Gender and Inclusion Toolbox:

Participatory Research in Climate Change and Agriculture

CGIAR

RESEARCH PROGRAM ON
Climate Change, Agriculture and Food Security

CCAFS

World Agroforestry Centre

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Acronyms

ALP	Adaptation Learning Programme
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CIS	Climate Information Services
CRA	Climate Resilient Agriculture
CSA	Climate Smart Agriculture
FAO	Food and Agriculture Organization of the United Nations
GHG	Green House Gas
ICRAF	World Agroforestry Centre
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
NGO	Non-governmental Organization
PAR	Participatory Action Research
PRA	Participatory Rural Appraisal
RBA	Rights Based Approach
SEAGA	Socio-Economic and Gender Analysis
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

Contents

Forward

Recent years have witnessed increased frequency and severity of climate extremes – from record high temperatures to severe drought in some regions, with erratic rainfall patterns in other parts of the world. These phenomena have significant implications for production in the developing world where the majority rural actors – men and women, depend on agriculture for their livelihoods and food security. Socially and culturally ascribed gender roles and responsibilities in most rural societies however, largely determine how each category differentially experiences the effects of climate change.

It is critical that the different options men and women pursue to reduce vulnerability in the face of a changing climate are understood to inform strategy and policy. This takes robust participatory research skills and effective use of qualitative tools to collect, synthesize and analyze data that throw light on how men and women are adapting to climate change and ensuring food security.

This manual introduces a wide range of participatory strategies and tools for research to guide the implementation of climate smart agriculture and efforts to achieve food security in rural communities. It is intended for NGO practitioners and program designers interested in diagnostic and action research for gender sensitive and socially inclusive climate change programs.

The manual provides users with an introductory section that defines basic concepts of gender, climate change, vulnerability, adaptive capacity and participatory action research. The following section describes steps in developing a research planning guide, building a research team and sampling procedures. Subsequent sections introduce key participatory tools for context analysis and for gathering a wide variety of information on perceptions of wealth, empowerment and overall socio-economic dynamics in a community. Users will be able to explore issues of access, use and control over climate services, and how co-benefits of climate interventions are perceived. The final section provides a set of easy to use guides on how to organize and analyze qualitative data from participatory action research.

CCAFS, FAO, ICRAF and other partners hope this training manual will be a major contribution to climate change interventions that improve men and women smallholders' adaptive capacity and food security prospects.

Margaret Kroma, Ph.D.

Assistant Director General

World Agroforestry Centre

Forward

With social inequalities on the rise almost everywhere, poor and vulnerable population groups are more negatively affected by the current global crises than others. Economic crises, natural disasters, environmental degradation and conflict are inhibiting development in many regions across the world, and climate change threatens to amplify these by creating additional uncertainties and risks for vulnerable populations, increasing the severity and frequency of disasters and jeopardising development gains made to date.

It is essential to continue supporting people's productive livelihoods and recovery from shocks and stresses but we must also work with them to try to find more lasting solutions that address the underlying drivers of both risk and vulnerability, strengthen existing adaptive capacity and build long term resilience.

The Adaptation Learning Programme (ALP), implemented by CARE International, promotes community-based adaptation, where addressing social and in particular gender inequalities is key to successful outcomes. We work with people whose lives depend on livestock and crop production in Niger, Ghana, Kenya and Mozambique. We have seen how unequal distribution of resources and power at all levels, including within each of these communities, constrains many people's options to take action on climate change. Part of ALP's response to this challenge has been to improve and promote knowledge on how best to identify the issues at play behind vulnerability and adaptive capacity. In other words, we look at why and how the lives and livelihoods of different social groups are affected by climate change in different ways, and what factors shape the aspirations and strategies women and men in different social situations adopt in response.

Everyone engaged in community-based action and research knows what an important and sensitive task it is to gain an understanding early on in the process, of the complex social relations at play in any given context. Gender relations and inequalities affect people and institutions at all levels and in all spheres, but they are always dynamic and personal, always sensitive, always changing. Capacity to engage in a sensitive way is critical but often lacking among development and research practitioners. Our contribution to this manual seeks to help in filling the gap by contributing some of CARE's tried and tested approaches to gender and power analysis across different contexts

To ensure the manual is relevant and responsive to realities in marginalized communities, CCAFS and ALP have joined forces to bring research and practical application together to refine the methods we use to improve our understanding of the contexts we work in. We hope to support researchers in testing their work practically and to amplify the value and impact of our collective learning through the combined outreach of our respective programmes. Our contribution to this manual has been one important part of the CCAFS CARE relationship, with testing done in ALP community sites in Northern Ghana. We hope it will provide its users with inspiring guidance and help to produce new insights to inform communities, decision-makers and researchers grappling with the complex relationship between gender and climate change in agricultural settings across the globe.

Fiona Percy,

Coordinator of the Adaptation Learning Programme for Africa

CARE International

The Adaptation Learning Programme (ALP) is implemented in Ghana, Niger, Kenya and Mozambique with the support of DFID, the Ministry of Foreign Affairs of Denmark, the Ministry of Foreign Affairs of Finland and the Austrian Development Cooperation.

Forward

This initiative began several years ago when CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) and Food and Agriculture Organization of the United Nations (FAO) came together to examine existing gender-targeted participatory research approaches to see which ones would be the most effective for addressing key gender-related questions that the CCAFS programme was grappling with. We soon realized, however, that these key questions needed to be co-defined with local partners working on the ground closely with farmers – both women and men. As these partnerships have evolved, so have the approaches. The result is a range of learning modules that have been tested in the field with NGOs and local researchers in different environments. Ideally, this should make them more useful, not just researchers, but development partners trying to figure out how best to support gender transformative approaches. We hope that these resources will aid research for development teams in shifting away from purely diagnostic and quite 'extractive' research methods towards action research that empowers both women and men.

Patti Kristjanson, PhD

Research leader and gender coordinator, CCAFS

Senior scientist, World Agroforestry Centre

What Can This Manual Do?

This manual is a resource and toolbox for NGO practitioners and programme designers interested in diagnostic and action research for gender sensitive and socially inclusive climate change programmes in the rural development context. It is meant to be an easy to use manual, increasing the research capacity, skills and knowledge of its users. Integrating gender and social differentiation frameworks should ideally begin from the start of the programme cycle and be coordinated throughout research, design, implementation, and monitoring and evaluation phases. The data gathered using this toolbox supports this programme work.

While the manual emphasizes participatory and qualitative approaches, many of the activities and tools can produce quantitative data. Each chapter features a bundle of research tools intended to be used sequentially. However, we know that each organization has its diverse needs. The chapters are in modular format so that teams can assemble their own research toolbox specific to their needs.

What Can't This Manual Do?

This manual *does not* focus on gender sensitive and socially inclusive programme design, implementation, policy recommendations, or monitoring and evaluation. It is intended for gathering gender sensitive data at the start of programming and *not* necessarily gender for mainstreaming existing programmes.

This manual utilizes participatory and qualitative approaches for the household and community level, emphasizing local contexts and meanings. It *does not* aim to produce statistical representations meant for scaling out to regional or national contexts.

This manual approaches climate change, agriculture and food security through a vulnerability perspective. It is *not* tailored for addressing disaster risk management or the biophysical science of climate change. For these aspects, it is highly recommended to consult additional resources, such as the FAO's E-Learning Tool "Planning for Community Based Adaptation to Climate Change" which is available online : http://www.fao.org/climatechange/67624/en/

Introduction

Climate change is a social issue. As the world moves towards climate smart responses that bridge food security, resilience and mitigation of green house gasses (GHGs), practitioners and researchers face the challenge of doing so through socially relevant and gender-sensitive approaches.

We know that a gender equity gap exists in agriculture and that this gap shapes how men and women contribute, respond and adapt to climate change. Rural women in particular head one out of five farms and comprise of 40% of agricultural labour across the developing world (FAO, 2011), and yet produce less than their male counterparts because of the persistent inequalities that frame their experiences. Women's insecurity over land access and tenure, lower political representation and decision-making power in rural governance, lack of access to financial capital, level of empowerment, barriers to participation in trainings and extension services and many other challenges exist in the path of promoting gender equitable adaptation and development. Building resilience within this context is a matter of understanding how gender norms and relations, along with other critical factors such as caste, class, age, disability and sexual orientation all affect differences in access, power and decision making in regards to adaptive capacity.

In order to support a more inclusive climate smart agenda relevant for both men and women, this Toolbox assumes several key points:

- Data should be sex-disaggregated (when relevant) to recognise women as individual farmers rather than counting them as de facto members of a household.
- The type and level of social-differentiation used should be based on the objective of the study and the climate change development program that it informs.
- Gender and social inclusion should be integrated from the research and programme design phase rather than relying on mainstreaming at a later point.
- Building capacity in gender and social analysis is important for both upstream and downstream practitioners in an organisation.
- A participatory approach to research can support jointly-produced knowledge that reflects more accurately the different needs, challenges and opportunities for women, men and vulnerable groups.

The objective of the Toolbox is to support programme designers and field practitioners in doing gender sensitive and socially inclusive research. The toolbox is divided into four main parts and includes a) An overview of concepts in gender, climate change, participation, qualitative research, and gender and social analysis; b) Team-based learning and reflection activities to support gender and inclusion concepts; c) A logistics and planning guide supporting sampling strategy, sex-disaggregation, and field work best practices; and d) Participatory research tools covering Co-Production of Knowledge, Climate Resilient Agriculture, Climate Information, and Mitigation for socially differentiated data collection and analysis. The Toolbox is in modular format, and each activity can be used on its own or sequentially according to the user's needs.

Social Learning & the Toolbox

With the support of CARE International, the World Agroforestry Centre (ICRAF), and the CGIAR Research programme in Climate Change, Agriculture and Food Security (CCAFS), along with dozens of practitioners, scientists, farmers, NGO professionals and academics, the tools and concepts in this document have been developed in various workshops, field tests, reflection sessions and forums. For CCAFS, the toolbox is part of a larger social learning approach which emphasises self-reflexive, iterative and shared learning platforms that seek to integrate diverse actors and sources of knowledge. It is at once a way to moving away from expert-driven, often top-down approaches as well as a means of supporting the participation of men and women who are less powerful in influencing the debate on climate change and adaptation (CCAFS 2011).

The "Gender & Inclusion Toolbox: Participatory Research in Climate Change & Agriculture" was initially conceived as a revision of the 2012 CCAFS and FAO Training Guide, "Gender and Climate Change Research in Agriculture and Food Security for Rural Development". The FAO-CCAFS manual was a product of collaboration itself, having ten research tools tested in three regions in Bangladesh, Uganda and Kenya. The resulting papers produced a set of recommendations on improving use – which served as the foundation for the current Toolbox chapters. The current Toolbox builds from the strengths of the FAO-CCAFS manual, however has changed significantly as different actors co-designed the content through social learning processes conducted throughout 2013-2014.

This is a living document. CCAFS and CARE would appreciate feedback and insights from your gender and socially inclusive research activities. Sending us your reflections or reports can help us improve methods and build the capacity of the PAR and gender community of practitioners. Contact us at our website: www.worldagroforestrycentre.org/gendertoolbox

PART 1 - BASIC CONCEPTS

Basic Concepts

Gender

Key Ideas

- The difference between “sex” and “gender”
- Gender inequality intersects with other forms of inequality for example class, ethnicity, sexuality etcetera
- Gender norms are changeable over time

Why Gender?

Social inequalities put many poor people on the frontline of harmful climate change impacts while constraining their options for taking action to reduce them through adaptation. Gender is often a defining factor of these barriers to adaptation. Critical awareness of and effective measures to address gender inequalities, therefore, are key for addressing climate change. Empowering women and engaging men in a process whereby women and men work together as equally recognized decision makers and agents of change from the household to the global level, is a crucial pathway toward gender equality, and resilience (Castaneda & Acquah 2012).

Social differences relating to gender are “learned, and though deeply rooted in every culture, are changeable over a lifetime or generations, and have wide variations both within and between cultures. Gender, along with other factors such as wealth and ethnicity, often determines the rights, roles, opportunities, power, access to and control over resources for women and men in any culture.” Striving for gender equality “does not mean that women, girls, men and boys are the same but that their enjoyment of these rights, opportunities and life-chances are not governed or limited by whether they were born female or male.”

Inclusive and meaningful participation of all community groups, particularly the most vulnerable, is needed in all the phases of climate change programming – from assessment to implementation, and throughout in monitoring and evaluation. This fosters women’s and men’s empowerment and ownership which is vital to positive and sustainable adaptation and development (CARE International 2011).

The What and Why of Gender Analysis

Gender analysis is the systematic attempt to identify key issues contributing to gender inequalities, many of which also contribute to poor development outcomes. This process explores how gendered power relations give rise to discrimination, subordination and exclusion in society, particularly when overlaid across other areas of marginalization due to class, ethnicity, caste, age, disability status, sexuality, etcetera. CIDA describes gender analysis as:

"The variety of methods used to understand the relationships between men and women, their access to resources, their activities, and the constraints they face relative to each other. Gender analysis provides information that recognizes that gender, and its relationship with race, ethnicity, culture, class, age, disability, and/or other status, is important in understanding the different patterns of involvement, behavior and activities that women and men have in economic, social and legal structures."

The gender analysis process seeks to collect, identify, examine and analyze information on the different roles of women and men. Gender analysis primarily seeks to understand these three questions:

1. What are gendered-related rights denials in a given context? How do unequal gender relations, gendered discrimination, subordination and exclusion influence rights denials? How do these rights abuses intersect with other areas of discrimination – based on ethnicity, culture, class, age, disability, etcetera?
2. How will gender relations affect the achievement of sustainable results? For example, if the project's sustainable result is increased productivity among female smallholder farmers, then gendered norms in household divisions of labour and workloads may greatly influence production outcomes.
3. How will proposed results affect the relative status of men and women? Will it exacerbate or reduce inequalities?

Gender analysis examines gender roles and relations from inter-personal, household, community, provincial and national levels. It looks at both the public and private spheres of people's lived experiences. It seeks to understand the differing priorities, needs, activities and responsibilities of men and women, boys and girls across different life stages, and in the various roles they play (as sons and daughters, lovers, mothers and fathers, citizens, neighbors, laborers, etcetera). An analysis of gender issues must also recognize other diversity factors that affect all members of society, such as age, ethnicity, class, caste and other socioeconomic conditions.

(CARE International Gender Network 2012)

Box 1: Classic gender analysis questions

- Who does what? How? Where? When? Why? (Labor)
- Who uses what? How? Where? When? Why? (Access)
- Who controls what? How? Where? When? Why? (Decision-making and control = power)
- Who knows what? How? Where? When? Why? (information = power)
- Who benefits from what? How? Where? When? Why? (benefit-sharing)
- Who is included in what? How? Where? When? Why? (participation)

(FAO 2009)

How Does Gender Influence Vulnerability to Climate Change?

The vulnerability and capacity of a social group to adapt or change depends greatly on their assets according to scholars like Moser and Satterthwaite (2008). Next to their physical location, women's assets such as resources and land, knowledge, technology, power, decision-making potential, education, health care and food have been identified as factors that add to vulnerability and adaptive capacity. In terms of gender, data from around the world indicates that women tend to have less or limited access to assets (physical, financial, human, social and natural capital).

The examples below illustrate some of the ways in which gender can shape women and men's vulnerability to climate change:

	Women	Men	Link to Climate Change Vulnerability
Roles	Stay home to care for children, as well as sick or elderly family members	Can migrate to access economic opportunities	Their ability to migrate in search of economic opportunities makes it easier for men to deal with crisis, and may result in benefits for the family as a whole. However, male migration often increases women's workload, as they are left behind to manage the family and households. It can also increase women's exposure to other risks, such as gender-based violence and HIV infection.
	Produce household oriented crops and livestock products	Produce market-oriented crops and livestock products	Both crops and livestock are affected by climate change, and this has profound consequences for household food security. Men often claim safer/more fertile land for growing market-oriented crops, leaving women to grow household-oriented crops on more vulnerable/less fertile land.
	Are responsible for food storage and preparation	Are responsible for selling valuable produce and livestock	In addition to the challenges described above, climate change has implications for food preparation and storage (in terms of water for food preparation and the vulnerability of food stores to extreme events, such as cyclones and floods). Harvests may be reduced or even wiped out by floods or droughts. This affects market prices and the availability of surplus to sell – placing pressure on both men and women to identify other sources of income and reduce major expenditures (e.g. school fees). In times of food shortage, women are often expected to feed other members of the family before attending to their own needs.

	Women	Men	Link to Climate Change Vulnerability
Resources	Have lower incomes and are more likely to be economically dependent	Have higher incomes and are more likely to own land and other assets	Men typically have more money and other assets than women. Men's savings provide a "buffer" during tough times and, along with other assets, make it easier for them to invest in alternative livelihoods.
	Have less access to education and information	Have more access to education and information	Managing climate-related risks to agricultural production requires new information, skills and technologies, such as seasonal forecasts, risk analysis and water-saving agricultural practices. Men are more likely to have access to these resources and the power to use them and are therefore, better equipped to adapt. At the same time, women often have traditional knowledge that can inform adaptation efforts. Both new and old information is important in the context of adaptation.
Power	Have less power over family finances and other assets	Have more power over family finances and other assets	Without the power to decide on family resources and finances, women's ability to manage risks by, for example, diversifying crops, storing food or seeds or putting money into savings, is limited.
	Have limited engagement in community politics	Have greater involvement/ decision-making power in community politics	Men are likely to have more influence over local governance-promoting policies and programme that may not support women's rights and priorities.
	Face many cultural restrictions/ prohibitions on mobility	Face few cultural restrictions/ prohibitions on mobility	Mobility is a key factor in accessing information and services. It is also critical for escaping the danger posed by extreme weather such as floods. Therefore, women are often at higher risk from these events.

(CARE International 2010)

What is Sex-Disaggregation?

" Sex-disaggregated data are data that are collected and analyzed separately on males and females. This typically involves asking the "who" questions in an agricultural household survey: who provides labor, who makes the decisions, who owns and controls the land and other resources. Or it may involve asking men and women about their individual roles and responsibilities.

When talking about sex-disaggregated data, we are not referring to comparisons of male- and female-headed households. This type of data is already collected as part of common practice. However, limiting analyses to this kind of comparison is problematic because it confounds gender and household structure. Male- and female-headed households are not comparable in most cases due to the way in which they are defined. "Male-headed" households generally include all households in which women are married to men while "female-headed" households are usually those households lacking adult men. Female-headed households are often more labor and resource constrained than male-headed households, but these disparities cannot necessarily be attributed to the sex of the household head. Unless a survey asks questions about individuals within a household, we'll miss important data on women living in male-headed households – the majority of the world's women."

- Cheryl Doss and Caitlin Kiera (2014)

The Difference Between 'Disaggregating People' and Counting Female-Headed Households

There are different ways of counting people in a sex-disaggregated manner. They can be simply disaggregated by sex ('male/ female'), but it often makes sense to refine disaggregation further, by introducing age groups or civil status (single/ married/ divorced/ widowed). It is important to be aware that counting the 'number of women/ men/ boys/ girls with access to/ benefiting from/ participating in etcetera.' is not the same as disaggregating households by male-headed and female-headed households.

