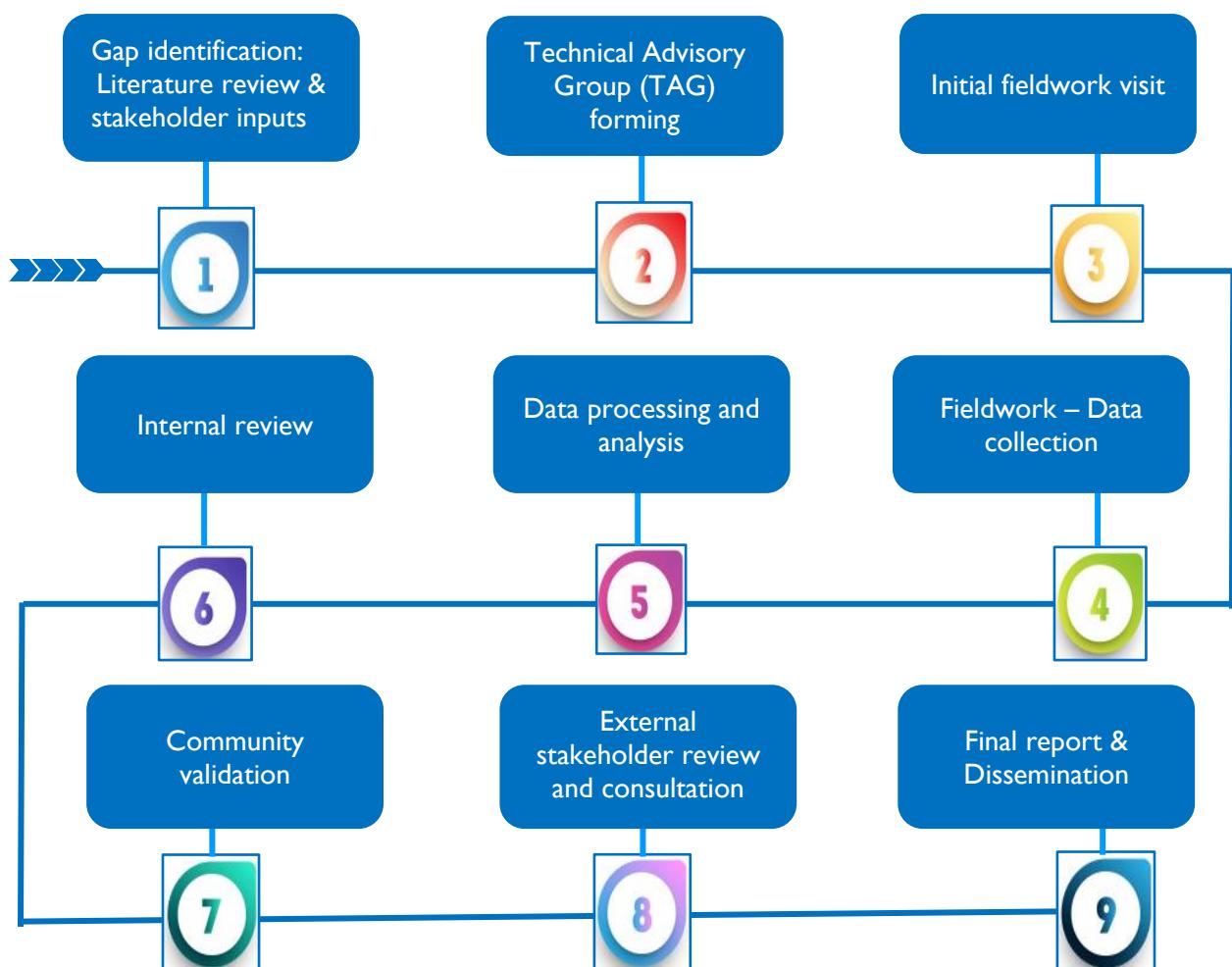


Figure 1: Research process for the participatory research

As illustrated in the above chart, the following section explains and recommends the processes and steps involved in this research study exploring gender-based vulnerability to climate change. All of these steps were followed for this research study. Below we explain why these are effective steps in conducting community based participatory research and our lessons learned.

<sup>9</sup> Chambers, R. (1992). *Rural Appraisal: Rapid, Relaxed and Participatory*. IDS Discussion Paper 311. Brighton Institute of Development Studies.

## 4.1 Gap Identification - Literature Review and Stakeholder Input

Identifying gaps in the research is one of the most critical steps in ensuring the research is relevant. This is commonly done through conducting a literature review and consulting key stakeholders.

A robust, comprehensive literature review should be carried out to ensure that the research is fully informed, and includes an understanding of existing knowledge around gender norms and vulnerabilities around climate change adaptation and disaster risk reduction in Cambodia. It also helps in framing the research design, selecting appropriate study locations and respondents, identifying knowledge gaps and choosing the most suitable research methods to use.