Quantitative surveys often use the household as their unit of analysis, enabling only a disaggregation of results by head of household. While this is useful, it is important to keep in mind that this type of disaggregation does not tell us more than the differences and commonalities the households headed by a man or by a woman. It does not inform about gender *relations* more widely, i.e. between women and men more generally and at different stages of their lives–for example between boys and girls, or between married women and men.

Both male and female heads of household are a distinct category of man or woman, and when a household is headed by a woman this is often due to specific circumstances such as the seasonal or permanent out-migration, sickness of a husband or polygamy ('de facto' female-headed households) or divorce from or the death of a husband ('legal' female-headed households). Female heads of household often, but not automatically, face exclusion and discrimination in access to resources, but sometimes have more control over resources than, for examples, women living in marriage. Female heads of 'de facto' female headed households often assume tasks and roles their husbands are temporarily or permanently unable to fill, but may then face legal barriers when it comes to making decisions over productive assets, e.g. land, or accessing extension services. (Ayers et al. 2012)

Gender Concepts

Sex refers to the biological and physiological characteristics of men and women (Mikkola 2012).

Gender is not the biological differences between men and women, boys and girls, rather a set if the social attributes associated with being male and female learned through socialization. Gender therefore is a social construct that defines what it means to be a man or woman, boy or girl in a given society – it carries specific roles, status and expectations within households, communities and culture. Individuals may also self-identify as neither male or female, or both male and female (CARE International 2009).

Gender roles are shaped by the different social and cultural contexts they exist in. Factors like country/region, ethnic group, age, economic class and religion all affect which roles and responsibilities that men and women, boys and girls are expected to have. (FAO 2012)

Gender roles:

- are socially constructed;
- determine social and economic activities;
- may reflect biological differences;
- vary according to regions and cultures; and
- **change over time**

Gender relations are the ways in which a society defines rights, responsibilities and the identities of men and women in relation to one another. Gender relations are based on **power** and negotiations, and gender roles are closely linked, influencing the definition and development of one another. (FAO 2012)

In addition to the roles ascribed to men and women in relation to each other, men and women each have **multiple roles**. "While men typically play their roles sequentially, focusing on a single productive role, women must usually play their roles simultaneously, balancing the demands of each within their limited time constraints. The gender-based division of labor ascribed in a given socio-economic setting determines the roles that men and women actually perform. (FAO 2012)

Since men and women play different roles, they often face very different cultural, institutional, physical and economic constraints, many of which are rooted in systematic biases and discrimination. (FAO 2012)

Box 2: Men's and women's multiple roles at community level

Reproductive role: Childbearing and rearing responsibilities, and domestic tasks done by women, are required to guarantee the maintenance and reproduction of the labor force. This includes not only biological reproduction but also the care and maintenance of the work force (male partner, oneself and working children) and the future work force (infants and school-going children). This work is usually unpaid.

Productive role: Work done by both men and women for pay in cash or kind. It includes both market production with an exchange-value, and subsistence or home production with actual use-value, and also potential exchange-value. For women in agricultural production, this includes work as independent farmers, peasant wives and wage workers. The work is both paid (but often underpaid) and unpaid.

Community managing role: Activities undertaken primarily by women at the community level, as an extension of their reproductive role, to ensure the provision and maintenance of scarce resources of collective consumption, such as water, energy sources, health care and education. This is unpaid work, undertaken in 'free' time.

Community politics role: Activities undertaken primarily by men at the community level, organizing at the formal political level, often within the framework of national politics. This is usually paid work, either directly or indirectly, through status or power.

(Moser 1998)

Gender equity is the process of being fair to women and men. To ensure fairness, strategies and measures must often be available to compensate for women's historical and social disadvantages that prevent women and men from otherwise operating on a level playing field. Equity leads to equality. (CARE International 2009)

Gender equality - or equality between women and men - refers to the equal enjoyment by women, girls, boys and men of rights, opportunities, resources and rewards. A critical aspect of promoting gender equality is the empowerment of women, with a focus on identifying and redressing power imbalances.

Equality does not mean that women and men are the same but that their enjoyment of rights, opportunities and life changes are not governed or limited by whether they were born female or male. (CARE International 2009)

Women's Empowerment involves awareness-raising, building of self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality. Empowerment comes from within; women empower themselves. Increase women's power through power to; power with and power from within which focus on utilizing individuals and collective strengths to work towards common goals without coercion or domination. (CARE International 2009)

Gender mainstreaming is defined by the United Nations as the process of assessing the implications for women and men of any planned action in all areas and at all levels. That means making both the concerns and experiences of women and men an integral dimension of all agriculture and rural development efforts. (FAO 2012)

Gender Transformative Approach refers to program approaches or activities that seek to build equitable social norms and structures in addition to individual gender-equitable behavior by addressing both the fundamental causes and sources of gender inequality For agricultural research for development this approach is crucial as it is hoped that better and more lasting outcomes will result from interventions that combine efforts to enhance access to resources, technologies and markets that understand and challenge the social context that enable inequalities to persist. (CARE International 2011)

Box 3: Dimensions of Women's Empowerment According to CARE

CARE understands that it takes much more than simply including women in its projects to make progress towards Women's Empowerment and Gender Equity. CARE defines women's empowerment as the **combined effect of changes** in:

- a woman's own knowledge, skills and abilities (agency),
- the societal norms, customs, institutions and policies that shape her choices in life (structures), and
- the power relationships through which she negotiates her path (relations).

This comprehensive understanding of empowerment requires not only to increase women's individual *agency* but also to change structural barriers in order to shift social and cultural norms, policies and key relationships in ways that allow women and men to step into new roles.

(CARE International 2011)

Box 4: BIOVERSITY's List of Gender Responsive Research Tips

Gendered Division of Labor

Multiple roles

A focus on agricultural production tends to prioritize field activities related to staple and marketable crops, obscuring the multiple labor and knowledge-intensive activities women and/or men carry out in forests and home gardens, seed selection and conservation, marketing, healing, food processing, and so on.

The reproductive sphere

The reproductive sphere refers to all activities required to maintain the household and its members, such as cooking, cleaning, raising children, and so on. In addition to contributing to agricultural production and natural resource management, women's particularly heavy responsibilities in the reproductive sphere limits their opportunity to pursue other activities

Crop production

Women and men may cultivate different crops or assume specific tasks in the cultivation of the same crops. For instance, men may prepare the land for cultivation, while women sow and weed, and both men and women may harvest crops together, performing distinct tasks in the process. Women may contribute a significant amount of labor in the cultivation of 'male' crops (crops controlled by men), but this contribution often lacks recognition.

Seasonality

Women and men's activities vary throughout the year; no snapshot can capture the range of activities pursued annually. Exploring these seasonal variations is important for understanding the labor constraints women and men experience at specific times of the year, among other considerations. Gendered seasonal calendars—a tool for gender analysis—are an effective way of making these visible.

Gendered livelihoods

Informal activities

Women generally have less access than men to formal institutions and forms of employment, but participate intensely in informal institutions and organizations and in the informal economy.

Various sources of income

Income from multiple sources may be small but nonetheless significant to women and men, and must be included in livelihood analyses. Income can be monetary or non-monetary. For example, one product may be bartered for another without money exchanging hands.

Non-staple crops

Women tend to grow many crops in small quantities that are nonetheless important to their livelihoods and to their family. These are found not only in women's fields, but also often on the borders of men's fields and in home gardens.

Non-timber forest products (NTFPs)

Women and men use various forest resources beyond timber, which tends to be controlled by men or by community organizations. NTFPs can be used for both consumption and sale, and the timing at which they become available can correspond with lean periods (before the harvest, when food is in short supply), making them especially important for food security. Women's ability to access many NTFPs and the income from them makes these forest products highly prized by women.

Non-market activities

Rural women are often involved in the collection of NTFPs and the production of crops for household consumption rather than for sale. This important contribution to household food security is overlooked when studies focus exclusively on income generating activities.

Animal rearing

Animal husbandry is not exclusively the domain of men. In fact, in some regions women are the main animal managers. Women typically raise fewer large stock than men and focus instead on raising poultry and small stock. Women may also assume complete responsibility for animals kept at the homestead, and may procure fodder for animals as well as processing and marketing livestock products. Yet, their contribution to these activities is often ignored.

Gendered Access to and Control Over Resources

Informal access to resources

Consider not only land tenure, which is often tenuous for women, but also other important forms of access to resources, such as access rights to trees and their products, that may differ from rights to the land on which the trees grow.

Gendered spaces

Women and men frequently exploit different spaces. For instance, women tend to collect products (NTFPs, firewood) from commons and uncultivated lands, such as the bush and interstices between fields. These spaces, which are crucial for women's livelihoods, are often ignored in analyses that focus on 'productive' lands.

Control over resources

While women may have access to certain resources, they may not have the ability to decide the fate of these resources (how to use them, dispose of their products, transfer them, and so on). Knowing who **controls** resources is important for understanding resource management processes.

(Elias 2013)

Basic Concepts

Climate Change

Key Ideas

- The difference between weather and climate
- The difference between coping, adaptation and mitigation
- The major gender disparities in climate change

Understanding Climate Change

The scientific community has had evidence for some time that the earth is warming at increasingly rapid rates and that human activity has been one of the driving factors for climate change today. While our atmosphere naturally contains greenhouse gases (such as carbon dioxide, methane and nitrous oxides) to produce what is called the greenhouse effect, the level of greenhouse gasses produced since the industrial revolution in the mid-18th century has altered the composition of our atmosphere leading to an enhanced greenhouse effect.

The human activities that lead to greenhouse gas emissions include burning of fossil fuels for transport and energy consumption, as well as agriculture and forestry. In the agriculture sector, emissions of greenhouse gases arise from fertilizer production and use, cattle, rice production, biomass burning and other activities. The agriculture, land use and forestry (AFOLU) sectors combined, contribute 24% of emissions leading to the enhanced greenhouse effect (IPCC 2014).

Generally, it is agreed that extreme weather events will increase along with the unpredictability of their occurrence due to climate change. The impact and intensity of these changes will vary from place to place. Some examples of climate change impacts include the following:

Increase in temperature

- Overall, the mean temperature is increasing and will continue to increase. This suggests that the coldest days will become warmer, and the hottest days will become even hotter.
- The frequency of cold days will decrease, and the frequency of hot days will increase.
- In some areas the frequency of warm spells and heat waves will increase.
- Number and intensity of wildfires will increase.

Rainfall

- Over many areas the frequency of heavy rain will increase.
- There will be an increase in number and intensity of floods and landslides.
- Drought risk will increase in many areas.

Sea level rise

- The global sea level rise is estimated to be up to 60cm by 2100 (IPCC 2007); however, some important processes are not well understood yet.

(FAO-CCAFS 2012)

For a complete explanation of the bio-physical processes of climate change, we encourage you to consult additional resources such as the United Nations Institute for Training and Research's (UNITAR) E-learning course which is available online: http://www.unitar.org/free-e-course-everything-you-need-know-about-climate-change-nutshell.

Mitigating Climate Change

According to the UNFCCC, mitigating climate change involves reducing the source of greenhouse gas emissions or enhancing the **sinks** that help remove CO^2 from the atmosphere through human intervention. There are many ways of enhancing sinks in agriculture such as- reforestation, improved cultivation practices, building up peaty soils to retain CO^2. Enhancing sinks can also be called carbon **sequestration.**

Adaptation to climate change is the larger processes by which communities and systems cope with the consequences of climate change, such as declining livelihoods, food insecurity or degrading farmlands. Many adaptation practices can help build resilience in the face of these challenges, but do not abate (or mitigate) the sources of CO^2 emissions.

For many organizations, a pathway forward that integrates building community resilience and adaptation, carbon sequestration and mitigation, as well as achieving national food security and sustainable development goals is called **Climate Smart Agriculture (CSA)**. For farmers in developing countries, the main aim of agriculture is to secure their livelihoods and produce products that can be used directly or sold in markets. Mitigation of climate change and carbon sequestration for its own sake is not necessarily the first activity consciously undertaken by farmers. Mitigation activities can however be integrated into many different every day practices if we see it in the context of farmers' decision making and the various incentives and **co-benefits** that these practices can deliver. CSA practices and projects that specifically aim to integrate mitigation activities into agricultural practices are termed **carbon projects.**

Types of Carbon Projects in Agriculture

Reduce Emissions	Avoid Emissions	Remove Emissions
A project aiming to reducing methane emissions from livestock could do so by introducing different types of feeds.	A project aiming to avoid emissions could substitute fossil fuels for bioenergy produced from wood, farm residues, algae or fish waste.	A project aiming to remove emissions, through agroforestry activities for example, which can sequester carbon from the atmosphere.

Mitigation is a co-benefit, which might be remunerated in the future through different payment schemes. The experience today suggests the real economic benefits for farmers will come from increased productivity due to climate-smart practices. Specific payments, including carbon market payments, would not be of great importance for small farmers in developing countries. (adapted FAO-CCAFS 2012)

Climate Change Concepts

Adaptation is adopting measures to protect against the actual and expected harmful effects of climate change, to exploit any opportunities it may generate, and to ensure the sustainability of investment and development interventions in spite of more difficult conditions; aims to reduce sensitivity of men, women, girls and boys to the effects of climate change (Jost 2011).

Adaptive Capacity is the ability of a system to adjust, modify or change its characteristics and actions to moderate potential, future damage; take advantage of opportunities; and to cope with the consequences of shock or stress (Brooks 2003).

Carbon sequestration The process of increasing the carbon content of a **reservoir**/pool other than the **atmosphere.** (IPCCC 2014)

Climate: The average characteristics of meteorological conditions, calculated over a long period (typically 30 years or more).

Food security exists when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO 2014c).

[Climate] Mitigation involves reducing green house gas emissions and/or enhancing the capacity of 'sinks' for GHGs, for the ultimate purpose of stabilising their concentration in the atmosphere; aims to reduce global *exposure* to the effects of climate change (SPC 2011).

Climate-Smart Agriculture is agriculture that sustainably increases productivity, resilience (adaptation), reduces or removes greenhouse gases (mitigation), where possible, and enhances achievement of national food security and development goals (FAO 2014a).

Climate Information System is the relevant information for adaptation to climate change, long-term planning and early warning systems.

Co-Benefit are the benefits of policies that are implemented for various reasons at the same time – including climate change mitigation – acknowledging that most policies designed to address reduction of greenhouse gas emissions also have other, often at least equally important, rationales (e.g. related to objectives of climate change adaptation, development, food security, sustainability, and equity). The term co-impact is also used in a more generic sense to cover both the positive and negatives sides of the benefits (FAO 2014b).

Resilience The ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety.(FAO 2014b).

Risk is the combination of: (I) the probability (or frequency) of occurrence of a defined hazard resulting in adverse consequences; and the magnitude of these consequences, given the interaction of the hazard with the properties of the exposed system (SPC 2011).

Box 5: Coping versus Adaptation

The terms "adaptation" and "coping" are sometimes used interchangeably, leading to confusion about the similarities and differences between these two important concepts.The following lists of characteristics are a compilation of brainstorming sessions by groups of development practitioners in Ghana, Niger and Nepal.

COPING	ADAPTATION
Short-term and immediate	Practices and results are sustained
Oriented towards survival	Oriented towards longer-term livelihood security
Not continuous	A continuous process
Motivated by crisis; reactive	Involves planning
Often degrades the resource base	Uses resources efficiently and sustainably
Prompted by a lack of alternatives	Focused on finding alternatives
	Combines old and new strategies and knowledge

(Daze/CARE CVCA 2009)

Maladaptation is an inadequate response to the challenge posed by climate change, by which 'business-as-usual' development interventions that overlook the implications of climate change inadvertently result in increased vulnerability to climate change; the term is also used to designate an inadequate adaptation (FAO 2014b).

Carbon Sink Any process, activity or mechanism that removes and accumulates and stores a greenhouse gas, an aerosol, or a precursor of a greenhouse gas or aerosol from the atmosphere (IPCC 2007).

Vulnerability to climate change is the extent to which a system, individual or group of people is susceptible to, and unable to cope with, the adverse effects of climate change; vulnerability to climate change depends on *exposure* to climate change, *sensitivity* to its effects and *adaptive capacity* (FAO 2012 p. 133).

Exposure to climate variation is primarily a function of geography. For example, coastal communities will have higher exposure to sea level rise and cyclones, while communities in semi-arid areas may be most exposed to drought (Daze/CARE CVCA 2009).

Weather: The meteorological conditions (air temperature and pressure, humidity, wind speed, precipitation) that prevail in a given place at a given time.

Sensitivity is the degree to which a given community or ecosystem is affected by climatic stresses. For example, a community dependent on rain-fed agriculture is much more sensitive to changing rainfall patterns than one where mining is the dominant livelihood. Likewise, a fragile, arid or semi-arid ecosystem will be more sensitive than a tropical one to a decrease in rainfall, due to the subsequent impact on water flows (Daze/CARE CVCA 2009).

Box 6: CCAFS Big Facts on Gender & Climate Change

Women tend to be more at risk from climate change than are men because they represent the majority of the world's poor. For rural women, three primary factors of gender-based vulnerability to climate change include: unequal access to resources; unequal opportunities to change or improve their livelihoods; and exclusion from decision-making. Through both direct and indirect risks, it can affect their livelihood opportunities, the time they have available to them on a daily basis, and overall life expectancy. The following are supporting facts.

- Women appear more vulnerable than men to the effects of natural disasters, with the impacts strongly linked to poverty. A few studies following the cyclone and flood disasters of 1991 in Bangladesh revealed that the death rate was 71 per 1000 among women aged 20–44, compared with 15 per 1000 for men of similar ages (WEDO 2008 p. 51).
- More and more agricultural work is being done by women as men move to non-farm jobs. In all parts of the world except Europe, the proportion of women in the total agricultural work force has risen over the past four decades (Doss 2011 p. 6).
- Women often have responsibilities, such as fetching water, collecting fuel wood, and looking after children that make them more vulnerable than men to the impacts of climate change (Wright and Chandani 2014).
- For example, in many developing countries women are the primary collectors, users and managers of water, so drought and water shortage can increased their workload (UNDP 2010).
- Female farmers produce less than their male counterparts because they have less access to or ownership of land, use fewer inputs and have less access to important services such as extension services. In many countries women are only half as likely as men to use fertilizers (FAO 2011 pp. 38, 45).
- If women had the same access to productive resources as men, they could increase yields on their farms by 20–30%. This could raise total agricultural output in developing countries by 2.5–4%, which could in turn reduce the number of hungry people in the world by 12–17% (FAO 2011 p. 5).
- Men have greater access to information than women. For example, in Kyengeza, Uganda, 80% of the men listen to the radio for daily weather forecasts, compared with only 20% of women (Kyazze et al. 2012 p. 12).

In light of the above, interventions related to climate risk reduction and social risk management should pay special attention to the need to enhance the capacity of women to manage climate change risks with a view to reducing their vulnerability and maintaining or increasing their opportunities for development.