Stakeholder inputs (i.e. through expert interviews and validation) are also effective in identifying information gaps, framing the research design and refining research instruments. It is important to seek support through a network of expertise in the area of the investigation. Insights from interviews with stakeholders from both local and international organizations as well as government ministries are helpful to gain an understanding of their perspectives on the intersection of gender with climate change adaptation and disaster risk reduction, and to understand the level of support they provide to the community. Ongoing engagement with these stakeholders throughout the research process is also important.

### **Box 1: Knowledge Gaps Identified Through The Literature Review**

The literature review for this research project identified a number of knowledge gaps including a lack information about women and men's social networks and their access to media, their economic power and financial independence, the decision-making dynamics between women and men, and an understanding of the different impacts felt by women and men to climate change. These were combined with previous research on people's perceptions of climate change conducted by BBC Media Action in Cambodia in 2018 to inform the research design and research questions for the project. Some of the gaps identified included:

- **Social networks:** There is limited knowledge of women's social networks and if / how these contribute to their ability to adapt.
- **Access to media and data:** Women's access to media (traditional and digital) differs from men's, but there is a lack of in-depth research on what impact this has on their access to information about adaptation.
- **Economic power and financial discrimination:** The literature found that women are less likely to own land, and rural women in particular face financial discrimination. But there is a lack of in-depth research on why is this and what is behind the economic barriers women face.
- **Decision-making dynamics:** There is a gap in understanding of how decisions are made within households, and how this contributes to decisions made to take action to adapt to the effects of climate change.
- **Climate change impacts felt by women:** Beyond health impacts and increased burden of work, there is limited evidence on how the impacts of climate change differ between women and men.
- **Why do women feel more prepared and willing to take action?** The literature review found that women feel more prepared for the future than men, but we do not know what is driving this.

## 4.2 Technical Advisory Group

To further ensure that the research is technically well designed, and all aspects are factored into consideration during the design stage and beyond, it is suggested that a technical advisory group (TAG) should be formed. In this research study, the TAG comprised of 6 appropriate available technical people, particularly in the areas of gender and climate change, with 2 women and 4 men<sup>10</sup>. A TAG provides expertise at different stages of the research process, including design of the research instrument(s) and methodologies as well as feedback on the report.

## 4.3 Initial Fieldwork Visit

An initial fieldwork visit to the selected study site is essential for a community-based research approach. This helps researchers to understand the community context and to develop a rapport with the local communities to build connections and trust. It helps to understand the feasibility of conducting the research there, connect with gatekeepers and local authorities and decide and define the appropriate groups of participants and how best to schedule the research according to the participant's needs and availability, particularly to ensure women are able to take part. Furthermore, results from initial visits help researchers to finalize the research design and instruments in the appropriate context, as an understanding of the community helps to ensure research questions, examples and techniques are relevant and understandable to those taking part.

## 4.4. Community-Based Fieldwork and Data Collection

Prior to fieldwork, a pilot test is organized so that researchers are more familiar with the tools and questions to ensure good quality data collection. The pilot test is also beneficial for researchers to understand the time required for each tool and the best strategies for data collection. At the start of the fieldwork, it is important for the researcher to conduct an initial field observation to understand more about the community, and any hazards it has encountered as well as build rapport and make informal conversation with relevant community members to help select and gather respondents (based on demographic requirements defined in the sampling strategy) in the most convenient place. Support from the village chief and vice chief or a local key influencer can also help to speed up the recruitment process and build trust with participants; they are able to help

### Box2: Lessons Learnt – Fieldwork and Data Collection

When researchers visit a village to gather relevant information, it is important for them to understand which members of the community are most trusted by the people living there. This can help to avoid selecting the wrong person who would not be able to help facilitate participation from the community. For instance, in one village we visited we found the village chief was not well liked by the community, so we had to find other members to work with. From our experience having the right local influencers can be very beneficial for participatory research, especially as people may not trust outsiders.

With strong local facilitators the recruitment process is faster and effective. However, field researchers also need to work hard to train the facilitators to make sure they can help to recruit the right people based on the criteria set. The field researchers should go along to the first few recruitments to help provide examples of how to introduce the study and its objectives as well as to ensure the consent process is followed. With this in mind, we can also make them aware of safeguarding and research ethics, including respecting research participants.

<sup>10</sup> The initial TAG comprised of 4 women and 3 men, but 2 women were unfortunately unable to participate so another member from the same organisation was invited instead.

identify those fitting the demographic requirements to save time and increase willingness to participate from community members. At the beginning of the process researchers must also determine the most suitable people to help facilitate the process, and this can be done through speaking to commune leaders, local authority and local people.

Using an ethnographic approach whereby researchers stay and immerse themselves in the community is important for building trust to gather useful and in-depth information. It is also useful to have local facilitators to assist with meeting organization and other logistics. Please see section 5 for details of each of the tools used.

#### **4.5 Data Processing and Analysis**

To maintain a high quality of information, the research team meet regularly to reflect on the fieldwork, and complete research summaries after each meeting or the end of each day. Data immersion sessions are also conducted during the fieldwork to understand the breath and nuance of the data. In this project key observation notes and records from each field researcher/assistant were completed daily (no later than 24 hours after the fieldwork) and were also used to check and triangulate with the key information collected from the interviews and discussion.

All forms of data from all tools (FGD, SSI and KII)<sup>11</sup> are thematically analysed and coded to a framework to help identify patterns and themes. The analytical framework helps researchers to focus on answering each of the research questions and objectives identified and report in the findings.

#### **4.6 Internal Review**

Following the analysis, key preliminary findings emerging are organized based on the analytical framework. All top-line findings are discussed among the research team and the data is used to validate each finding. The internal review plays an important role in ensuring consistency of the data being presented, analysed and interpreted and that the research findings correspond to the research questions and research objectives accordingly. It also helps to ensure all ethical protocols are adhered to and the quality is assured.

#### **4.7 Community Validation**

To check the validity and reliability of the research findings, in accordance with the PRA approach, researchers bring back preliminary key research findings to validate with selected research participants in the communities. Throughout the process, a list of key findings is discussed with participants, and researchers continue to understand their reactions, comments and additional inputs they may have. The session is divided into plenary or small group discussions depending on the content and sensitivity (i.e. female and male groups discuss gender-sensitive points separately). Participants are also brought together to discuss the key findings from the fieldwork using a gallery walk to check participants' reactions (i.e. agreement and/or disagreement). All exercises for validation are conducted in a way that allows all participants to join in, for example the gallery walk presents findings for participants to look at and then add sticky notes to images confirming whether they agree or disagree with the findings. Fieldnotes taken during the session also enable researchers to validate the points raised.

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<sup>11</sup> **FGD:** Focus Group Discussion, **SSI:** Semi Structured Interview, **KII:** Key Informant Interview

## 4.8 External Stakeholder Review and Consultation

Stakeholder review and consultation is organised to seek input from experts working on gender issues and climate change. This includes representatives of key ministries, local and international NGOs and networks. Plenary and small group discussions are helpful for collecting their feedback on the findings to ensure the results are useful to those working in the area and to help shape the final report.

## 4.9 Final Report and Dissemination

The research report is the final product of the entire research process and is shared with relevant organisations that can make use of the key findings and recommendations. Dissemination is not just about a presentation of findings and distribution of the report, but it is about raising awareness of the issues around gender vulnerability to climate change, and promoting key take-aways that could help bring about future collaboration.

# 5. RESEARCH TOOLS

A community-based approach is at the forefront of this research to enable meaningful contributions from the communities taking part. A participatory rural appraisal (PRA) technique is embedded to ensure inclusivity, and importantly it allows participants to reflect on their own life experiences.

At the start of the research process, researchers consult with key informants in the community such as leaders, village chiefs, religious leaders or respected elders in order to obtain information about the community – such as the structure, interaction between residents, and any other important points which may be relevant for the approach.

A number of tools are suggested for use to help answer the research questions. These include a transect walk, FGD (resource/hazard mapping, historical timeline, seasonal calendar, decision-making matrix, vulnerability matrix, Venn diagram), SSI and KII.

### 5.1 Transect Walk

Conducting a transect walk through the community with key members (such as community leaders, village chiefs or respected elders) provides a broad overview of the community and the opportunity to gather general information about the systems and structures within which the community operates, as well as key resources and opportunities for development.<sup>12</sup> The transect walk can also help to identify key areas to follow up on in the focus group discussions (outlined further in this design). A rural observation



Transect walk led by a member of the community fisheries committee

<sup>12</sup> Participatory Rural Appraisal (PRA) Manual, Food and Agriculture Organization of The United Nations (FAO), 2006.

conducted concurrently with the transect walk further helps to understand the infrastructure of the community, and identify key features and landmarks i.e. to probe on who goes where, who uses what space, i.e. is it men or women? Younger or older people?

The walk, which can take a couple of hours depending on the size of the community, includes areas of interest in the community to identify different hazards or conditions, and allows the researchers to probe further on particular issues such as how changes in the climate have affected the community. A transect matrix is produced per community to document all information.

### Box3: Lessons Learnt – Transect Walk

With this specific research, we found there were fewer women representatives in the villages we visited who were confident to communicate with the research team and help lead the transect walk. We aimed to have at least two local people – a woman and a man – to lead the walk in each village or area, but this was not always possible. In addition, we found that having more than one local person accompany the research team made the process more relaxed and also helped make the process more effective; two researchers and two locals can be divided into two teams and split the map between them, consolidating all information at the end of the walk.

## 5.2 Focus Group Discussion (FGD)

FGDs are conducted with different groups according to gender, age, occupation and the type of climate-related risk they face. This includes employing various tools such as resource/hazard mapping, a historical timeline, seasonal calendar, decision-making matrix, vulnerability matrix, and Venn diagram.

Separate groups can be used for women and men to enable them to discuss sensitive issues safely and with confidence. Women and men can also be brought together to discuss issues both have in common.