(CCAFS 2014)

Basic Concepts

Participation

Key Ideas

- ***Participation*** empowers men, women, boys and girls to find solutions to their own development challenges. It is both an attitude and a philosophy that encourages learning, discovery and flexibility' (Hannah & Jost 2011 p. 12).
- Participation assumes ***equality*** between outside experts and community members**.**
- 'Practitioners of ***participatory [approaches]*** should be rigorous in terms of implementation and interpretation, to limit the influence of bias on findings' (Kristjanson et al. 2014 p. 1).
- ***Implementation*** should take into consideration social-cultural settings, making comparison of results between communities a challenge.
- 'A ***gender-sensitive*** approach requires understanding of site-level socially differentiated dynamics, and a strategy for achieving gender-appropriate targets' (Kristjanson et al. 2014).

Understanding Participation

Participation in research and development is a construct that emerged in the late 1970s, although its conceptual origins stretch back to the 1960s (Chambers 1994). Since then participatory approaches have been endorsed and used by many international organizations, including the World Bank, specialized agencies of United Nations such as FAO, and IFAD the CGIAR, IUCN, CARE International, etcetera.

In the research community, participatory approaches are sometimes viewed as less rigorous, because practitioners may use methods that are non-randomized and/or qualitative. Thus, some assume that participatory approaches to research require less skill than other statistically driven approaches. Nothing can be further from the truth. In fact, practitioners of participatory approaches must be highly skilled so as to maintain rigor in implementation, objectivity in analysis, and ability to recognize and manage bias (Kristjanson et al. 2014).

In gender research and in development work, participatory approaches are proving particularly useful for understanding gender norms in terms of governance and control of resources, and for identifying opportunities for transformation of these norms (Kristjanson et al. 2014).

The unique value of participatory approaches is that they encourage community members and outside experts to work together in gathering and analyzing information, building a community's analytical capacity and empowering them to seek information about and solutions to local problems that lead to sustainable local action (Kristjanson et al. 2014). Ideally, when participatory methods are used to gather information in a community, residents should be equally involved in design, implementation, analysis and reporting of the activity.

Pretty et al. (1995) described a typology of participation in which passivity epitomizes the lowest level and self-mobilization the highest level (Pretty et al. 1995). Different types of participation may be necessary at different points of a gender and climate change program. Self-mobilization may not be possible during initial phases when the objective is to gather information on which to base an intervention, while it becomes highly likely at the point of identifying solutions to problems and the co-development and implementation of action plans.

Types of participation (Pretty et al. 1995 p. 14):

- **Passive participation:** People participate by being told what is going to happen or has already happened. It is a unilateral announcement by an administration or project management without listening to people's responses. The information being shared belongs only to external professionals. This is more often the case for women and youth, especially in rural areas
- **Participation in information giving**: People participate by answering questions posed by extractive researchers using questionnaire surveys or similar approaches. People do not have the opportunity to influence proceedings, as the findings of the research are neither shared nor checked for accuracy.
- **Participation by consultation**: People participate by being consulted, and external people listen to views. These external professionals define both problems and solutions, and may modify these in the light of people's responses. Such a consultative process does not concede any share in decision-making, and professionals are under no obligation to consider people's priorities.
- **Participation for material incentives**: People participate by providing resources, for example labor, in return for food, cash or other material incentives. Much on-farm research falls in this category, as farmers provide the fields but are not involved in the experimentation or the process of learning. It is very common to see this called participation, yet people have no stake in prolonging activities when the incentives end.
- **Functional participation**: People participate by forming groups to meet predetermined project objectives related to the project; which can involve the development or promotion of externally initiated social organizations. Such involvement tends to occur after major decisions have been made rather than in the early stages of project development. These institutions tend to be dependent on external initiators and facilitators, but may become self-dependent.
- **Interactive participation**: People participate in joint analysis, which leads to action plans and the formation of new local institutions or the strengthening of existing ones. It tends to involve interdisciplinary methodologies that seek multiple perspectives and make use of systematic and structured learning processes. These groups take control over local decisions so people have a stake in maintaining structures or practices.

- **Self-mobilization**: People participate by taking initiatives independently of external institutions to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used. Such self-initiated mobilization and collective action may or may not challenge existing inequitable distributions of wealth and power.

Box 7: Obstacles within the community and possible ways to overcome them

In any community there will be obstacles to participation, many of which will be directly tied to gender norms (Hannah & Jost 2011 p. 63). A practitioner of participatory approaches must be aware of dynamics related to gender as well as poverty, organization, communication and institutions that limit the participation of marginalized members of a community and proactively address them in a research or development program so as to ensure that all members of a community are part of the program.

Community level obstacles	Mechanisms for overcoming obstacles
Lack of appropriate community organizations	• Spread awareness of the programme and development needed • Strengthen existing organizations, especially inclusive decision-making mechanisms
Lack of organizational skills	• Investing in men and women's leadership skills for more vocal and active participation and cooperation • Informal trainings by community organizations • Helping leaders to plan meetings • Bring issues to membership • Formal training in record keeping, etc.
Poor communication facilities	• Organization builds communication networks within its membership • Breaks down some tasks • Discussions for smaller groups • Empowerment and targeted capacity building for marginalized voices, particularly women and those lacking self-confidence or social status
Factionalism and differing economic interests	• Minimize the need for cooperation between conflicting groups • Design incentives to strengthen local organizations • Support processes that unify people who must cooperate
Corruption	• Develop mechanisms for system checks

By being aware of obstacles to participation and taking steps to manage them, a practitioner of participatory approaches is managing bias. But bias is larger than that, because it is ingrained in all human perceptions and observations, often unintentionally. The recognition and management of bias is essential to effectively using participatory approaches to research and development.

Practitioners of participatory approaches must understand bias, because it can be a valuable source of information. Thus we often use techniques other than randomization in designing our research. By delving into and understanding bias, we allow for the analytical process of 'triangulation' (Hannah & Jost 2011). A basic rule is that information gathered from one respondent is an opinion, while if it is repeated and confirmed by multiple respondents it becomes an interesting piece of evidence. We seek to probe and understand the drivers behind a respondent's opinions, and balance them by seeking information from those with different opinions. We recognize marginalization and seek out the opinions and points of view of the marginalized. By balancing the informant pool in this way, the opinion of a biased outlier will be diminished and we can understand the bias and its drivers. This allows us to determine if they will serve as a logjam to progress in solving problems and need to be addressed before addressing the problem.

Different types of bias to keep in mind when designing a study are (Chambers 1983 p. 26):

Spatial bias: The selection of a study area based on convenience and access. Investigators often travel by road, leading to study areas identified by proximity of villages to good roads. The people in more remote communities (often the poorest) remain unrepresented in the study.
Project bias: The selection of a study area based on the presence of other projects, because of the increased level of activities in the village and comfort with outside investigators. Visitors and researchers are often channeled to areas where projects have been active and most of the work will then concentrate on these places.
Person bias: The selection of respondents who are easy to access and interact with. The views of certain types of people (influential, rich, vocal, etcetera.) can be overrepresented in the interviewing process, and those people may be biased against poor people, or ignorant of their needs. The "rural elite," while not at all representative of the cross-section of the community, is often the most vociferous during group interviews, drowning out the voices of others. The investigator must make a special effort to include marginalized members of the community in a study, such as women, approaching them in settings where they feel comfortable enough to express their views.
Seasonal bias: The collection of data during one part of the year, which may not be representative of the activities, roles, benefits, challenges and so on, during other parts of the year. For example, malnutrition, morbidity and mortality may be highest at the end of the dry season. Surveys carried out at other times of the year may miss these phenomena.
Diplomatic bias: The reporting of information by informants that hides certain problems, out of respect or embarrassment because the problem may have a negative social stigma. For many communities, poverty is the subject of shame, and the needs of the poorest are sometimes glossed over or even concealed, either by the poor themselves or by officials working with them.
Professional bias: The filtering of information through the lens of one's professional training, rather than objectively considering it as reported. Health professionals, for example, may introduce bias because of their prior knowledge of illnesses and treatments, preventing them from really understanding what informants are trying to tell them about their health. In epidemiology, professional bias can cause problems at the technical level, preventing study teams from correctly understanding the traditional knowledge base.

Key principles of participatory approaches

- Behavior and attitude
  - » Listen, learn and respect
  - » Be culturally and socially sensitive
  - » Be prepared to unlearn negative attitudes and stereotypes, personal cultural or gender bias
  - » Act as facilitator, not an expert
- People are knowledgeable
  - » On subjects important to their livelihoods
  - » Certain individuals have unique and valuable perspectives, recognize specific knowledge possessed by men, women, youth
- Co-learning
  - » Share knowledge, experience and analysis
  - » Combine local and professional knowledge for effective acceptable action
- People are rational
  - » There is an insider's and an outsider's perception of behavior
  - » Based on the information available, most people make rational decisions
  - » The appearance of irrational behavior means that a misunderstanding may have occurred
- Optimal knowledge/optimal ignorance
  - » There is a balance between the need for information and the need for timely decision-making
- Action-orientated
  - » Be prepared to take action rather than just collect data

(Hannah & Jost 2011 p. 17):

What are PRA and PAR?

Chambers (1994) defines participatory rural appraisal (PRA) as follows:

> "…PRA describes a growing family of approaches and methods to enable local people to share, elucidate and analyze their knowledge of life and conditions, to plan and to act." (Chambers 1994)

It is one of the most common forms of participatory enquiry used today. It reflects a progression from its antecedent, rapid rural appraisal (RRA) in that the focus has shifted from extraction of information from communities by academic experts for the purpose of project planning and publication, to community empowerment by valuing available knowledge and enhancing analytical capacity for the purpose of achieving sustained institutional change (Chambers 1994). It involves the use of an ever-evolving set of information visualization tools that enhance detail and understanding for informants and experts alike, and allows the equal participation of literate and non-literate respondents.

Baum et al. (2006) defines participatory action research (PAR) as follows:

> "PAR seeks to understand and improve the world by changing it. At its heart is collective, self-reflective inquiry that researchers and participants undertake, so they can understand and improve upon the practices in which they participate and the situations in which they find themselves. The reflective process is directly linked to action, influenced by understanding of history, culture, and local context and embedded in social relationships. The process of PAR should be empowering and lead to people having increased control over their lives." (Baum et al. 2006).

In agriculture, it is a methodology that embraces iterative cycles of co-inquiry by communities and experts to test potential solutions to problems in realistic local settings. It encompasses the principals and elements of PRA in a longitudinal approach to adoption of ever improving solutions to a community's most pressing agricultural problems.

This guide represents the first step in a PAR cycle, co-developing the knowledge that is necessary to plan a PAR programme.

Why PAR in Knowledge Production?

PAR takes the linearity out of agricultural knowledge production. Instead of scientists identifying problems in their offices and developing and testing solutions in their labs, communities and experts work together to understand local problems and assets and to identify and test potential solutions that hopefully capitalize on the community's existing strengths. Thus ***empowerment*** occurs when communities develop skills in analysis and problem solving that will continue long after a 'project'-based relationship with outside experts ends.

The methodology allows for direct testing of improved practices and technologies on the ground in the ***local context***. This allows for rapid weeding out of unworkable solutions, and timely adoption of those that can work for the community. The traps of classic methods for achieving ***scale*** are avoided, as farmer share their new knowledge in their communities and serve as local experts for neighboring communities who can see and rapidly adjust new options for their own contexts. Finally, 'real' evidence from farmers themselves can be more convincing to ***policy*** makers than that coming from a lab or research station.

Basic Concepts

Qualitative Research

Key Ideas

- Qualitative and participatory research has the power to reveal multiple narratives, not objective "truth"
- Reflection and self-awareness are essential characteristics for facilitators
- Researchers can promote safe and open research spaces to improve the quality of data and promote participation of marginalized voices

Key Competencies for Qualitative Researchers

Practitioners who use PAR approaches are also facilitators in the research process. Remember that people do not naturally possess good facilitation skills. Skills such as managing conflict, engaged listening and ensuring meaningful participation need to be practiced and developed over time.

Improving a facilitator's own gender awareness and being critically conscious about the different social, political and cultural dynamics in the research process is also a skill gained over time. Ideally, building capacity around facilitation for inclusive research should be a key component of your project or programme. The following list illustrates basic competencies that PAR and social inclusion research practitioners should aim to have:

"Inductive" Reasoning

"..the absence of prescribed sets of rules creates an open-ended field of opportunity for researcher's skills, knowledge, and intuition. Interviewing is a craft that is closer to art than to standardized social science methods" (Kvale 1996).

"Deductive" reasoning is often found in the natural sciences. The deductive approach is when research questions and assumptions are informed and developed mainly from academic understandings of the topic. This way, deductive researchers are interested in gathering information that will help test the validity of a pre-established set of research questions.

Another approach is called "inductive" reasoning, where researchers use their observations and interactions with the community to form their research questions. Inductive research often gives more space for social, political, cultural, environmental *contexts* to arrive at a research focus. This approach can seem daunting as it requires practitioners to begin with very broad set of questions and trust in the research process itself to narrow down and clarify a research focus.

Possessing strong inductive research skills for gender and PAR teams can be a great asset. Inductive research can allow for more feedback between communities and research teams, also allowing women, men or particular interest groups more decision-making power to define their priorities, needs and beliefs.

Self-Awareness

Facilitators should be aware of their own **positionality** which can include their personally held beliefs, values, power, and expectations in comparison to the communities they enter. Being self-aware requires the capacity to critically reflect on your own identity and how it may influence the research space, hierarchies, gender and cultural norms and the way in which community members respond to you.

Good facilitators for gender and inclusion research should not only be aware of their own position but also be able to adjust and change aspects of their behavior and impact in a way that promotes discussion.

Building Rapport

All members of the research team should strive to be respectful guests in communities and invest their efforts to build good rapport. What may seem like small "details" can often be critical elements that shape the willingness and quality of participation of focus groups. A research team should ideally work together to carefully choose their research location, seating arrangements, adjust their own attitudes and verbal or body language, and broadly speaking, be prepared to navigate the known and unknown social and cultural norms of the communities they work in. Many of these things can be done by researching community norms ahead of time, taking the time to properly seek permission to enter communities, as well as working actively to adjust your own power in a research space.

Deep Listening

Unlike surveys or questionnaires, collecting high quality qualitative or PAR data can depend on a facilitators ability to listen. Deep listening and being truly engaged requires discipline and practice. Gaining this skill may even require un-learning roles and habits that we have formed over time and being more conscious of ourselves as facilitators.

Interpret Meaning

The importance of complex *contexts* and multiple *perceptions* is an essential component of gender and inclusion research. The very modes of doing research on climate change such as interviews, focus groups, or PAR activities can elicit many different realities and layers of information. PAR research therefore does not propose any one objective "truth" or reality. For this reason, answers to seemingly simple questions about rainfall or farming practices may bring forth multiple, even contradictory statements. The ability of the facilitator to value and evaluate *perceptions* over seeking "truth" is a skill that requires facilitators to be interpreters of meaning.

The Focus Group

The activities in this manual are largely based on focus group activities. This section will give an overview of concepts and best practices for focus groups.

Focus Groups A focus group is a small group of people selected by researchers to engage in discussions on the research topic. Generally focus groups should be no fewer than 5 people. An average of 10 to12 participants is ideal for discussions.

Composition Choosing the composition of your focus group is critical in qualitative and gender research. Disaggregating by sex, socio-economic status, or other characteristics should be justified according to your research objectives. Diversifying groups may encourage discussion, but may also reinforce hierarchies or gender norms that ultimately silence certain voices. For example, having a discussion on sensitive issues dealing with reproductive health may mean conducting separate men and women's focus groups. However, if researchers neglect consideration for the age composition of their group, you may find yourself in a scenario where younger women are less inclined to share their experiences in the presence of older women such as mothers, aunts or elderly neighbors. It is important to choose your focus group composition and justify how you disaggregate.

Structure- The following outlines the basic logical structure of a focus group session.

Introduction

- Explain your project and purpose
- Get consent
- Establish rapport and open research space

Opening questions

- Keep your questions broad
- The goal is to make participant comfortable talking about the topic

Key questions

- As you transition from broad questions, begin asking key questions aiming to produce essential data
- Use probing techniques for greater nuance and detail

Closing questions

- Recreate "distance" by referring to project, what will be done with the data, whether team will come back
- **Note that recording what happens after you end your session may also generate information**

(adapted from Hennink 2011)

Types of Questions

Generally, focus group questions should be clear, simple and conversational. Avoid technical language or phrases that are non-threatening or judgmental. Questions should focus on one issue rather than bring up multiple ideas. In addition, there are several types of questions that facilitators should be mindful of:

1) Open-Ended versus Close- Ended Questions

Focus group discussions are meant to stimulate meaningful answers and narratives. For this reason, open-ended questions are ideal for focus groups over close-ended questions. Open-ended questions are often asking "Why" and "How" and engaging people on their feelings, expectations or opinions. Close-ended questions are often answered with yes/no or short technical answers

Closed-Ended Question	Open-Ended Question
What crops are you growing this season?	How do you decide which crops to grow this season?

2) Leading Questions

Facilitators can easily fall into asking questions that direct participants in their answer. The phrases you choose can often tip off participants on what information you are seeking rather than allowing participants to answer from their own perspective.

Leading Question	Open-Ended Question
Do you have problems with the agricultural extension officer?	How do you feel about the agricultural extension officer?

3) Probing Questions

Sometimes, well phrased questions are not enough to encourage deep discussion in a focus group. Some facilitators may even have a tendency to offer suggestions to participants and assess whether or not the focus group agrees or disagrees. Good facilitators on the other hand will rely on probing questions, or supportive questions that help draw out ideas and catalyze interaction.

(Hennink 2011)

Tricky Terminologies

As researchers we enter communities having already studied a great deal about the subjects with which we work. There is a danger of assuming that concepts and terminology which come second nature to us are shared by the other research team members and the communities with which we work. As researchers, first, we have to spend time defining terminologies with our research team members. Everyone needs to work with the same definitions and concepts to ensure that relevant and appropriate data is collected. Then, the research team needs to define the tricky terms with the participating community members before launching into focus group discussions. This means avoiding imposing our own vocabulary on our research team and on communities, repeatedly using words that are misunderstood, and instead pursuing vague responses to uncover local terminology and meanings. For agriculture and climate change, the following concepts and terms may cause confusion in the field:

- **Weather/Climate** – Some cultures do not have a term separating these two concepts.
- **Year** – Some cultures do not organize time by years. Perhaps they use different calendars or seasonal indicators.
- **Drought** – The definition of a drought could mean dry spell, dry season, or lack of rain.
- **Good/bad rains/season** – What constitutes a "good" or "bad" year is highly contextual to the community. The length or timing of seasons may also vary according to the community. Also, in some communities, there may be multiple rainy seasons with different characteristics.
- **Rain** - Some cultures have many terminologies for rain.
- **Predict** (i.e. weather prediction) – Linguistically prediction may be translated deterministically or as "guess", 50/50 etc.
- **Normal, average** – This has varying definitions.
- **Likelihood, probability** – Definitions of likelihood depend on linguistics and can lead to misunderstanding.
- **Accuracy** – Accuracy as defined by farmers and scientists may be different.