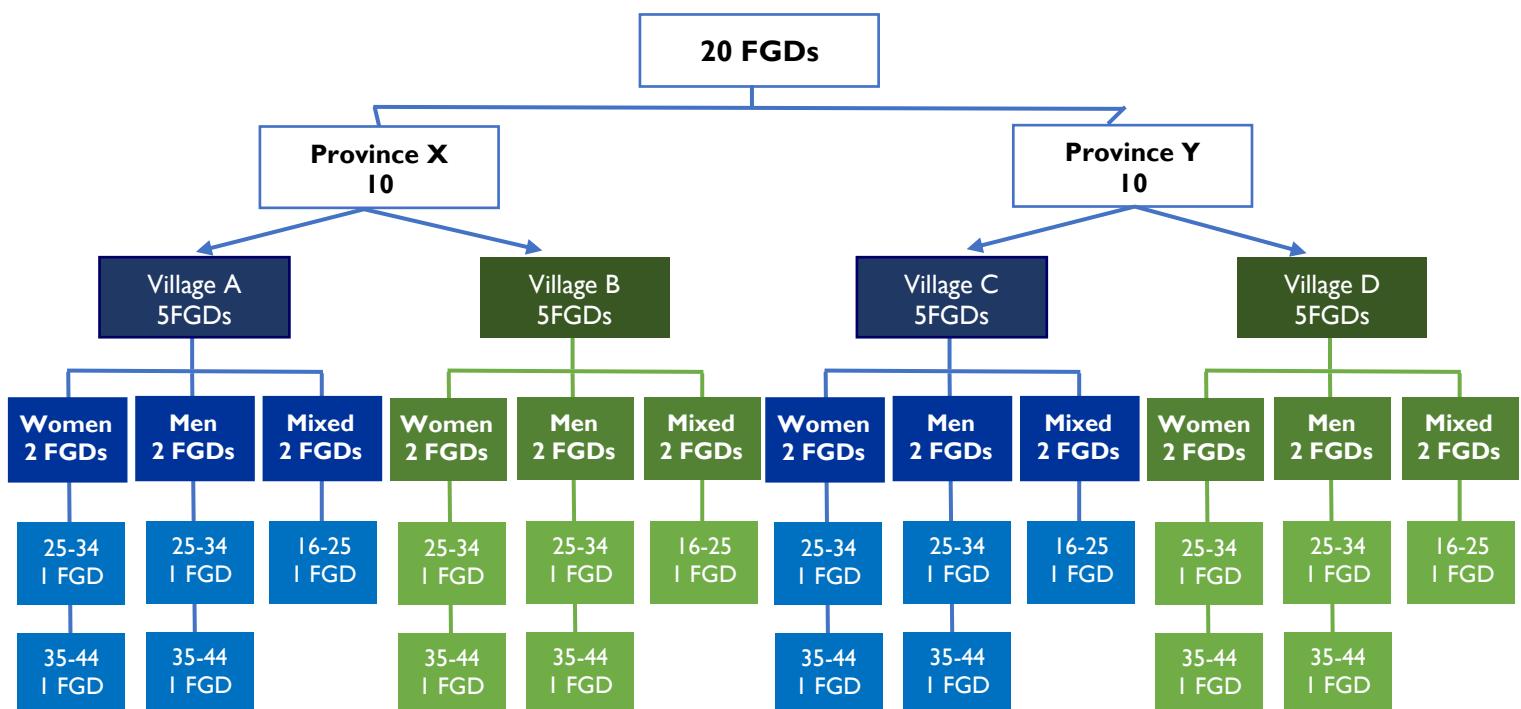


Figure2: An example of focus group discussion arrangement

#### Box4: Lessons Learnt – Focus Group Discussion

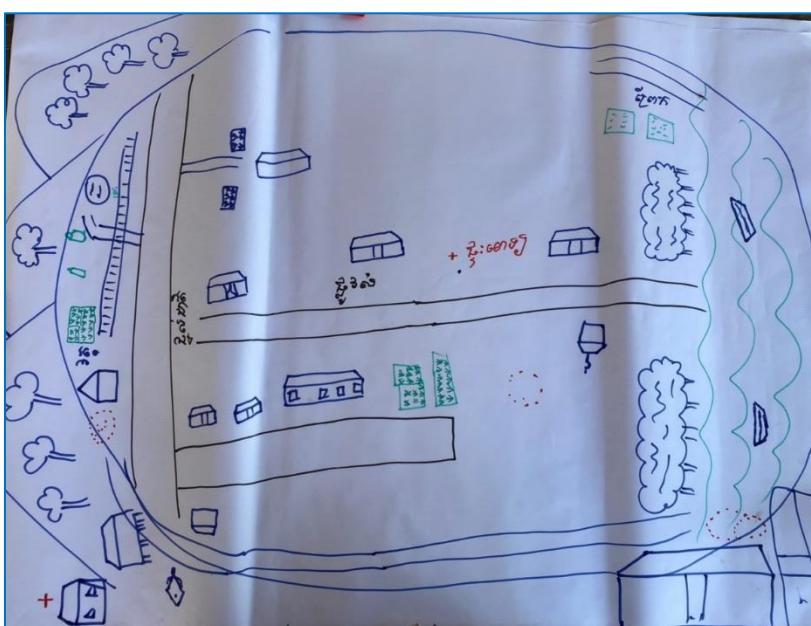
There are many different factors that researchers need to consider when employing each tool in a FGD. For example, we need to consider that needs and space for self-expression that may differ between women and men, elder and younger people, richer and poorer people, etc. Taking these factors into account, we involved female facilitators to conduct exercises with groups of women, male facilitators with groups of men, and involved both male and female facilitators to facilitate mixed groups. The lessons learnt are highlighted below:

- Participants are more comfortable expressing their opinion in an open conversation which can include some sensitive information such as violence, decision making, debt, etc. with facilitators/moderators/interviewers of the same gender. This helped to elicit fruitful insights.
- In addition to this, some female participants tried their best to find time to speak to the research team, even bringing their children along and feeding them during discussions, which they would not feel comfortable doing with a male facilitator.
- Safeguarding was taken into consideration throughout the research. Using facilitators of the same gender as the participants for recruitment and data collection helped to avoid the possibility of incidents.
- Having a mixture of male and female participants and facilitators/moderators worked well when we wanted the topic to be discussed and debated among participants, and to see their reactions.

Running groups with women and men separately also enabled the research team to compare the data collected. We found that findings were complimentary, and also helped to verify information between the groups to better understand the community as a whole.

#### 5.2.1 Resource and Hazard Mapping (RHM)

The RHM is used to understand what resources are available in the community and identify areas and resources at risk from climate-related hazards and subsequent disasters. This also includes planning for risk reduction.



An example of participatory RHM

report. The research team will also probe on gender-specific issues in this exercise.

This exercise takes roughly one-and-a-half hours and is moderated by a facilitator who will ask participants to draw a map (using pen and flipchart) which identifies a central landmark in the community, the community boundaries, agricultural land, key facilities (i.e. religious sites, hospitals, schools and markets) and resources such as water sites and forests. Areas and resources at risk will be identified. Any issues which are discussed but are not location-specific will be noted in a

## 5.2.2 Historical Timeline (HT)

A HT is used to gain insights into previous extreme weather events, such as women and men's perception of risk and what action they took. Knowledge of previous behaviours helps to aid understanding of women and men's current perceived risks and to identify potential risks in the future,<sup>13</sup> as well as establish perceived changes over time.

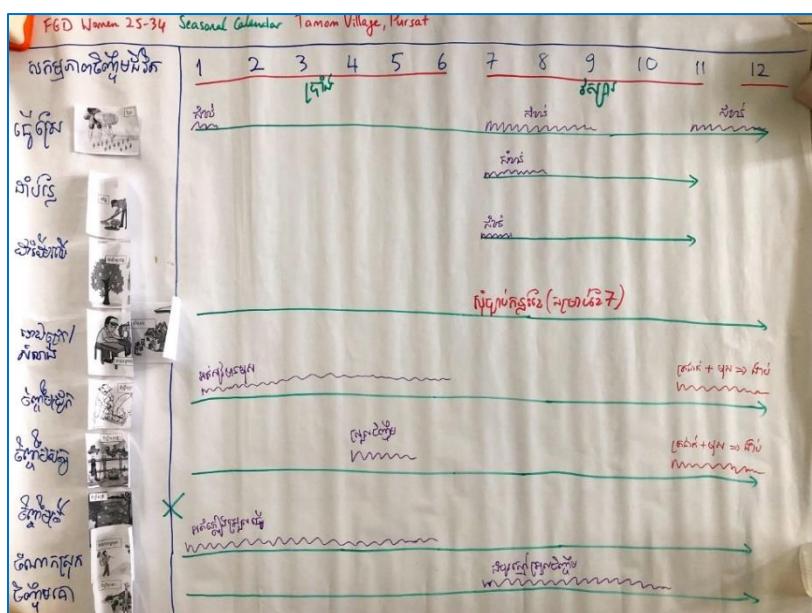
The exercise takes approximately an hour, and the facilitator starts by asking participants whether they can recall major climate-related hazards, and the impacts these had on the community. The facilitator records this information in chronological order and considers different time periods (for example 2006-2010, 2011-2015 and 2016-2020). Follow-up questions for discussion are used to understand the impact of climate-related hazards on resources and the livelihoods of people in the community.