(Roncoli 2013)

10 Best Practices for Focus Group Discussions

Creating a safe “research space” and building rapport between facilitators and community members is an essential part of PAR and gender work. Here are some suggestions for establishing open environments for focus groups:

Get Consent

Ethically and practically, it is essential to get consent from your focus group participants as well as the community leaders or “gatekeepers”. This may mean writing a letter, sending invitations, calling or having a meeting with the village heads and community members. In some cases, women may need permission from others before participating in research activities, making consent an essential part of ensuring their participation.

Set Ground Rules

Let participants decide their own ground rules for what they need to feel safe during sessions. Make sure that both men and women can agree on the ground rules and express their expectations. You can refer to these rules during sessions to keep groups accountable. Note that it is better to phrase ground rules positively rather than negatively i.e. – avoid making rules that start with “don’t” or “no”.

Clarify Objectives & Manage Expectations

Always communicate the session’s goals or purposes. This helps participants focus their ideas and encourages everyone to work towards accomplishing the same goal.

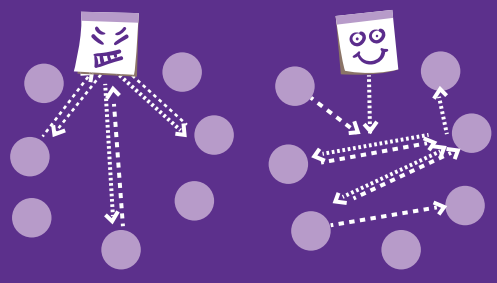
When working with communities who are new to the research or development organizations, being transparent about what your research will bring or not bring is essential. Engaging in research because of inflated expectations may ultimately raise tension and break trust.

Be Mindful of Time, Space and Season

When working with women or social groups who already juggle multiple responsibilities at home, on the farm and in the community, the facilitators should take care to respect time. Choose a time and meeting space that is accessible to your group. Sometimes this means choosing public spaces so as not to raise suspicion. Sometimes this means picking a time when participants are least busy. Be aware of seasonal time constraints too! Farmers are likely to be busiest at the beginning and end of the growing season(s), compared to after a harvest.

Address Power

When arranging a focus group, be aware of the power dynamics you communicate. Are the facilitators at the head of the room like in a classroom? Are the facilitators standing above the participants? In most cases, it is best to arrange seats in a circle so that conversation can flow in multiple directions and lecturing is avoided. According to certain cultural norms, village outsiders may be given a special seat or designation. Try to avoid this and always sit at the level of your participants, without letting technology or other objects indicating a higher status distract or intimidate people. This may also extend to dressing in socially appropriate clothes.



Moderator dominated Interactive

Also, be as informed as possible ahead of time on the make-up of your focus group to avoid inappropriate participants. For example, if a village elder will be part of your focus group, it is likely that other participants will be less willing to discuss village politics. You may choose to interview authority figures separately as they can be extremely valuable key-informants. It is also critical to be aware of local power relations between men and women, or between different ethnic groups before coming into the research space. This way you can adjust your facilitation as much as possible to accommodate for marginalized voices.

Have Open Verbal & Body Language

Research teams should be aware of their own verbal and body language during sessions. The facilitators should prioritize eye-contact and engaging with participants. Designate multiple note takers to coordinate notes if possible to avoid interrupting the flow of conversation. Make sure to speak in non-scientific terms or jargon. If working with a co-facilitator, you may choose to remind one another of these tips throughout the session.

Enjoy Silence

For many researchers, silence during sessions can seem terrifying. Being silent in most cases, can give participants the time and space to process and formulate ideas. Over-compensating for silence by speaking a lot may also have the opposite effect on your participants- discouraging them from speaking up and relying on you for direction.

Manage Conflict Creatively

There are many ways to manage conflict within focus groups without escalating tension. For example, if there is a very active or despondent community member, rather than stop a session to address their disruptive behavior, a co-facilitator can pull them aside while the main session continues.

Encourage Participation of Women & Marginalized Voices

Facilitators must be able to step back and allow participants to drive discussion. This may mean supporting participants who are timid (particularly women or marginalized members of a community) and asking those who are more vocal to step back. If engaging in a PAR game or activity, allow the participants to work out details on their own. Facilitators must also learn how to keep discussions on track, while encouraging reflection and space for unintended information.

Finish gracefully

It is important to finish focus groups logically and smoothly. Make sure to explain your next steps, schedule return visits, and thank the group for their participation. Always allow for more questions after the end of the session.

Consider leaving copies or originals of the products of your focus group (maps, charts, pictures) as an appropriate way of wrapping up.

(adapted from Ayers et al., 2012)

Helpful Frameworks for Gender and Socio-Economic Analysis

This Toolbox focuses on providing guidelines for gathering data for gender and social inclusion research for climate change programing. The toolkit also promotes PAR activities that supports more equal exchange between communities and researchers, offering options for community-led analysis and validation.

The methodologies within this toolkit are designed to complement and plug in to many different analysis frameworks. Each user should purposefully choose which analysis framework(s) suits their research interests best. Broadly speaking some of the existing analysis frameworks that can support climate change and adaptation projects include the following:

Gender and Diversity - The success of development initiatives depends on equal relations between women and men and between different social groups. From a climate change perspective, this begins with an understanding of the differences in adaptive capacity between different groups and between men and women, and the design of adaptation strategies that ensure that vulnerable people have equal access to resources, rights and opportunities. It is increasingly recognized that women may be more vulnerable to climate impacts than men for a variety of reasons. On average, women are poorer and they typically lack secure access to the resources needed for adaptation. Women rarely have an equal say in decision making in households, communities or in national politics. At the same time, experience has shown that women are central to permanently improving the lives of their families and communities, and therefore must play a pivotal role in community-based adaptation initiatives. Similarly, marginalized groups tend to have less security in access to and control over resources, and this contributes to their vulnerability to climate change. These underlying causes of vulnerability must be addressed in order to have a sustainable impact in reducing vulnerability to climate shocks.

Livelihoods Frameworks - Livelihoods frameworks guide users in a systematic process of understanding how people use diverse assets or resources (both tangible and intangible) to undertake a range of activities, in order to achieve important outcomes in their lives. These outcomes include satisfaction of basic rights, as well as sustainable access to basic needs like water, shelter, and food. Livelihoods analysis involves understanding how people access and control various mixes of resources and activities, and how these differ within and among households in ways that affect their ability to achieve the outcomes they desire in their lives. The analysis also helps us to determine how these are influenced by external factors such as gender and other social norms, policy frameworks, economic trends, and the physical environment.

Rights-Based Approaches - A rights-based approach (RBA) deliberately and explicitly focuses on people achieving the minimum conditions for living with dignity (i.e. achieving their human rights). It does so by exposing the roots of vulnerability and marginalization and expanding the range of responses. It empowers people to claim and exercise their rights and fulfill their responsibilities. A rights-based approach recognizes poor, displaced, and war-affected people as having inherent rights essential to livelihood security – rights that are validated by international law.

(Adapted from Daze/CARE CVCA 2009)

The following profiles of analysis frameworks were helpful in supporting the development of this toolkit and can serve as references for your project to consider:

1. Socio-Economic & Gender Analysis

Summary: Developed in 1993, the Socio-Economic and Gender Analysis approach (SEAGA) is an approach to development and the humanitarian context based on the analysis of socio-economic patterns and participatory identification of women's and men's priorities and potentials.

Uses: The SEAGA approach is a useful framework for integrating gender issues into climate change work in the agriculture and food security sectors because it facilitates the analysis of the social dynamics that may shape how different members of a community and a household experience and respond to climate changes. This approach, by putting people at the center, is one way toward ensuring that climate change related projects, initiatives and policies meet the needs of those who will be most affected.

The participatory nature of SEAGA ensures that men and women who are experiencing climatic change in their day-to-day lives are also the very people engaging in the process of implementing climate change solutions.

Guiding Principles:

Gender roles and relations are of key importance	Disadvantaged persons and groups are a priority in development initiatives.	Participation is essential for sustainable development and climate change adaptation.

The SEAGA approach uses a variety of PRA tools and checklists to explore the capacities, vulnerabilities, resources, livelihoods and institutions of the target population. The tools can be divided into three broad categories: context analysis, stakeholder analysis and livelihood analysis. These are summarized below.

Context analysis

Understanding the context in any particular community – the socio-economic patterns of how women and men from different socio-economic groups earn an income and obtain other resources – is useful in understanding the patterns of vulnerability to multiple risks, including climate risks. Some questions for understanding the context for climate change adaptation and mitigation are:

- What are the important environmental, economic, institutional and social patterns in the village? Do men and women have the same views on these?
- What were past climate conditions like, what are they like now, and what are future projections? Do men and women report seeing impacts? What are women's/men's perceptions of these?
- What are the supports for climate change adaptation or mitigation? The constraints?
- What are the impacts of climate change on women and men, boys and girls?

Livelihood analysis

Livelihood analysis focuses on how individuals, households and groups of households make their living and the access of men and women to resources and services. It reveals the activities people undertake to meet their basic needs and generate income. Some questions include:

- How do people make their living? How do the livelihood systems of women and men, boys and girls compare? How do the livelihood systems of different socio-economic groups compare?
- What are the likely climate change impacts on current livelihood strategies? Are certain sectors or groups of people more or less vulnerable? Why? What are perceptions of women and men on these?
- How diversified are the livelihood activities of men and women? Describe the activities.
- What are the patterns for use and control of key resources? By sex? By age? By socioeconomic group? How will a change in climate affect the use of resources for men and women?
- What are the most important sources of income? Expenditures for each socio-economic group, including women and men? Tribal and indigenous groups?

Stakeholder analysis

Stakeholders are all the different people and institutions, who stand to gain or lose, given a particular activity. For every adaptation and mitigation activity proposed, the different stakeholders are identified, revealing where there is conflict or partnership.

Key questions include:

- What adaptation activities do different men and women propose? For what?
- For each proposed adaptation or mitigation activity, who are the stakeholders? How big is their stake? What is their historical relationship to each other?
- Is there conflict between stakeholders? Is there partnership?
- How do different stakeholders perceive the risks associated with climate change? How do men and women perceive the benefits of mitigation and adaptation activities?
- How can short- and long-term needs of different stakeholders be balanced?
- Will men and women benefit equally?
- Will men and women differentiated by wealth benefit equally?
- Is participation of women ensured? Is participation of other marginal groups ensured? By whom?
- Is access to information ensured? By whom?

For a more detailed explanation of SEAGA, consult the FAO's website here: http://www.fao.org/docrep/008/y5702e/y5702e04.htm

2. CARE's Women's Empowerment Global Framework and Local Adaptive Capacity Framework (LAC)

Summary: Women's empowerment differs from culture to culture, and context to context. CARE's global framework links women's own definitions and priorities for empowerment to 23 key dimensions of social change which have been shown to be widely relevant to women's empowerment across many studies and contexts.

Uses: CARE defines women's empowerment as the **combined effect of changes** in agency, structures, [power] relations. For gender and climate change researchers, employing CARE's Women's Empowerment framework can help contextualize agricultural roles and adaptive capacity in terms of these changes.

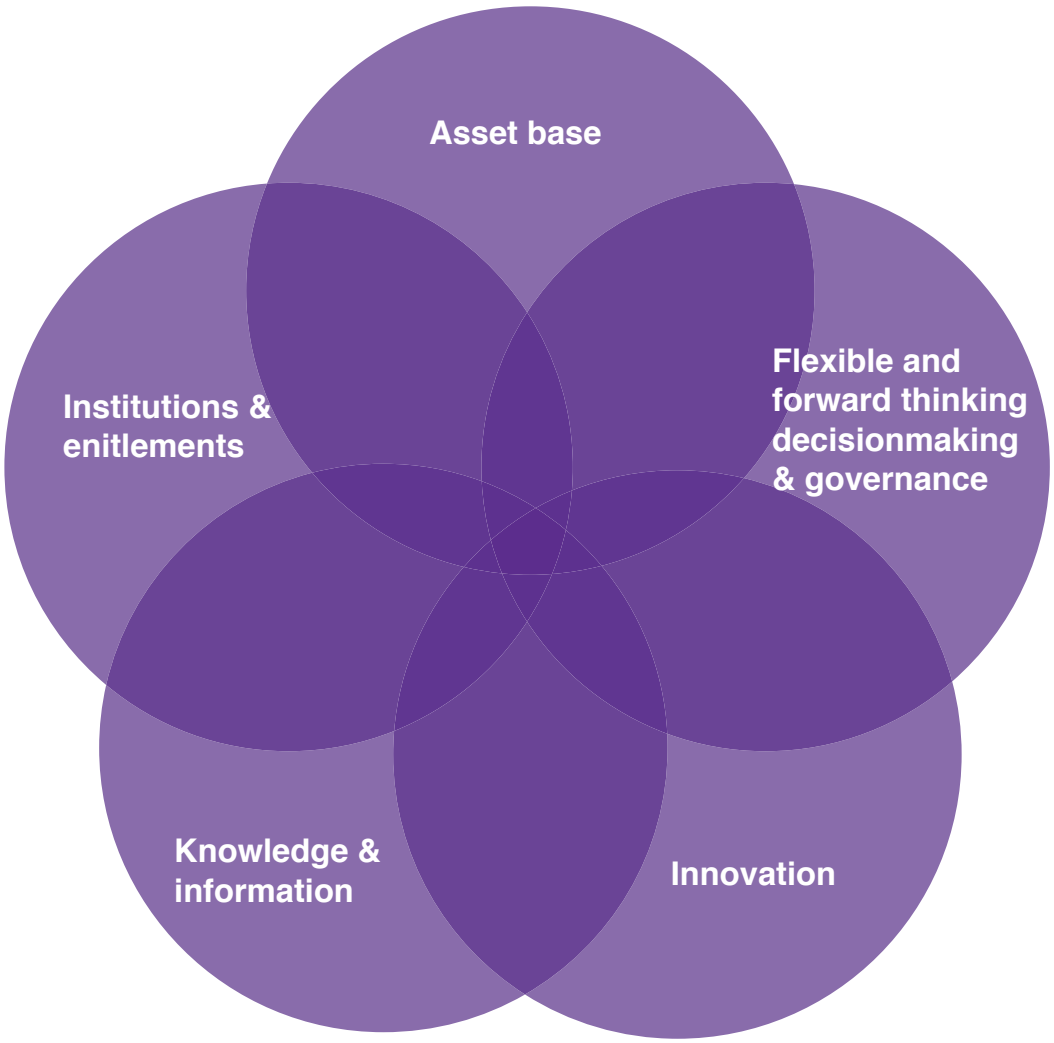
Principals:

Agency	Structure	Relations
1. Self-Image; self-esteem	11. Marriage and kinship rules, norms, processes	19. Consciousness of self and others as inter-dependent
2. Legal and rights awareness	12. Laws and practices of citizenship	20. Negotiation, accommodation habits
3. Information and skills	13. Information and access to services	21. Alliance and coalition habits
4. Education	14. Access to justice, enforceability of rights	22. Pursuit, acceptance of accountability
5. Employment/control of own labor	15. Market accessibility	23. New social forms: altered relationships and behaviors
6. Mobility in public space	16. Political representation	
7. Decision influence in household	17. State budgeting practices	
8. Group membership and activism	18. Civil society representation	
9. Material assets owned		
10. Body health and bodily integrity		

CARE's Local Adaptive Capacity Framework

In addition to CARE's Women's Empowerment framework, the Local Adaptive Capacity (LAC) framework identifies 5 main dimensions of adaptive capacity. Gender analysis should be cross-cutting throughout research and applied to every aspect of LAC.

ACCRA Local Adaptive Capacity framework (LAC)



1. **Access and control over assets:** The financial, physical, natural, social, political and human capitals necessary to prepare a system to respond best to a changing climate. This category incorporates the importance of different kinds of capital, often informal, non-monetary or reliant on social networks.

2. **Institutions and entitlements:** The ability of system to ensure equitable access and entitlement to key resources and assets is a fundamental characteristic of adaptive capacity. Entitlement to the key resources needed for adaptation can be differentiated according to age, ethnicity, class, religion and gender (among other groups). Representation and participation in key institutions is also essential to enabling an equitable distribution of resources. Access to key resources, participation in decision-making processes and empowerment are key elements of this characteristic.

3. **Knowledge and information:** Successful adaptation requires information and understanding of future change, knowledge about adaptation options, the ability to assess them, and the capacity to implement the most suitable interventions. In the context of climate change it is important to ensure that systems are in place to distribute relevant information at both national and regional scales. In addition, forums must be made available for dialogue and discussion among all stakeholders.

4. **Innovation:** A key characteristic of adaptive capacity relates to the system's ability to support innovation and risk taking. Innovation can be planned, technically oriented and geared towards large- scale innovations; or it can be autonomous, local-level initiatives that help people adapt to changes to local climate. An enabling environment that promotes and allows for experimentation and the exploration of niche solutions is required to take advantage of new opportunities and to confront challenges presented by climate change. The environment also needs to protect against the risks of failure associated with innovation.

5. **Flexible forward-looking decision-making and governance:** Informed decision-making, transparency and prioritization are all key elements of adaptive capacity. Ensuring that local organizations are well-informed of future climate trends enables them to take measures to plan for their impacts. Similarly, flexibility to allow systems – and the institutions that govern them – to evolve and adapt to a changing environment is a crucial characteristic of adaptive capacity.

(CARE International 2011)

For a more detailed explanation of LAC framework, consult the CARE's website here: http://www.careclimatechange.org/

3. Five Capitals

Summary: The Five Capitals Model, developed by Forum for the Future, is a framework understanding wealth, resources and flow in terms of 5 different "capitals":

1. **Natural capital** - The natural resources (energy, environment and matter) and processes needed by organizations to produce their products and deliver their services.
2. **Social capital -** Any value added to the activities and economic outputs of an organization by human relationships, partnerships and co-operation.
3. **Human capital -** Incorporates the health, knowledge, skills, intellectual outputs, motivation and capacity for relationships of the individual.
4. **Manufactured capital -** Refers to material goods and infrastructure owned, leased or controlled by an organization such as tools, technology, machines, buildings and all forms of infrastructure.
5. **Financial capital** - Reflects the productive power and value of the other four types of capital and includes those assets of an organization that exist in a form of currency that can be owned or traded.

Uses: The Five Capitals Model can complement more explicitly gender-analytical tool such as the SEAGA and CARE's Women's Empowerment framework. Similar to LAC, a Five Capitals approach can add additional dimensions for promoting an integrated development approach.

While the model has been developed to cater to sustainable businesses and a green economy, applying these Five capitals to climate change research can help us look at development on the community level in a more integrated and long-term way. Five capitals can also enable researcher to identify which capitals are under or over emphasized within climate change and gender research.

For more detailed explanation of The Five Capitals Model, consult Forum For the Future website here: http://www.forumforthefuture.org/

PART 2 - LEARNING ACTIVITIES

Materials •Flipchart paper • colored pens or markers •writing paper

Learning Exercises: Gender

Activity: Exploring gender and culture

Objective: A learning exercise for researchers to a) examine the difference between sex and gender; b) explore and challenge socially constructed gender roles.

Participants: 10-25; preferably similar numbers of men and women

Time: 2 - 2 ½ hours

Part A – Gender and Sex

Step 1 - Ask participants to think about the first words that come to mind when they hear the words 'man' and 'woman.' Write down responses from the group in two columns on flipchart paper: 'MAN' and 'WOMAN.'

Make sure that, at a minimum, some words describing biological traits (such as 'penis' for man and 'breast' or 'menstruation' for woman) come up on the list. Biological components are bolded in the list above.

This is an example of the kind of list that participants might come up with:

Man		**Woman**	
Police	Beer, wine	Cooking	Gentle
Father	Bread-winner	Talkative	Passive
Power	Decision-maker	Shopping	Kind-hearted
Strength	Violence	Mother	**Menstruation**
Freedom	Unfaithful	Wife	**Pregnancy**
Businessman	Husband	**Breasts**	**Childbirth**
Penis	**Moustache**	Gossip	Housekeeper
Testicles	**Beard**	Sexy	Passive
Generous	Lazy	Beautiful	Obedient
Selfish	Brave	Tidy	**Vagina**
Dominant	**Adam's apple**	Jealous	Tolerant
Loud	Humorous	**Uterus**	Doesn't drink
Noble			heavily or smoke

Step 2 - When the lists are complete, pose questions from Checklist 1 to participants to discuss if any roles can be reversed.

Checklist 1

- Can any of the 'man' words also describe women?
- Can any of the 'woman' words also describe men?
- What are the things that women or men can do exclusively?
- Can a woman be a police officer? A husband? A parent? Powerful? Free? Strong? Humorous? Generous? Bread-winner? Noble? Unfaithful?
- Can women drink?
- Can a woman have a penis?
- If women are capable of being a police officer (for example), why aren't there more women who are police officers?
- Can a man cook? Do shopping? Be gentle? Submissive? Beautiful? Have breasts? Gossip? Be warm, kind-hearted? Menstruate? Be sexy? Be a wife? Can a man be fair? Be passive? Tolerant? Obedient?
- If men are capable of cooking and shopping, why don't more men do the cooking and shopping for their households?
- Why do some men who have jobs as cooks not do the cooking for their families?

Explain that these lists illustrate the difference between sex and gender. Refer to the World Health Organization's (WHO) working definitions for sex and gender: Sex refers to the biological characteristics that define humans as female or male. Gender refers to the economic, social and cultural attributes and opportunities associated with being male or female at a particular point in time.

Step 3 - Divide participants into single-sex groups of 4-5 people. Ask the groups to work together to illustrate what they understand to be an ideal man and an ideal woman, using large sheets of paper and markers. When they have finished, ask each group to present and explain their drawing(s) to the group.

Helpful hints:

» If supplies are available, participants can use modeling clay, cloth, balloons, wires, pencils, and other materials to build a sculpture.

» Depending on time available and the number of participants, you can ask each group to draw two pictures (one man and one woman), or only one picture.

These are some reactions of participants after completing this activity.

"By drawing an image of the ideal man, we realized that men also endure pressure and bear a different kind of discrimination by reinforcing gender inequalities." (women)

"We men feel a burden to impress girls, earn an adequate salary and develop a muscular body." (men)

"I can't grow a mustache, and my father and uncle always pester me about it. I'm not considered [much of a man] without one." (man, India)

"It is so difficult to live up to the expectations of the ideal woman." (woman, Balkans)

"I feel enormous pressure to support my family financially. My dream was to return to school to get an advanced degree, but I had to give it up in order to fulfill my obligations." (man, Balkan)

Part B - Discussion

Initiate a discussion with the group using some or all of the questions from Checklist 2 as a starting point; ask additional probing questions as appropriate. Encourage debate within the group, and be ready to spend some time discussing the issues that arise.

Some sample answers are included beneath some of the questions, to give you an idea of where the questions are headed. These are participant responses from a similar exercise that was done in the Republic of Georgia in 2006.

Checklist 2

- What did you learn about being a boy or girl when you were growing up? How did you learn? From whom?

  A newborn baby's sex is acknowledged when it is born when its genitals are recognized. Penis and testicles means it is a boy; vagina means it is a girl. On identifying the biological sex of the child, the family knows how to bring her/him up. There are differences in the colors used for boys and girls (blue/pink), types if clothes (trousers/dresses), types of toys etc. Social norms are set by each culture.

  A person's biological sex dictates the way they will be brought up.

  Boys are brought up to be independent, aggressive, tough, courageous, physically strong; girls are brought up to be dependent, emotional, sensitive, delicate.

  - How are images of the ideal man and woman created?
  - Where do they come from?
  - Who affirms them?
  - Would you like to change the images you describe?

  The attitudes, values and behavior that as men we consider appropriate for us (our gender identity or masculinity) are learned in society.

  Men can also be dependent and sensitive; women can be strong and independent. Society puts different values on these attributes for men and women.

  More social value is placed on a newly born boy child than a girl child.

  In the Republic of Georgia, the facilitator asked why none of the groups had included a penis and testicles in their models of an ideal man (see models shown on next page). Participants replied that it wasn't necessary since they were underneath the clothing. This pointed to some nervousness and timidity with regards to exposing genital organs. The facilitator explained that in other countries when this exercise was carried out it was quite common for the groups to include penises and testicles and there would be discussion around the size of them; some arguing that the bigger they are the more of a man you are. This was acknowledged by some of the participants as being an issue for Georgian men too.

  - What are the things that women or men can do exclusively? (NOTE: This question is deliberately open ended. Participants may come up with answers that reflect biological or cultural differences.)
  - What is a gender stereotype?
  - Are gender stereotypes positive, negative, or neutral?
  - Why do gender stereotypes persist?
  - What is the purpose of challenging gender stereotypes?
  - Why do some people resist challenging the status quo?
  - How easy or difficult is it to consider gender roles that are different from the ones to which we are accustomed?
  - What does this mean in the context of our development work?
  - What happens if we challenge these roles? What happens if we do not challenge these roles?

Part C - Closing

Step 1 - Congratulate participants on their contributions, and encourage them to become more aware of gender roles and expectations in their daily lives. Ask participants:

How do the concepts in this exercise relate to your work?

How will your work change as a result of your new knowledge?

Step 2 - Provide pieces of paper to each participant and invite them to write how their understanding of gender has changed after this exercise.

Also ask them to write one action or change in their life they will take this week as a result of participating in this exercise.

No one is asked to write their name on the paper, so it is anonymous. Anyone can volunteer their thoughts on what they wrote out loud with the group, after everyone is finished.

(Kambou et al. 2006)

Source: Kambou, Sarah Degnan, Veronica Magar, and Heidi Lary. *Walking the Talk: Inner Spaces, Outer Faces: a Gender and Sexuality Initiative.* Cooperative for Assistance and Relief Everywhere, Incorporated (CARE), 2006.

Materials •Flipchart paper •colored markers • List of CC definitions •vulnerability charts

Learning Exercises: Climate Change & Gender

Activity: Linking Climate Change with Gender

Objectives: A learning exercise for researchers to build consensus on climate change concepts, linking them to field experience.

Participants: 10-25 participants

Time: 1hour

Prep: Print out the definitions in this activity and cut each definition into a strip. Fold it and put it in a bowl.

Part A – Gender Dimensions of Climate Change

Step 1 - Divide the group into pairs or small groups. Have each group choose two definitions from the bowl and brainstorm real-life examples of each term based on their own experiences, development work, or the news. Ask each team to look further into their examples, and define how their scenario effects gender relations, or men and women differently. Alternately, you may ask the groups to creatively demonstrate their terms by drawing, acting or presenting in any form they choose.

Definition 1:

Adaptation: Adaptation is adopting measures to protect against the actual and expected harmful effects of climate change, to exploit any opportunities it may generate, and to ensure the sustainability of investment and development interventions in spite of more difficult conditions. Adaptation aims to reduce sensitivity of men, women, girls and boys to the effects of climate change

Real life example:

Gender dimension:

Definition 2:

***Adaptive capacity**:* The ability of a system to adjust, modify or change its characteristics and actions to moderate potential, future damage; take advantage of opportunities; and to cope with the consequences of shock or stress.

Real life example:

Gender dimension:

Definition 3:

***Climate change**:* A shift in average climate and/or magnitude of climate variability observed over long periods (typically decades or longer).

Real life example:

Gender dimension:

Definition 4:

Climate change mitigation: Mitigation involves reducing Green House Gas (GHG) emissions and/or enhancing the capacity of 'sinks' for GHGs, for the ultimate purpose of stabilising their concentration in the atmosphere; aims to reduce global exposure to the effects of climate change

Real life example:

Gender dimension:

Definition 5:

Exposure: The extent to which one is exposed to the effects of climate change, considering that these effects will vary in nature and intensity across regions of the world.

Real life example:

Gender dimension:

Definition 6:

***Hazard**:* A potentially damaging physical event, action, situation or phenomenon. A climate hazard is a specific type of climate event with the potential to cause harm.

Real life example:

Gender dimension:

Definition 7:

***Maladaptation**:* An inadequate response to the challenge posed by climate change, by which 'business-as-usual' development interventions that overlook the implications of climate change inadvertently result in increased vulnerability to climate change; the term is also used to designate an inadequate adaptation response, which fails to reduce vulnerability to climate change and instead ends up increasing it.

Real life example:

Gender dimension:

Definition 8:

Resilience: The ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety.

Real life example:

Gender dimension:

Definition 9:

***Risk**:* The combination of the probability (or frequency) of occurrence of a defined hazard resulting in adverse consequences; and the magnitude of these consequences, given the interaction of the hazard with the properties of the exposed system.

Real life example:

Gender dimension:

Step 2 - Have each group present back. Discuss the scenarios and ask all the participants if the definitions match examples and if the gender dimensions of each scenario make sense. As a facilitator, be ready to assess the level of clarity that your participants have on climate change and gender. Be prepared to clarify the different concepts and draw out examples from the groups as they discuss.

Part B – Vulnerability to Climate Change

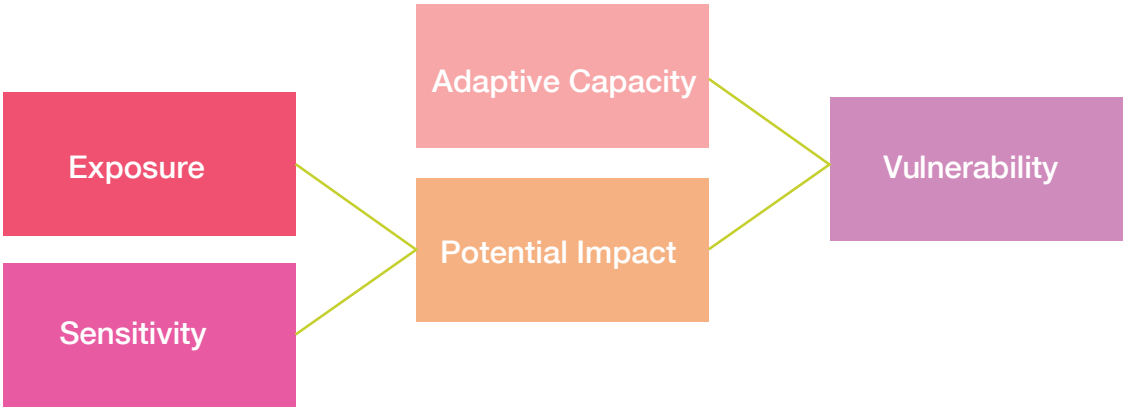
Step 1 - Regroup everyone and explain that you want to pull the various definitions you have reviewed to discuss the concept of vulnerability and how it affects men, women, children and different social groups differently.

It is important to note that vulnerability and capacity of a social group to adapt or change depends greatly on their assets. Consequently women's assets largely determine how they will be affected by and respond to the impacts of climate change. Through both direct and indirect risks, it can affect their livelihood opportunities, the time they have available to them on a daily basis, and overall life expectancy. In addition to exacerbating existing risks, climate change can reveal new risks that have been hidden.

Step 2 - Present the following diagram to the group and take your time going over the concept of vulnerability.

Vulnerability to climate change of different social groups or livelihood systems to a climate change hazard depends on how it is *exposed* to the *hazard* and how *sensitive* it is to that hazard. This will influence the impact that that hazard can have on the livelihood system. That potential impact, combined with the capacity of the system to *adapt* to the hazard, determines the *vulnerability* of the group or system.

Figure 1. A framework demonstrating the components of climate change vulnerability.



Step 1 - To explore how exposure, sensitivity, adaptive capacity and potential impact interact to define vulnerability, use the framework above as a reference to work through each scenario. If the scenario is unfamiliar, create a scenario to present to the group based on your own community contexts or ones you are more familiar with.

	Scenario 1	Scenario 2
Exposure:	Flood	Drought
Target Group:	Children	Mothers
Scenario:	A devastating flood hits a rural, disconnected village in Indonesia where most of the livelihood is based on rice and fisheries. Nearly 75% of the houses in the village are near to water while only a few are on higher grounds.	A village in Tanzania has been experiencing a long drought, devastating this season's maize harvest. There are rural extension agents in nearby villages but not many other services or facilities.
What is the sensitivity of most households? Of the target group?		
What are some potential impacts on the target group? *(on a household level, in terms of food security, income, health, cultural or other socio-economic dimensions you can think of)*		
Describe this group's potential adaptive capacity? *(What access to assets, resources, information, support, strengths, knowledge do they have and how could they use it?)*		

Ask the group to first define an exposure (flood, drought, disease), its potential impacts (on the household level, in terms of food security, income, health, women's empowerment, cultural, or other socio-economic dimensions), relevant adaptive capacities (the rural women's existing capacities), and how these aspects affect the vulnerability for women in the community.

Step 2 – As a way of deepening the discussion, you may want to run through each scenario by switching the target group. If you have worked through a scenario focusing on children, now repeat the scenario using elderly residents. If you have completed a scenario focused on women, now look at the situation differs for men. Discuss these differences once you have completed each scenario.

Learning Exercises: Participation

Activity: Reflection Exercise

1. Participation

We have all taken part in a participatory activity in our lives, usually lots of them. For example, voting is a form of participation in the democratic process! Many of us have likely used participatory approaches in our professional lives, either in the office, while training others, or when working in communities. Break your team into groups of 3 to answer the following questions:

Q: What types of participatory projects have you been involved in? List them all for the group, then go back and ask each member to describe the project(s) he or she mentioned.

Q: Do you have other examples of participatory projects and activities that you have heard about? List them for the group again before going back and gathering descriptions about them.

Q: For each project, what level of participation does the group think was achieved, and why? Use the Pretty et al. (1995) typology. For the purpose of the project, was that level optimal? What could have done to improve the level of participation?

Allow the groups to work through all the examples they have listed. Then bring the groups back together in plenary. Each group member should choose one of the examples they worked with, describing the project in plenary, the level of participation achieved and how participation could have been improved.

2. Bias

Step 1 - Break your team into the same groups of 3, and give each group a copy of the exercise below to complete. These examples have been adapted from a manual for One Health Practitioners (Hannah & Jost 2011 p. 27).

Step 2 - After completing the exercise, ask each group to return to the list of participatory projects they had generated in exercise 1 and discuss the following questions about each project.

Q: Upon reflection by the person who mentioned the project, what kind(s) of bias were involved in the project? Use the Chambers (1983) typology.

Q: Often these types of bias are introduced because we involve a variety of actors, each one of whom has his or her own priorities. What could you have done to 'control' for the bias you identified?

Q: During the project did you gather information from informants? Think about one of the informants you spoke with and ask yourself if that informant may have given you biased information. What makes you suspect the information was biased? What could you have done to probe and triangulate that information to understand the bias and balance it with other information?

Exercise

In the blank spaces provided below, please identify the type of bias associated with each situation.

1. A mother says that there is a new disease affecting her children. She describes clinical signs similar to those seen in kwashiorkor, which has been in the area for quite some time. The investigator assumes that the mother is incorrect about this being a new disease.

   Type of bias: _____.

2. A facilitator asks a Ministry of Agriculture and Livestock official for locations of communities experiencing elevated incidences of cattle disease. The official points the investigator in the direction of villages on a main road between two major towns.

   Type of bias: _____.

3. Fieldwork is conducted between the months of June and August. The facilitator asks community members about the agricultural issues that occur in their village.

   Type of bias: _____.

4. A village leader is asked about a prenatal disease that is associated with poverty and food insecurity. He denies that it exists in his village, but says that it has occurred in a nearby village.

   Type of bias: _____.

5. A facilitator conducts a focus group on whether the climate information received recently is helpful for farming in a village. The men answer the majority of the questions with confidence, while the women sit on the periphery and do not offer their opinions.

   Type of bias: _____.

6. Several villages in a region have community monitors who have been trained by an NGO on reading rain gauges and distributing weather and climate information. A NGO official recommends that these would be the best villages to include in a study, because the community monitors are very knowledgeable about the farming practices related to climate change impact in their village.

   Type of bias: _____.

3. Barriers

Ask your team to identify a new place in the country that it would like to work, helping a farming community adapt to climate change. The first step for the team will be to work with the community to identify what the problems are related to climate change, and what potential solutions already exist in the community if they could be scaled up.

The team plans to do this using PAR. List the types of community members the team would like to include in the PAR activity and why. For each type of community member, answer the following questions:

Q: What obstacles to participation does this type of community member face?

Q: If this type of community member does not participate, how might the study be biased?

Q: How can you overcome the barriers to participation and include this type of community member in your study?

Materials •Flipchart paper •Colored markers •1 ID Wheel per participant

Learning Activities: Role of the Researcher

Activity: Identity Wheel

Objective: A learning exercise for researchers reflecting on positionality, power and identity in the research setting.

Participants: 10-25 participants

Time: 1-2 hours

A researcher's identity can play a part in shaping the research process. Reflecting on a researcher's own power, privilege, attitudes and behaviors within a research setting can help unpack some of the factors shaping interview or focus group dynamics. This exercise is to help researchers identify different parts of their identity, how they are perceived, and how to negotiate their own power within research settings.

Below is an "identity wheel" depicting 10 different aspects of a person's identity. These aspects can be adjusted as needed and are meant as a self-reflection tool for understanding someone's position within different communities.

Step 1 - Think about a particular research experience you have been in before. It may be a past experience facilitating or simply a time where you were perceived as an 'outsider' in a community you worked in.

Each participant should take 10 minutes to mark a point on each identity scale, indicating how each aspect can either enable or disable you in an interview or focus group setting. The closer the mark is to the center, the more 'disabling' you perceive the aspect to be while the farther away it is from the center, the more enabling the aspect is for you as a researcher. Prompt participants with questions form Checklist 1 to assist them with choosing a point. Fill out each of these measurements and connect the dots so you have a personal identity wheel based on your reflection of a specific research situation.