ମୂଲ୍ୟାବଳୀ ମାନ୍ୟବିକ	2006-2010	2011-2015	2016-2020
		X X X	X X X X
	X X X	X X X X	X X X X X
	X X X	X X X	X X X X X
	X X X	X X X	X X X X
	X X X X X	X X X	X
	X /	X X X X	X X X X X
V4 FGD HT M2			

An example of HT exercised in FGDs

## 5.2.3 Seasonal Calendar (SC) (Gender Calendar also Included)

The seasonal calendar presents the pattern of activities related to the livelihoods of villagers/community members. A SC helps to draw out key livelihood activities in the community across an entire year and explores the influence of climate-related hazards on each of them. Using this tool, it is beneficial to explore gender-specific workloads, including their constraints and opportunities.<sup>14</sup> This activity asks participants to identify seasonal variations in weather events which provides the opportunity



An example of SC exercised in the FGD

<sup>13</sup> Gender-sensitive Climate Vulnerability and Capacity Analysis (GCVCA), Practitioners Guide, CARE International in Mozambique and CARE International Poverty, Environment and Climate Change Network, July 2014.

<sup>14</sup> Participatory Rural Appraisal (PRA) Manual, Food and Agriculture Organization of The United Nations (FAO), 2006.

to understand the relationship between climate variability and key livelihoods activities at different points during the year.

This exercise takes around an hour which includes time for discussion. Some participants may have difficulty in recalling time periods; therefore, the Khmer calendar is considered if needed and uses prompts which may aid recollection. Each month is listed horizontally across the top of a piece of paper. The facilitators then discuss livelihood activities (for example for those working in agriculture this could include planting and harvest seasons, migration periods, etc.) over the year with participants – and list them vertically on the left side of the paper. When key information has been listed, participants are able to discuss changes to their livelihood activities over the period as well as the causes for this.

This exercise enables the research team to understand who holds responsibility for each livelihood activity. This is important to understand women's workloads at a particular time of the year and whether and how it can contribute to their increased vulnerability to climate change. For example, in Pursat province during the planting season at the beginning of the rainy season women, especially those husbands have migrated, were particularly busied with farming in addition to their household and childcare activities.

#### 5.2.4 Decision-Making Matrix

A decision-making matrix is used to get a better understanding of who makes decisions on different issues and who controls the assets/resources within the household, and consequently how the decision-making power is allocated between household members.<sup>15</sup> This exercise provides an opportunity to understand how the role of intra-household decision making influences adaptation strategies to climate-related hazards.

To conduct this exercise, the different issues which require a decision are first listed down vertically, and the decision-makers are marked on horizontally to map out who has decision-making power. Follow-up questions are also used to get more depth from the responses. The exercise is used to understand where there are more dominant members of the household, and where decisions are made more equally. It will take an hour to get this exercise done.



An example of decision-making matrix exercised with male group

#### 5.2.5 Vulnerability Matrix (VM)

A VM is used to determine the hazards that have the most serious impact on people's livelihoods and how the vulnerabilities they have make them more likely to be affected by climate-related hazards. The researchers ask the group to identify the most important resources for their livelihoods (not

<sup>15</sup> PRA Tool for Studying Urban Agriculture and Gender, RUAf Resource Centers on Urban Agriculture and Food Security, 2004.

necessarily resources they currently have access to). The participants are then asked to identify what they think is the greatest hazard or threat to these resources and give each a score in terms of risk and impact for example, storm, flood, thunder/lightning, drought, temperature, etc.

Putting together this exercise takes an hour. Participants are asked to list down five important resources to their livelihoods and subsequently discuss the effects of climate-related hazards on those resources, with follow-up questions on existing adaptation practices to address the impacts identified.



An example of VM exercised with female group

### 5.2.7 Venn Diagram (Institutional Mapping)

This exercise is used to understand which institutions exist within the communities and assess their role, importance and benefits to community members. The Venn Diagram shows institutions such as organizations, groups and important individuals in the community and their relative importance.<sup>16</sup> This

might include the local authorities, water supply company, commune disaster management committee etc. Furthermore, the diagram helps to unpick the links and level of contact between women and men and governmental and non-governmental organizations that operate in or have an influence on the community. This tool is very important to provide an understanding of how institutions in the community have contributed to support community members to adapt to the impacts of climate-related hazards and what can be done in the future.

<sup>16</sup> FOA's PRA Toolbox. Available at <http://www.fao.org/3/x5996e/x5996e06.htm#6.2.5.%20Venn%20Diagram%20on%20Institutions>

Conducting this exercise takes about one-and-a-half hours. It starts by asking participants about organisations in the local community involved in climate related issues, how they benefit from the work of these organisations, and the degree of cooperation between these institutions and themselves. Thereafter, women and men participants discuss each organisation on the list in terms of the frequency of their contact with the organisation (and the organisation with them) and the importance of that contact for their family or themselves. The result is visualised by making a circle of each organization (label with its name) with a size relative to its importance and at a distance from the centre of the paper relative to the degree of accessibility.

### 5.3 INTERVIEWS

In this project, interviews have been a key resource to get in-depth information from participants (i.e. community, local authorities and NGO representatives) on identified issues – gender-based vulnerability and climate changes.

#### Box5: Lessons Learnt – Interview

Researchers determined the number of interviews required during the research design phase in order to understand the resource and time needed to accomplish all of them. However, researchers always leave flexibility to increase or decrease the number of interviews, as this depends largely on the saturation of information needs on the topic. For this specific study, we increased the number of interviews and target groups conducted based on additional information we gathered through staying in the village, as we found that there was more information we wanted to learn from the community. For example, we originally planned to interview one village model farmer (VMF) but we conducted two interviews because we found there were two type of VMFs – one for rice farming and another for vegetable growing who had encountered different experiences which were important to capture. In some villages, we did not find any mother in-laws to interview but we found a father in-law to interview instead. This means that the number of interviews and types of target groups need to be flexible, depending on how important they are for the study.

#### 5.3.1 Semi-Structured Interview (SSI)

Semi-structured interviews are used to get a deeper understanding of specific issues related to climate change, including impact, actions taken, and challenges faced, and how these differ for women and men. They are used to complement the FGDs outlined above and are crucial to help better understand the individual experience. The topics and questions covered in the interviews are designed to explore whether and how the potential social, structural and resource based barriers identified in the literature review affect women (and men's) vulnerability to extreme weather and changes in the environment, as well as leaving space to uncover other potential drivers of vulnerability. Semi-structured interviews are conducted using a list of key questions in the form of informal and conversational discussion. This allows interviewed participants to raise questions and

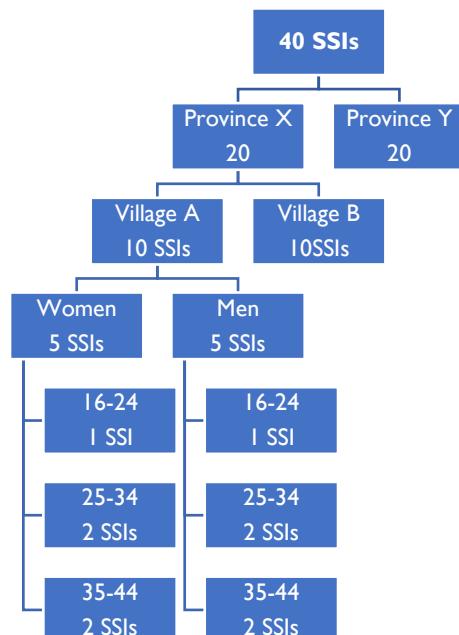


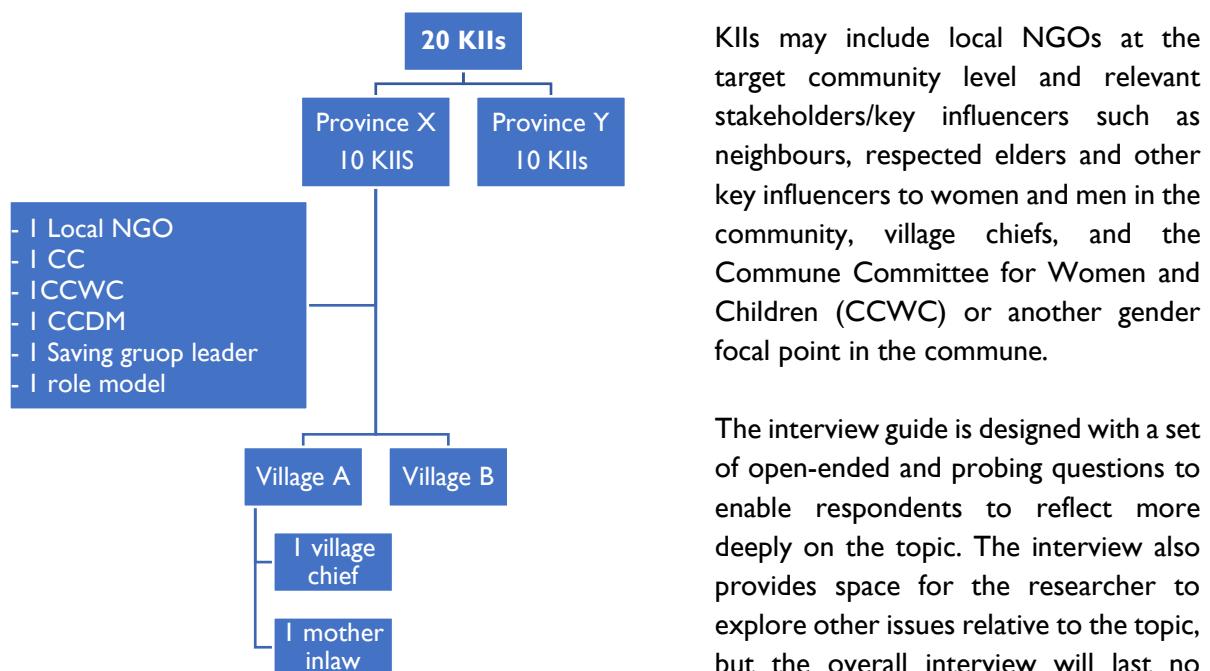
Figure3: An example of SSI arrangement

discuss their opinions relative to the topic. The interview is conducted individually and takes no more than one hour to ensure participants remain engaged. Findings from the FGDs are used to help shape questions to probe in more depth on the proposed indicators of the study. The interview guide is open-ended to enable discussion.