Checklist 2

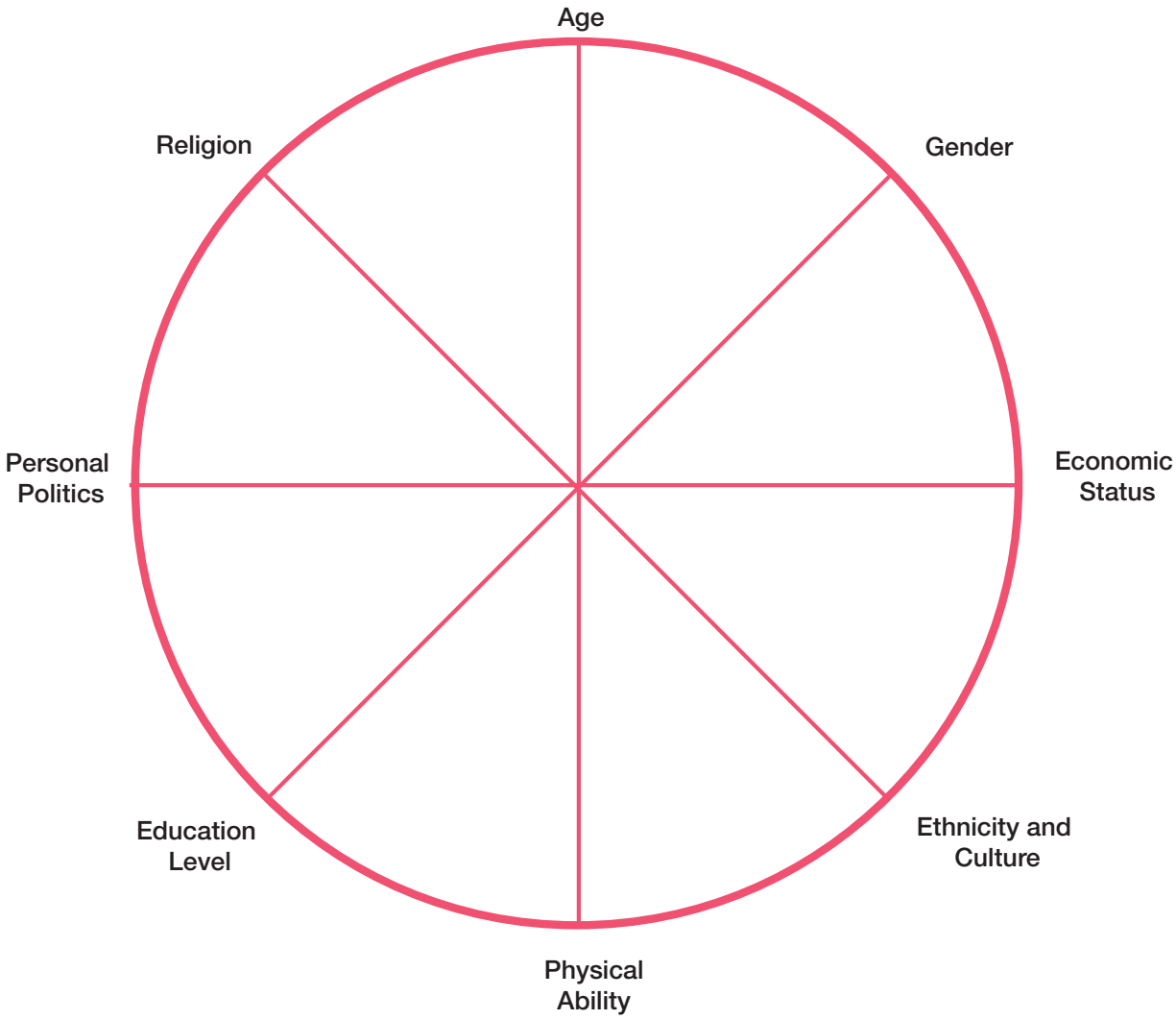
- How do other people's perceptions of this characteristic help overcome certain barriers with community groups?
- Is the aspect perceived similarly between groups in the community for example older and younger women, older and younger men, those of lower or higher socio-economic status?
- Does the aspect gain you respect?
- Does the aspect put people at ease?
- Does the aspect allow you access to certain information?
- How are you adjusting your behavior to accommodate these perceptions of this aspect?
- How are you adjusting your facilitation to accommodate these perceptions of this aspect?

Step 2 - Share your identity wheel with others in the group, explaining how different aspects affect your research approach. Consider these questions together:

Can these aspects be changed or controlled?

Are different aspects connected? How?

Are some less important than others? Why?


Age
Gender
Economic Status
Ethnicity and Culture
Physical Ability
Education Level
Personal Politics
Religion

Materials • Colored markers •Copies of the empathy map for groups

Learning Activities: Role of the Researcher

Activity: Empathy Mapping

Objective: A learning exercise for researchers building empathy with community members.

Participants: 10-25 participants

Time: 30 minutes – 1 hour

Self-reflection can be a critical skill for researchers and practitioners. What many practitioners also need is the capacity to have empathy for the people and communities they work with. Empathy is the ability to recognize and understand the thoughts and feelings of another person. By considering the human aspects of programme participants, researchers are able to develop better relationships, to ask more relevant questions, and to better understand the complex perspectives and motivations behind decision-making.

Note: This exercise is not intended to characterize, stereotype or define your focus group participants. Focus group participants have a real voice and you should ask them to share it! This is an exercise intended to challenge you as a practitioner to identify who an ideal research participant is, and consider his or her thoughts, feelings, fears, joys, actions and influences.

Step 1 - Form small groups of 2-3 people.

Step 2 - Discuss as a group your 'ideal research participant' or who your program is intended to reach. Is this a young man in a rural community? A mother who provides for her large family? Who are some of the most critical voices you and your team need to hear from?

Step 3 – Once you have decided upon a specific person (or persons), complete a point-of-view statement that relates to agriculture, climate change and/or gender. Use the following format to structure this statement.

IDEAL PARTICIPANT

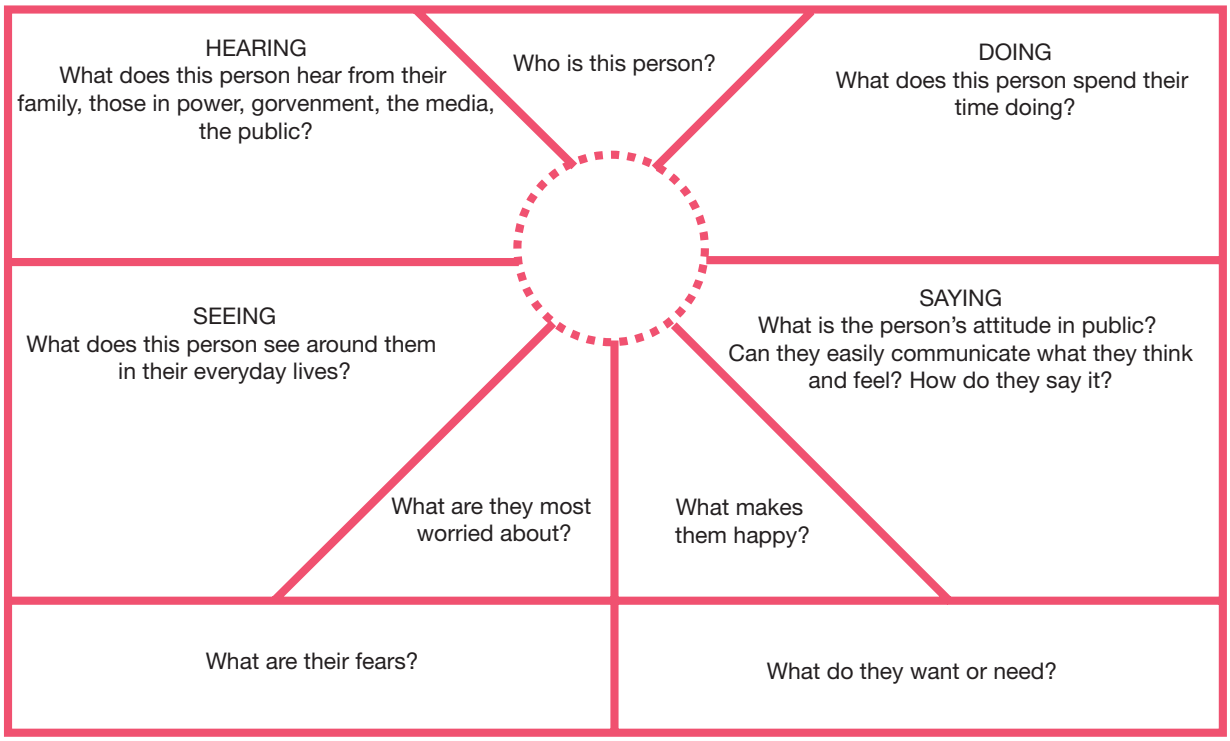
…is affected by	…changes.
…must do	…tasks.
…is faced with	…perceptions.
…overcomes	…challenges.

Examples:

A young woman in this village must travel farther to get water during drought.

A married mother in this village is affected by domestic violence.

Step 4 – With your ideal person in mind, take time to fill in each of the sections on the empathy map.



Materials • Colored markers •Copies of the empathy map for groups

Learning Activities: Helpful Framework

Activity: Assessment and Reflection on Gender and Inclusion

The following reflection activity can help you understand the need for gender analysis and frameworks for integrated development.

Objectives:

1. Identifying strengths and weaknesses in your organization or project in regards to gender and inclusion.
2. Identifying which frameworks fit into your current work best.

Time: 1-2 hours

Participants: 10-25 participants

Step 1- Take your time to reflect on how the different frameworks relate to your own work or your organization's work overall. What are gaps that need to be filled, which frameworks can help fill these gaps and why?

1. Gender and socially inclusive programs and services

   Explain how gender is currently addressed in development or research programs in you organization currently.

2. List examples of the politics, projects or services addressing gender and social differentiation successfully in your organization or work:

3. Which frameworks would best suit your current or planned projects in your organization? How or which components of this framework would add value to your organization?

NOTES

PART 3- LOGISTICS & PLANNING GUIDE

Preparation

A. Building a Team

Your research team is the foundation of your research project. Building a strong team requires guidance and deliberate capacity building in gender and PAR processes. Investing your time in building your team can really dictate the quality of your research.

Team Composition

As a principal investigator or research project coordinator, you are responsible for hiring and building the capacity of your team. Specifically this may require hiring at least two local note takers and two facilitators.

Note that involving "community gatekeepers" or local leaders in this process may be useful in promoting transparency and participation. You may choose to invite key local leaders who could help facilitate your research activities in this preparatory phase as needed.

Pay careful attention to the gender composition of your team. **It is highly recommended to have at least one female facilitator and one female note taker.** This would allow for maximum flexibility while conducting your focus groups. Team members should anticipate adjusting their roles or opinions to meet the challenges of building trust and gender sensitive research spaces. In some cases, having female facilitators may improve trust with female focus groups. In other cases, having mixed gender facilitators may work better.

Practical Skills Needed by facilitators AND note takers:

- Some background in participatory action research or field work
- Some technical knowledge of development, gender and climate change issues
- Familiarity with the local community (if not belonging to the community themselves)
- Cultural sensitivity to the community's practices
- Local language proficiency

Orientation and Training

Once you have staffed your team, you will need to spend time orienting and training them to help every member of your team understand their roles, responsibilities, and enable them to work together toward a common purpose. We suggest communicating the following points in a series of open discussions, brainstorming sessions and conversations:

1. *The purpose of your research.* What is the overall purpose of your research? Is this inductive or deductive research and what does that mean? What are the main research themes or questions that you want to explore? How will the data collection and analysis from this project fit into the project or overall institutional context of your organization?

   If you are working from an analytical framework, we suggest that you present it early in the process and talk through the challenging terminology and meanings of the research questions, indicators and/or themes to ensure that all of your team members fully understand the purpose. This directs the facilitation and note taking, as well, making it more attentive, relevant and appropriate.

2. *Logic and expectations*. Why have you chosen to do gender sensitive and PAR research? What are your expectations for and vision of a "successful" gender and socially inclusive research project? How do your team members define it? What are your expectations for and vision of "successful" participation? How do your team members define it? Having these discussions early is important to **establish team norms and support systems**. Not only will the logic of the research be clarified, it may also help teams commit themselves to the project and each other.

   Expectations of time requirements, compensation and all expected roles, for example not just translating but also participating in recording data every day, should also be clarified early in the team-building process. The team needs to understand all that is expected of them to maintain team unity and transparency.

3. *Methodology Review* and *Pre-testing* For many teams, participatory approaches may challenge their own sense of comfort and reveal biases. It is important to spend time becoming comfortable with participatory approaches and address the fears your team members

Preparing your note takers

- The quality of your study relies upon the data collected from your note taker(s)
- During training, the research team needs to decide on the depth of their notes – summarizing is not enough for qualitative research. Exact quotes and stories are necessary.
- If the burden seems too heavy for just one note taker, consider adding a second to your team.
- During the tool review and pre-test, the facilitator and note taker should practice working together to use techniques like echoing – the facilitator repeats what the participant says to both validate the participant's comment and allow the note taker to have more time to record the exact comment made or story told – to ensure better note taking.
- Also during the review and pre-test, the team needs to complete the data entry part of the process to both get into the habit and to figure out ways to improve the note taking for actual data collection.
- For actual testing, sessions can be recorded but only to provide support to the note takers. The team should always take thorough notes.
- For actual testing, the research team should work together at the end of each day to complete the transcript from the notes and recollections of quotes and stories. You cannot hire someone to do qualitative data entry for your project. Only the research team can compile a database, and the note taker is the key to this process.

may have. To become more comfortable in PAR, we recommend **reviewing each tool with your group**, first discussing their purpose and priorities, followed by role-playing the actual activities. Role playing will allow your team to begin to understand how they use the tools, how they work together as a team, and what is confusing or challenging to them as facilitators and note takers. **Note taking, especially, should be practiced in these mock sessions because it is just as critical, if not more so, as facilitation in the data collection process**. Refer to the box on tips on preparing your note taker(s).

This should also lead to pre-testing each activity in a community before starting the testing process. This community pre-test is critical for helping your team become familiar and comfortable with practicing the tools with community members and for deciding how the tools can best be used in your research context to obtain the information you desire. Additionally, your team will learn to work together to collect more data, by the facilitators, translators and note takers further practicing techniques for effective, ethical and thorough data collection.

Additionally, if you will be using recorders, audio or video, you team needs to be oriented on how to use the equipment. **We suggest using recorders but only if communities consent and only as a supporting source of data**. The note taking and data entry in the reporting sheets should provide the majority of the content for your database.

4. *Capacity Building on Gender & Climate Change*. We highly suggest reviewing the basic concepts and learning activities found in this manual with your team before engaging in research. Coming into research with common terminologies and being well informed on the subject and concepts of your research, will enable your team to work cohesively and effectively.

B. Background Research

Prior to visiting the community or communities to carry out your research work, it is crucial that you conduct background research. The following lists of questions on (1) institutional settings (who are the actors) and (2) environmental, economic, and social trends will help you ensure that you identify socio-economic and gender issues from the beginning of the field visit.

Both of these lists of questions should be explored using available information on the area to the extent it exists, including:

- Statistics and reports from government departments and ministries;
- Program and project documents from agencies and NGOs;
- Studies and surveys from universities and research institutions; and
- Documentation from service organizations in the local area.

Note that this background information should not lead your analysis but may help inform you of key stakeholders and issues to be aware of. Answers to the following questions may not be readily available but it is important to be aware of the local context to the extent possible. Checklist 1 suggests questions to investigate institutional settings:

Checklist 1

- Are there local groups that are organized around environment issues such as climate change, forest user groups or water user groups? Do both women and men participate in these?
- Are there local groups that are organized around economic issues for example credit, agriculture production? Do both women and men participate in these?
- Are there local groups that are organized around social issues includes health, literacy, religion, youth?
- Are there groups exclusively for women? If so, what is the focus of these groups? What do women gain from them? Are the groups open to all women?
- Are there groups from which women are excluded? Which ones? Why? What do the women lose due to the lack of their participation?
- Are there groups exclusively for the poor separated along gender lines? If so, what is the focus of these groups? What do the poor gain from them?
- Are poor men and women excluded from any of the local groups? If so, which ones? Why? What do the poor lose due to the lack of their participation?
- Are there groups exclusively for youth and are they separated by gender? If so, what is the focus of these groups? What do youth gain from them?
- Are there groups from which young men and women are excluded? Which ones? Why? What do the youths lose due to the lack of their participation?
- What are the links between local groups or organizations and outside institutions such as NGOs, political parties and government institutions?

Checklist 2 has suggested questions to investigate local trends:

Checklist 2

- What are the most important environmental trends (e.g. drought, deforestation, erosion or other meteorological trends)?
- What are the most important trends in agricultural production and food security?
- What are the most important economic trends, e.g. jobs, wages, prices, costs of living, crop yields and livestock population?
- What are the most important demographic trends (e.g. birth rates, infant mortality, in-migration, out-migration, increases in female-headed or child-headed households and the role of HIV/AIDS)?
- Which other trends are important (e.g. governance, social changes, in for instance the household or change in government policy)?
- What are the linkages between the trends?
- Are there linkages or causes stemming from intermediate or macro levels?
- What is getting better? What is getting worse?
- Which trends impact women and men, boys and girls differently? And how?
- Which trends impact poor men and women more than richer men and women (e.g. health, access to resources etc.)?
- Are there differences in gender roles by ethnicity, class etc.?

As you explore these issues, you should keep in mind that the questions are a starting point. When entering the community, you may find that the people you speak with perceive different trends, or prioritize challenges differently to what you found during your background preparations. In addition, it is possible that the community uses different terms or ways to express what they perceive around them. You will need to bridge language, vocabulary and conceptual barriers. In addition, you will need to be careful not to lead the discussion toward trends you have read about, but use this information only to facilitate discussions among community members. (FAO 2012 p. 37-38)

C. Sampling Strategies and Procedures

Before you enter a village and begin to collect information, you need to develop a plan for exactly how you will carry out your work. Planning ahead ensures that you ask the right questions, use the right tools and speak to the right people. If you don't plan ahead, these things will likely shift to being a matter of convenience, and you will introduce bias into your study.

Choosing Your Villages

Deciding on where you will work, and who you will speak with is part of your 'sampling strategy'. This strategy should be based on your objectives and those of your organization. To begin, let's work through some simple questions:

- What is the mission of your organization?

  _____

  _____

- Why are you carrying out this study? What will your organization do with the information?

  _____

  _____

This is the objective of the study. Now you are ready to identify where you will do the study:

- If your organization works in a specific place, like a certain village or district, then you will do your study in that place.
- If your organization is looking for a new place to work, you need to consider the mission of the organization and choose a place that corresponds well with that mission.
  - » Is the mission to help farmers mitigate against climate change? Then, you should choose a place that has potential for carbon storage in crop fields and pasture, or by conserving forest.
  - » Is the mission to help farmers adapt to climate change? Then you might choose a village where farmers have already begun to notice the impacts of a changing climate.
  - » Is the mission to help farmers get access to and use information about climate and weather? Then you might consider places that have good access to radio and good support services.

In order to facilitate your work, we suggest you select villages that fulfill the following criteria:

- Where there is a lot of need for your organization's mission and the organization can have a lot of impact.
- The village leaders must be willing and able to provide information related to what you would like to study, and the village should not be very small (less than 50 households).
- A village is defined as:
  - » A place where people act as a 'community' in the sense that there is a level of interaction and dependence among them;

» A place where it is possible to define who is or is not part of the village;

» A place where it is possible to communicate with inhabitants (e.g. through a chairman or a village meeting) (FAO 2012 p. 62).