Participants to be interviewed are selected from the FGDs and through a snowballing approach to understanding different cases in the community. Gender, age, occupation, marital status, number of dependents, disability, ethnicity and the type of climatic risk faced are all factors which are taken into account when selecting participants to ensure a broad range of views is covered.

### 5.3.2 Key Informant Interview (KII)

Qualitative in-depth interviews are also conducted with a range of key informants – such as community leaders, professionals, or residents who have first-hand knowledge about the community. It is anticipated that these community experts, with their particular knowledge and understanding, can provide insight on the nature of problems and give recommendations for solutions.<sup>17</sup>



## 6. TRIANGULATION

To ensure the quality of the qualitative investigation, triangulation is commonly used when research involves multiple methods or data sources and researchers. Triangulation is as a research strategy to test the validity and reliability of the investigation. In this user guide, three triangulation approaches, namely methodology triangulation, data triangulation and researcher triangulation, are discussed.

- **Methodology triangulation:** methods employed need to be validated to ensure they complement each other. For instance, various exercises used in FGDs (resource/hazard mapping, historical timeline, seasonal calendar, decision-making matrix, vulnerability matrix and Venn diagram) are supported by a number of interviews (SSIs or KKIIs).

<sup>17</sup> UCLA Centre For Health Policy Research

- **Data triangulation:** data collected from different sources are cross-checked against each other to check the validity of the findings. For instance, the data from the decision-making matrix is backed up by the data collected from the individual in a semi-structured interview on intra-household decision-making section (i.e. in climate change response) and vice versa.
- **Researcher triangulation:** As multiple researchers are involved in the fieldwork it is important to ensure consistency throughout the fieldwork and analysis. A pilot test of all the tools should be conducted with another community prior to its use with the actual groups of participants to ensure researchers are familiar with the tools, and that these are adapted as needed. This helps minimize technical problems during the fieldwork, and most importantly helps to ensure consistency among researchers.

## 7. HANDS-ON EXPERIENCE: POTENTIAL CHALLENGES IN THE FIELD AND RECOMMENDATIONS

### 7.1 Challenges and Considerations

- **Demographic representation:** It is important to ensure different members of the community are included in the research and their opinions reflected. This includes both women and men of different ages, and with a variety of livelihoods and levels of education. It is also important to reflect the opinions of more vulnerable groups, such as elderly respondents, or those with a disability.
- **Participant availability:** Participants in the communities are often busy with livelihood activities, household chores and childcare (particularly women), or other obligations, such as attending religious ceremonies. In this piece of research some women were delayed by household tasks, reducing their ability to participate in the research.
- **Participant engagement:** Participants may find it difficult to engage with discussions for extended lengths of time, particularly women who must bring their children with them to the interviews/FGDs. In some interviews/discussions, noise pollution from construction work and ceremonies taking place nearby also posed a challenge.
- **Participant trust:** Sensitive development activities which may be taking place in the community (i.e. sea landfilling) could make community members less willing to trust the researchers and participate, especially when consent forms and voice recordings are required. Sensitive topics – such as around gender-based violence – are also challenging to explore as they require a high level of trust from the participants.
- **Capturing the conversations of all participants:** Note-takers are present to capture conversations, but this can be difficult when many speak people speak at once.

### 7.2 Solutions and Recommendations

- Local partners, community members and authorities are consulted during initial fieldwork visits to help inform decisions on the appropriate locations for the study. The research team also seeks permission from local authorities to conduct fieldwork in the suggested sites.
- Village chiefs and vice chiefs are approached to assist with participant recruitment. As key members of the community their support can help speed up the process. It also helps to ensure representation of the different demographic groups in the study.
- Clear communication of the purpose of the study and the use of female recruiters and facilitators can help to build good rapport with women and encourage them to participate.
- FGDs and interviews are scheduled according to participant availability to ensure they are able to take part. For example, if a woman can spare some time in the morning after completing household chores, before needing to be back to prepare lunch for the family.

- To help female participants with children they are able to bring their children with them to the interviews and help is provided at the venue(s) to take care of the children and give them snacks.
- Researchers take an ethnographic approach, staying and immersing themselves in the community to develop a good relationship with community members and garner their trust. All discussions also take place in local authority spaces (i.e. village chief's house, commune hall) so that participants are able to express themselves freely. Separate groups are used for women and men when sensitive issues are discussed.
- Quiet spaces are also used to ensure participants can engage and are not distracted.
- When possible, sessions are recorded using a voice recorder to ensure the conversation is fully understood and captured by the research team. Data immersion sessions and team reflection also help to ensure robustness of the information from the participants, and validation of the findings means the participants themselves are able to confirm or clarify the results.

**“Women are better prepared for hazards than men because she knows in detail about small preparation [methods] such as collecting and stocking of water as well as keeping farming material when the rain comes, while men do outside jobs and know less about protection.”**

Female leader of a community saving group, Pursat province