Purposeful vs. Random Selection

To choose the exact village or villages you will work in, you need to decide if you need to choose them randomly or if you can select them purposefully.

Purposeful selection is good in the following circumstances:

- When you have one or a few villages that you know you will be working in for the next few years, and you would like to co-develop knowledge with the residents that will provide everyone with a deep understanding of the problems and priorities, and a common understanding of the way forward.
- When you know that there is something unique or special about a certain village that will provide you with information and points of view that you will not be able to access elsewhere.

Random selection is good in the following circumstances:

- When your organization will be working in a large area like a province or a watershed, and it is not possible to study all of the villages, then you can take a sample of villages to represent them all.
- When you would like to do a statistical analysis of your findings, then you need to randomize the sample and select enough villages to survey that they will represent the diversity of all the villages.

If you would like to select your villages randomly, use the following steps:

1. Delineate your working area. This is the entire area that your organization would like to work in the future. You can use a map, and a red marker to draw a line around the area.
2. If the area is uniform (a single district, a single watershed, etc.), you can use a single random sampling, which is a good way to involve community leaders so that they can see that there were no biases in the selection:

   a. Identify all of the villages in the area.

   b. Write each on a separate slip of paper, fold them, and put them in a hat or basket.

   c. Draw out one piece of paper at a time and write the name down until you have the number of villages you need to sample.
3. For a single random sampling, you can also use Excel to limit possible biases in participant selection:

   a. Enter the list of villages into an Excel spreadsheet as follows:

b. Decide on the number of villages you need to include in your study. For example, in the list of 11 villages from Burkina Faso above, you may need to include four of the villages.

	A	B	C
1	No	Village	
2	1	Boulsa	
3	2	Donsen	
4	3	Weregourou	
5	4	Bonam	
6	5	Tapoa-Djerma	
7	6	Bwahoun	
8	7	Dani	
9	8	Koria	
10	9	Alambare	
11	10	Gorom-Gorom	
12	11	Hounde	

c. In Cell C1 enter the header “Random Function”.

d. In Cell C2 enter the formula **=rand()**, like this:

e. When you press <enter>, a random number between 0 and 1 will appear as shown here:

	A	B	C	D
1	No	Village	Random Function	
2	1	Boulsa	=rand()	
3	2	Donsen		
4	3	Weregourou		
5	4	Bonam		
6	5	Tapoa-Djerma		
7	6	Bwahoun		
8	7	Dani		
9	8	Koria		
10	9	Alambare		
11	10	Gorom-Gorom		
12	11	Hounde		

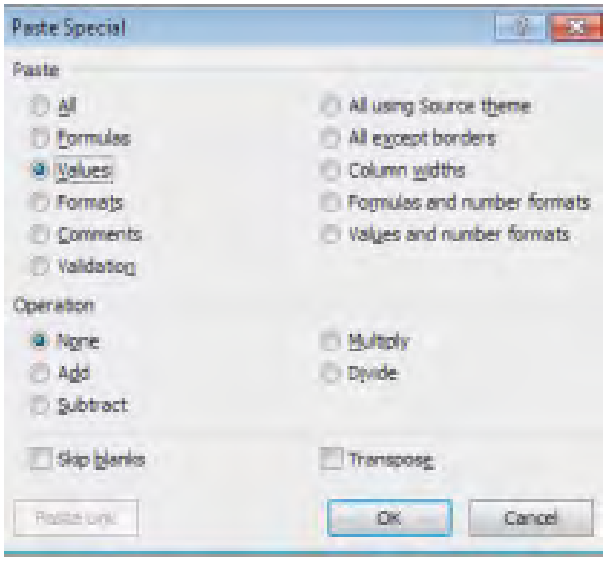
f. Copy this formula down to the rest of the cells in column C. Note: as you do this, the first value will change. This happens because you have a dynamic function in the cells so we need to convert these to static values. It will look like this:

	A	B	C	D
1	No	Village	Random Function	
2	1	Boulsa	0.488434273	
3	2	Donsen		
4	3	Weregourou		
5	4	Bonam		
6	5	Tapoa-Djerma		
7	6	Bwahoun		
8	7	Dani		
9	8	Koria		
10	9	Alambare		
11	10	Gorom-Gorom		
12	11	Hounde		

g. With the whole of column C selected, right-click and choose **Copy**.

h. Move into cell D1; right click and choose **Paste Special**.

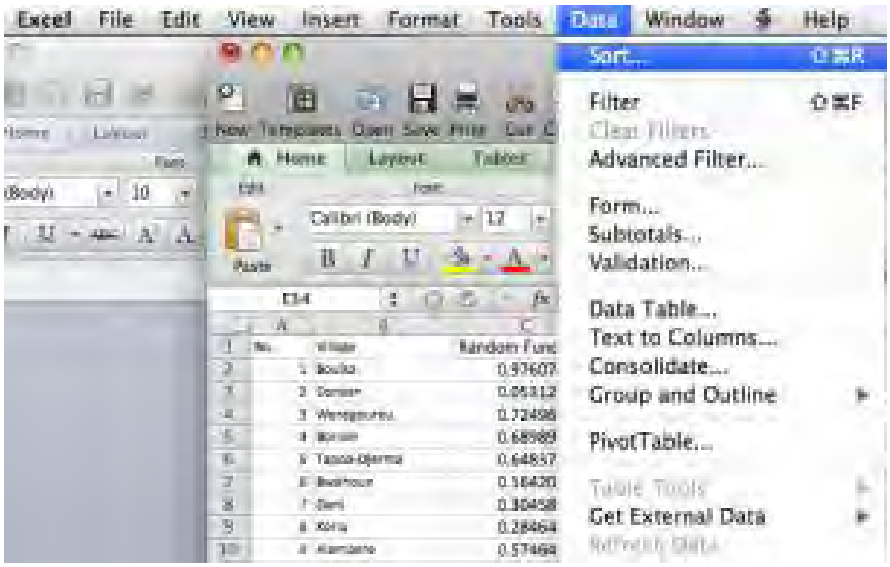
i. On the **Paste Special** dialogue box select **Values** as shown here:



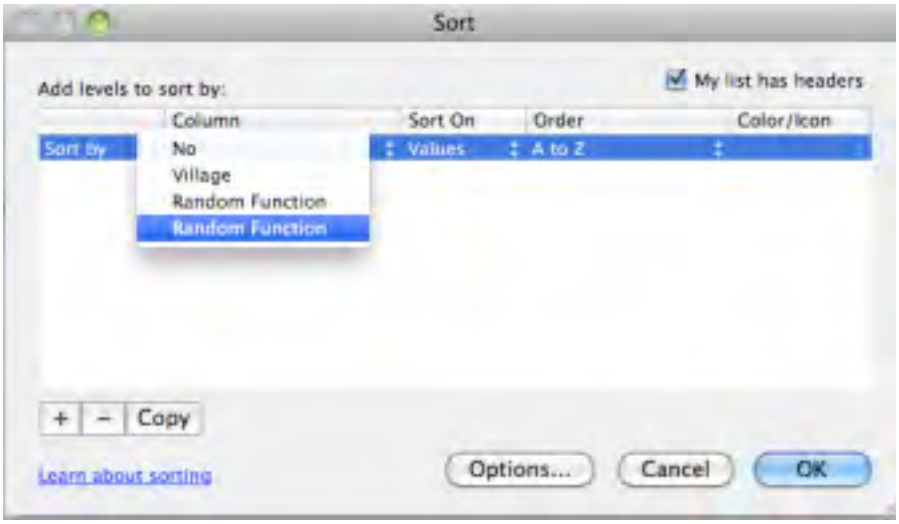
j. Click OK and the actual values rather than the formulae will be pasted. Note the values in column C will have changed again – this is expected as they still contain dynamic functions, but the values in column D are now fixed and suitably random, like this:

	A	B	C	D
1	No	Village	Random Function	Random Function
2	1	Boulsa	0.401935384	0.183944066
3	2	Donsen	0.393561689	0.74783433
4	3	Weregourou	0.262433316	0.677435385
5	4	Bonam	0.546924695	0.774767727
6	5	Tapoa-Djerma	0.791646764	0.830582187
7	6	Bwahoun	0.855478479	0.666854844
8	7	Dani	0.180599472	0.989772386
9	8	Koria	0.651651719	0.462137788
10	9	Alambare	0.432880272	0.115637714
11	10	Gorom-Gorom	0.39097324	0.763295363
12	11	Hounde	0.192302484	0.771982462

k. Now sort the worksheet in descending order by column D ensuring all columns are sorted together. You can do this by clicking on 'Data' and choosing 'Sort', like this:



l. In the **Sort** dialogue box that pops up, click on **Column** and choose the second **Random Function**, like this:



m. Select the first villages from the randomized list that you need. For example, if you need four villages, you will choose Alambare, Boulsa, Koria and Bwahoun as shown here:

	A	B	C	D
1	No	Village	Random Function	Random Function
2	9	Alambare	0.785180499	0.115637714
3	1	Boulsa	0.246071677	0.183944066
4	8	Koria	0.508442565	0.462137788
5	6	Bwahoun	0.28080714	0.666854844
6	3	Weregourou	0.318100403	0.677435385
7	2	Donsen	0.372446471	0.74783433
8	10	Gorom-Gorom	0.213853791	0.763295363
9	11	Hounde	0.472904001	0.771982462
10	4	Bonam	0.471618809	0.774767727
11	5	Tapoa-Djerma	0.299895193	0.830582187
12	7	Dani	0.619386428	0.989772386

4. If the area is not uniform (different terrains, different districts, different production systems, different ethnicities in different locations, etc.), you should stratify your sample. You can do this by creating a different worksheet for each type of category. For example, you may have a worksheet for villages in valleys, another for villages in mountains, and another for villages on flatlands. For each worksheet, follow steps a-m above.

Determining Sample Size: If you are choosing your villages by random selection, you first need to determine the number of villages that you need to study.

1. Start by counting the number of villages in the area where you will be working over the next few years.
2. Calculating a survey sample size can be done using two basic formulas, one calculating a preliminary sample size, followed by one to correct the calculation for a finite population (Creative Research Systems 2012):

Sample Size:

$$ss = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)
p = percentage picking a choice, expressed as decimal (.5 used for sample size needed)
c = confidence interval, expressed as decimal
(e.g., .04 = ±4)

Correction for Finite Population:

$$\text{new ss} = \frac{ss}{1 + \frac{ss-1}{pop}}$$

Where: pop = population

A number of websites provide sample size calculators based on these formulae, for example Creative Research Systems at: http://www.surveysystem.com/sscalc.htm (Creative Research Systems 2012). Note that when using these formulae to determine how many ***villages*** you need to include in your study, the number you enter for pop (population) is the total number of villages, *not* the total number of people.

You will notice that if you have a small number of villages, your ideal sample size as a proportion of the total will be quite large. For example, with 70 villages, a confidence interval of +4 and a confidence level of 95%, you should include 63 villages in your study. That may be unrealistic for you. Just remember that the fewer villages in your study, the lower the confidence level in terms of your results being truly representative of your entire area. For example, you may decide that you will include 10% of the villages in the area in your study. That seems like a large proportion of the villages. If you have 70 villages, that would mean surveying seven of them. But your confidence level drops from 95% to 35%. The objective of randomly choosing the villages is:

- To prevent biases like road bias to enter into your selection – so even if you choose a small number of villages at least you have been unbiased in your chose.
- To evaluate the statistical significance of the results you obtain – if it is important that your results are statistically representative of a larger population, then you should endeavor to survey the recommended number of villages from your sample size calculation.

Choosing your informants

Now you need to decide which people from the village (informants) you will speak with, at least in the beginning. Again, let's begin by answering some simple questions:

- Are there specific categories of people that your organization focuses on (for example women)?
- Are there types of people that are most implicated in your organization's mission? For example, if your organization seeks to help small farmers adapt to climate change, you may want to focus on the farmers in a village, not non-farmers like brick makers.
- Has your background research identified categories of people that may be marginalized in the village (such as single mothers, minority ethnicities, very poor families, landless, etc.)?
- Are there people in the village that can serve as key informants, because they have special knowledge about an important topic?

Note down your answers. Make a note to yourself about important categories of people that you must make sure are participating in every focus group discussion that you facilitate.

You will need to gather informants to form a focus group for every tool that you use from this guide. Thus, for each tool you need a sampling strategy. Everyone that uses this guide will usually start with the Co-production of Knowledge Section, the Village Map.

1. Read the objective of the tool, and the suggested participants. Compare them to your notes on the objective of the study and important categories of people for the study.
2. Decide on the number of focus groups that you will need for the tool, and the number and types of participants in each of the focus groups.

Purposeful vs. Random Selection:

If you are using ***purposeful*** selection, discuss the types of people you would like to have for each focus group with the appropriate community leaders and arrange for the leaders to invite the desired number of participants. Refer to the entering communities section for suggestions on working with leadership and invitations. You may find in some communities it is appropriate for a village chief to send a messenger to a household to tell a person that they are invited to a focus group. In other communities it will be necessary to send an invitation letter to each person. In some cases, it is more appropriate to hold an orientation meeting for all members of the village, and ask for volunteers for certain focus groups. If you use this method, remember to pay attention to who is volunteering. If important categories of people are being left out, it may be necessary for you or community leaders to seek them out individually and invite them. Whatever method you use, don't be surprised when additional people show up and passerbys join in. When this happens, be sure that the focus group has an inclusive atmosphere, and that they feel welcome to participate.

If you are using ***random*** selection for focus group participants, you are going to use a similar method to what you did to select the villages.

1. Develop two lists – one containing the names of all the men in the village, and one containing the names of all the women in the village. You may want to include important information, like age group and occupation.
2. If you are using the hat method, put the men's names in one hat and the women's in another.
    a. For your first men's focus group, draw out names and set them aside until you have the number of men you need in the group. Then put all the names back in the hat for the next drawing.
    b. Do the same for your first women's focus group.
    c. If it is a mixed sex group, divide the number of participants evenly between men and women and draw an equal number from each hat.
    d. For every focus group interview you conduct, follow the same procedure.
    e. Sometimes you will find that you want a specific category of women or men, for example male farmers or young women. In this case empty the hat and find all of the women or men that fit that category, putting their names back in the hat to draw from.
3. If you are using Excel make one spreadsheet for men and one for women and follow the steps for 3a through 3m from the village random selection instructions above.
    e. Each time you make a new selection for a new focus group, start with the name just below the last person you chose and work your way down the list.
    f. If you would like to have specific types of men or women, like female farmers or older men, first stratify the list based on that characteristic. Cut and paste those names into a new list, then follow the instructions for randomization and choosing your informants.

(Adapted from FAO-CCAFS 2012)

Implementation

A. Research Ethics

For implementing research projects, it is important to uphold research ethics that are standardized throughout the research cycle. For example:

- *Get consent!* – The first step before you begin your research is to gain consent from participants. You must also seek consent from the existing village leaders or certain "gatekeepers" who play critical roles in community life. Consent can be verbal or written but should clearly ask participants whether they are willing to participate. Here is an example statement that you may use to introduce yourself and gaining consent from the community:

Example Statement:
"My name is _____ and I am a _____ from the organization _____. Our organization's mission is to _____ and we are here today to gain your permission to ask you some questions on the different social, economic and political characteristics of the village over the course of the next ____ days. The information that you provide will is very valuable for our organization to learn about how different roles, responsibilities, and different decisions are made on agricultural and natural resource management by men, women and children in the village. Most of our discussions with you will be done in separate women's and men's groups.

We hope that you will be comfortable speaking to us and that we can record (or write) the valuable insights and opinions you have. We would like to record each discussion because your voice is important and rather than summarize, we would like to capture your thoughts in detail. If you are not comfortable with this, let me know and I will make sure that your name is not written and that the information you share with us is anonymous. Your participation in this project is completely voluntary and you can leave at any time.

Are there any questions?"

- *Communicate Your Research Goals*- You must share not only the purpose of your research but how your data will be used in the future. Who will it be shared with, what impact might the research have?
- *Ensure Anonymity* – You must be explicit about confidentiality and build the confidence of participants that their words will not be misconstrued or used for any purpose outside of those you have listed. Individuals will not be identified or singled out without express permission.

Recommended for PAR:

- *Follow Up* – It is highly recommended that researchers follow up with the communities they work with by presenting summaries or preliminary findings to the community at the end of the research period, or returning once the research has been completed and circulating any outputs, publications, or future plans for interventions.
- *Compensation*- You will need to carefully consider what forms of compensation you will be providing participants. In some contexts, no compensation can help reinforce a self-help and rights based approach. In other contexts, communities will expect monetary compensation because of local norms and relations with other development and research organizations. It is important to understand that providing compensation will set the tone and precedent for future work in the community, not only for your team but all other organizations who will be working with the community. It may also cause tension when passersby try to join the session.

  In some cases, coordinating with community gatekeepers and village leaders on providing lunch to focus groups as a form of compensation can be arranged ahead of time. This can be a cost effective and transparent incentive for participation.

  If doing longer semi-structured interviews with individuals or households, it may be more appropriate to compensate individuals with small items such as staple crops, sugar, tea etc.

  If monetary compensation is demanded, as a research team you must be very aware of building expectations or setting unrealistic ones when dealing with money. Researching how much a farm worker would get paid in the village for 1 days work can be a good reference for compensation if necessary.

B. Entering a Community

It is very important to establish transparency and good communication with the leadership and members of the community you will be working with. You must make sure to confer with village authorities and gain consent from your participants before proceeding with any activities.

Working with Leadership

As a research team, you must be aware of the social and political dynamics of the community in which you work. There will be "gatekeepers" in the village who are strategically important as allies as you embark in your research. These 'gatekeepers' may also represent a particular strata of the village elite that can either enable or hinder your work. This is why it is of utmost importance to be sensitive to the hierarchies that operate within the leadership. Community leaders can lend legitimacy to your work, help you mobilizing participants, and give valuable insight to the research topic.

You should strive to involve gatekeepers in different aspects of the research process without letting them dictate or influence the participants. Be sure to discuss with them that you are interested in understanding the perspectives of many different types of people, and that they should help encourage community members to speak up.

To keep village gatekeepers engaged in the process, you may want to periodically ask them to evaluate how the research activities are going. If they have feedback or suggestions for improving participation, this may help better define their roles as enabling influences for your work.

Modes of Entry

There are several ways to enter a community. You will have to keep in mind the most culturally appropriate places and forms of communication, how to target women, youth and other specific groups, and who to recruit from the community to help gain you legitimacy and introduce your research project.

- *Invitation letters* - If choosing to write formal letters to individual participants and village leaders, you may need to keep in mind that households may only be listed under the husband's name. Inviting women to focus groups via letters may require physically visiting households or going through the village leaders who can then distribute them to women on your behalf.

  Remember to specify exactly whether you are inviting a man, woman, girls or boys (indicating age), for the research activity.

  You may need to be accompanied by a local official or leader while delivering these letters depending on the context. (FAO 2012 p. 65)

- *Informal oral invitations* - Holding a public event with the cooperation of local leaders and gatekeepers may be a good platform for introducing your research. Remember that not all communities have the same literacy rate and that letters are not universally appropriate.

  Make sure that your community announcement does not conflict with weddings, funerals, market days, holidays etc.

If you intend to involve youth, find out when school hours end or choose different venues to target your audience.

Introductions

You must be able to manage expectations when introducing your research project. Be aware that the very word "project" may imply the promise of development activity. Here are some guidelines for introducing your work to the village:

- Explain who you are and what your organization does
- Explain the theme and purpose of your research – where will the data go?
- Be transparent about timing and the schedule of your work
- Make realistic promises by reinforcing that as researchers, your main purpose is to reflect community voices (not provide services or introduce development interventions)
- Ask for input or open up to questions

C. Exiting a Community

It is important to wrap up your research activities with purpose and clarity. As gender and PAR researchers, we suggest sharing your findings with the community in a public event, even if it is providing a snapshot of findings.

After the presentation, be open to questions. Support any discussions on participant experiences and try to encourage a sense of closure.

If you have concrete plans on returning to the community, share them at the meeting.

D. Audit Trail Log

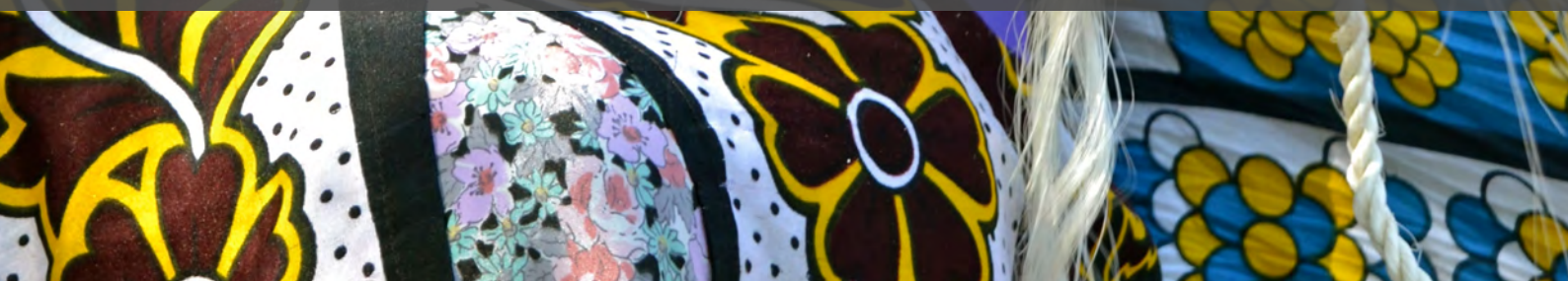
You should keep an audit trail of all of your activities. It should include information ranging from discussions on training sessions, the applicability of the tools in respective contexts, the quality control process, the challenges or research barriers faced, the interesting data you find and from which tools and actions, as well as the steps taken when analyzing the data and producing written outputs. The audit trail can be accounted for through the reporting sheets and through daily debriefing with the research team.

By **completing the reporting sheets every day after your sessions**, all of the notes from the note takers will be recorded. When possible, direct quotes and stories need to be transcribed. Any interferences or instances of potential bias additionally should be recorded. The outputs of the group work (maps, diagrams, etcetera.) should be photographed or copied into the reporting sheets to keep a complete record of the activities. The reporting sheets and all other outputs from your research can be shared on the online interactive platform for practitioners and researchers around the world.

(Adapted from FAO-CCAFS 2012)

NOTES

PART 4 – RESEARCH MODULES



Co-Production of Knowledge Module

The Co-Production of Knowledge module seeks to create a more equal platform for creating information and a shared vision of adaptation and resilience. The following tools are meant to create more transparency and trust between the research team and community, supporting a research space that encourages community members and particular marginalized groups to define their priorities. The information in this module can also collect a broad range of data that may add to your "baseline" information for your study or project.

Tools:

This module includes a group of tools that when implemented sequentially provides us with the necessary background information for designing an agriculture program that can integrate gender, with special consideration for vulnerable groups.

Tool	Suggested Use
Village Resource and Use Map	Two sessions – Men and Women A baseline understanding of the village layout, identifying resources on which people depend for their livelihoods as well as resource gaps and conflicts over resources, according to both men and women.
Village Map (Cont.) and The Goal Tree	Two sessions – Men and Women Community priorities and visions for the future.
Wealth and Vulnerability Analysis	One mixed session Social-differentiation along economic lines to identify vulnerable groups and their characteristics.
Gender Empowerment Now and Then	Two sessions – Men and Women Men and women's definitions of "empowerment" and how empowered, based upon the local definitions, do they consider women now and in the past.

Flexibility and Use:

This module can be used independently to prepare for a climate-resilient agriculture programme, or in conjunction with any other module to prepare for a programme with multiple climate change and gender objectives. If used in conjunction with other modules, the research team should take care to plan the sequential roll-out of tools so as to avoid repetition. For example, a baseline village map developed in Module 1 can be added to Module 2 to identify livelihood resources and matched with Module 3 to identify areas of with mitigation potential. The tools in this module are designed to sequentially build on each other. However, if you already have the information generated by one or more of the tools, you can easily drop them and concentrate your time and resources on the other tools.

Materials: • Flip chart paper • Stickers • Markers • Beans or other counters • Other objects to mark landmarks • Chalk

Village Resource and Use Map

Participants: Separate groups of men and women (6-14) are highly recommended for capturing gender-specific information.

Time: 1 ½ - 2 hours

Activity Preparation

The village map is not concerned with cartographic precision, but with getting useful information about local perceptions of resources by men and women. Practitioners should determine the contents of the map by focusing on what is important to them. Perception of what is important and the use of resources will most likely vary between genders and vulnerable groups so make sure to choose and disaggregate your focus group participants well.

What resources are you most interested in learning about?_____

_____

Are there particular ways in which you should disaggregate the groups to get information relevant to your interests?_____

_____

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves, and note the name and any special information for each individual (such as youth, elderly, disabled)

Step 3 – Ask someone to suggest a centrally located landmark in the village. Try placing a rock in the centre of the circle and ask participants to mark other important things in the village with chalk or other objects available until they have drawn the entire village.

Participants should not be interrupted unless they stop drawing/marking, after which follow-up questions can be asked.

Step 4 – After the village according to the group has been drawn, ask follow up questions regarding important features that may relate to your project. Some suggested features are in checklist 1:

Maps should be drawn using symbols, pictures and diagrams so that non-literate people can participate.

Checklist 1						
Water Sources e.g:	**Infrastructure e.g:**	**Agricultural Lands e.g:**	**Market Related Spaces e.g:**	**Services e.g:**	**Special Use Places e.g:**	**Agro-ecological Zones e.g:**
water bodies, irrigation sources, rivers, boreholes, taps	roads, bridges, houses, buildings	crop varieties and location, commonly held land versus private lands, grazing lands	shops, markets, small industries	Health clinics, schools, ICTs	Bus stops, cemeteries, shrines, waste sites	Soils, slopes, elevations, degraded lands, forests, wetlands

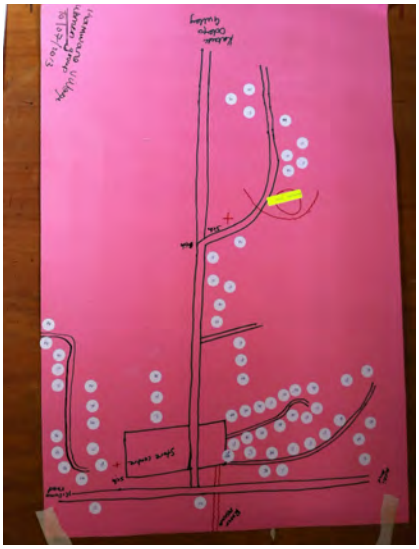
On many occasions, how a focus group chooses to draw a map can reflect the complex social and political groupings in a community. As a facilitator, note how borders are drawn and whether certain ethnic groups, classes or marginalized identities are omitted from the map. You may choose to prompt your group on this, or choose to interpret their omission as valuable data in itself.

Step 5 - Ask participants to describe the map and discuss the features represented. Ask questions about anything that is unclear. You may find that this generates further discussion and changes to the map.

Step 6 - Once a basic map has been produced, ask a participant to transfer it to paper. Make sure to write each resource's name, local and official.

Step 7 - When the group has finished the map, start a discussion to deepen your understanding about the resources depicted.

Step 5



Step 6

Some suggested questions are in Checklist 2:

Checklist 2				
	Is there enough for everyone? How is its quality?	**How is its quality changing? What is driving the change?**	**Are there restrictions to use?**	**Who is responsible for maintain it? What has been done to improve it?**
Forest y 				
River x 				
Add your own				

Step 8- The village map is also an opportunity to probe specific resources and the gender specific labor roles associated with them. You can refer to Checklist 3 for examples of specific resources that are often gender specific along with probing questions on their gendered access, use and control.

Checklist 3				
		Who does the labor? Who helps them?	How long does it take them?	How often is it collected or made?
Water 	Irrigation			
	Potable			
	Livestock			
Fuel 	Firewood			
	Charcoal			
	Farm Residue			
Land Mgmt. 	Fertilizers			
	Compost			
	Manure			
Livestock 	Grazing			
Add your own				

Step 9 - If time permits, having a discussion about conflict over resources can reveal key gender and vulnerability issues. Ask participants to identify any major conflicts and use Checklist 4 to probe each one. When the discussion has been completed, distribute counters and ask the group to rank the conflicts in terms of their severity, impact on their household relations, ability to produce income, or another category relevant to your project goals.

Checklist 4				
	Why does this happen?	**Who is most involved?**	**What are some solutions?**	**Ranking based on:** _____ _____
Cattle Theft				•••••• •••••
Use of Grazing Lands				••••
Neighboring village does not help water committee				•
Drunk men attack women near borehole				••••• ••••

Variations

1. *Mobility Map.* This variation can be used to understand mobility and access to resources based on social group or gender. You can probe participants on how far, how often and why they travel within or outside the village. You can also probe on the enabling or constraining factors such as permissions needed, expenses, safety and other factors affecting movement all using the basic village map as foundation.

2. *Resources Maps of Past and Present*. This tool can be used to map resources as they were in the past (ex. 30 years ago) and at present. This can be used to facilitate discussion on changes in resources.

3. *Future Map.* You may want to ask participants to indicate things they would like to see in their village that are not currently on the map - in other words to draw a picture of what they would like the future to look like. This allows for some preliminary planning ideas and encourages people to begin contributing their thoughts at an early stage in the participatory process.

4. *Social-disaggregation.* In addition to separate focus groups of men and women, from the results of the Wealth Ranking you may want to add focus groups based on age classifications, wealth status and other vulnerable groups. You may even choose to include a group based on leadership status.


DAWA
legend

Reporting – Village Resource & Use Map

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert a photo of the village resource and use map

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Resources and Uses (add categories as desired)

Resource	Uses	Users	Quality	Drivers	Restriction	Mgmt.

Household Level Resource Use by Gender (add categories as desired)

Activity	Source	Users	Frequency	Time

Dimensions of Security and Conflict Over Resources (add categories as desired)

Rank	Resource	Detail of Conflict	Resolutions?

What do I need more information about? What do I need to clarify? What topics were not covered that I still want to discuss?

Materials: • Tape • Different Colored Circles • Markers • Colored Papers • A Large Flip Chart Paper With A Tree Drawn On It (optional)

Village Map Continued & Goal Tree

Participants: 6-14 separate groups of men and women are highly recommended for capturing gender-specific information.

Time: 1-2hrs

Material Preparation

- Make sure to have your completed village map.
- Cut 10-20 circles out of colored paper to be your "fruits" for the tree. You want them to be big enough for everyone to be able to be able to read them from where they are seated.

Activity Preparation

- Have your village map in the center of the circle before you begin.
- Arrange participants in a circle.

As a facilitator, try to emphasize that this activity is about imagining a future that the community can build themselves.

- Clear the ground so that a large area can be seen and used by all.

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 - Warm up the focus group by asking everyone to think about the future and what is important to them as members of this community. Roughly ask:

"With a lot of effort and hard work, what could your village be like five years from now?"

Step 4 - Refocus the participants on the village map and present the group with 10-20 circle cut-outs. This time, you want the group to write down or draw what they have imagined for their future community, placing the improvements on top of the map as they discuss. Invite people to think of physical changes and improvements, but also social, political and personal changes such as- better relationships between men and women, stronger ties to government services etc.
These activities are intended to help create a picture of the future the participants see for their community, not the picture someone from outside envisions.

Step 5 - Gather all the circles with future goals written or drawn on them, and present it back to the entire group, going through each one if it is unclear. Goals may change shape or become more developed during this discussion.

Step 6 – Taking away the village map, now present the group with a large drawing of a tree (we recommend drawing it directly into the ground or using chalk if you are indoors). Ask people to imagine this tree having many fruits that the community wants to eat. Each goal or circle is a "fruit". There can be "low-hanging fruit" at the bottom of the tree that people in the community can easily eat or achieve. There can also be fruit higher up the tree that people in the community have to work harder to reach. Ask the focus group to arrange the fruits based on how easily they can achieve these goals using their own hard work.

Step 7 – As a facilitator, you may choose to focus on specific fruits that relate to your project, or have a general discussion about why the community has arranged the tree as they did. Probe the focus group on which goals are most achievable and why, which ones are most important and why, or even going further and probing the group on steps needed to achieve these goals.

Optional Step 8 – Since these goals are intended to be conducted in separate men's and women's groups, you can choose to share the men's tree with the women's group and vice versa. This way men and women can see each other's priorities easily, highlighting opportunities to work together as well competing interests that might hinder cooperation.

Variation

Go back through each goal at the different levels and ask, "What is the first step that needs to be taken to make this goal happen?" Follow-up with questions about relationships, tools and/or skills that are needed, considering how each may be found locally. This approach adds more dimensions to the strategy piece of this activity by laying out what steps the community can start taking and how.

Reporting – The Goal Tree

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Insert a photo of the Goal Tree

The Goal Tree:

Goals	Perception about how to achieve goal
e.g. Primary school in community	

Provide any additional issues, comments or observations that were raised in the session by participants that could not be captured in the table above.

What do I need more information about? What do I need to clarify? What topics were not covered that I still want to discuss?

Materials: • List of households in village (optional) • 100 Counter • Markers • Flip Chart Paper • Chalk

Wealth & Vulnerability Ranking

Participants: Separate groups of men and women (6-14) are highly recommended for capturing gender-specific information.

Time:1 ½ – 2 hours

Activity Preparation

- Reflect on what important agricultural, socio-economic or gendered information you are interested in for your program goals. Before starting this activity, read through Checklist 2 and select all of the topics that would be helpful for your organization to know about the community, adding your own criteria as you need.
- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.
- It is important to take your time in explaining the objective of wealth ranking so as not to create conflict. This exercise can help your organization hear from participants on what local definitions of poverty and wealth are rather than imposing outside perceptions. This is also an opportunity to ensure that the most marginalized are included, and to understand better the wealth trends within the community as a whole.

Participants often refer to female headed households as those that lack men. Disaggregating based on this definition is not enough – it obscures households where men are present, but women are the primary breadwinners. Make sure to address this definition with the community ahead of time by discussing what a female headed household or head of household in general is.

Note: You should emphasize that wealth is relative to the village, not the country.

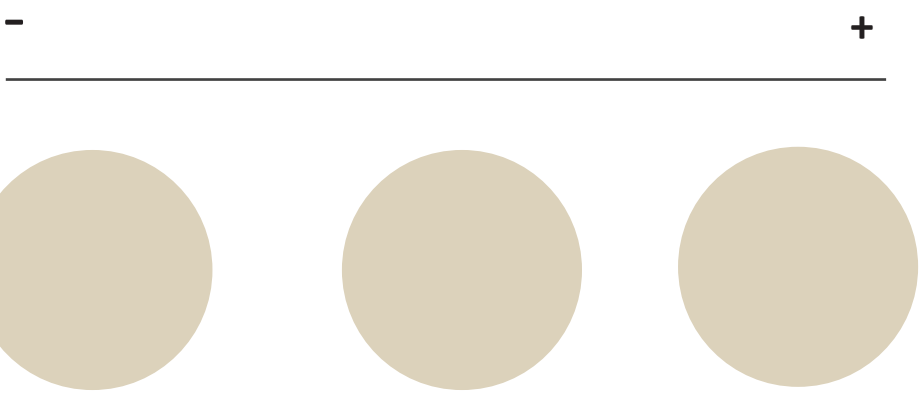
Step 1 – Introduce yourself and the team and then the activity.

Step 2 – Ask the participants to introduce themselves, and note the name and any special information for each individual (youth, elderly, disabled, etc.)

Step 3 – Start with general questions about the village from Checklist 1.

Checklist 1
• What is a typical household in this community? Who is in it? (Make sure to define what a household is and get clarifications on polygamous, joint families and the diversity of living arrangements.) • How many households are there in this village? • Is the village population changing in general? Why or why not? • What is a "female headed" household? • How many of those households are female headed? Child headed? • Is the number of female headed households changing? Why or why not? • Is the number of child headed households changing? Why or why not?

Step 4 –Draw a line in the center of the page where one end represents the poorest group while the other end represents the least poor. Draw three circles along the line to represent three basic wealth groups.



Assure the informants of confidentiality and do not discuss the ranks of individual families but rather a representative average.

It is important to be aware of culturally appropriate indicators of wealth before entering the community. For example, asking for the number of livestock in pastoral communities may be highly inappropriate in certain communities. Having communities describe typical households based on their own criteria may be a good starting point for this activity, rather than entering with pre-set questions.

Step 5 – Take out 100 counters and explain that these *represent* the total number of households in the community. Ask participants to discuss on their own and sort the beans into the three different categories based on wealth.

Let the participants take time to discuss and move around the beans. **Let them complete this without intervening.**

Step 6 – Once the participants have finished, ask them what they have named the categories. You will find that the community may already have terms to define these groups. Then begin by probing them on what a typical household in the middle category looks like. Allow the participants to use their own criteria to describe the groups, before moving on to the other circles.

Step 7 – Once you have understood important markers or characteristics based on community standards of wealth, challenge the participants to think about whether there are any in between wealth categories. Are there a few people in the village who do not fit into these three main categories? If so, add a 3rd or 4th circle and define a typical household in these categories.

Step 8 – Now that you have created a basic idea of the differences between each wealth category, review each category again, using Checklist 2 to ask specific questions pertinent to your programme goals to create a fuller picture.

Checklist 2 – To ask each different category

- How many children are in an average household?
- How many disabled or sick people are in this group?
- Do both boy and girl children go to school? What kind of schools would they attend?
- What is the average education level of men? Of women?
- Do men sell their own labour? How often? Do women? How often?
- What are the major hardships or disasters experienced by this group?
- How many meals in a day do they eat?
- What type of diet do they have?
- How many months are households food self-sufficient?
- How many months do households work in order to have food security?
- How many months do households purchase food?
- How much land for cultivation do they hold?
- What crops do they grow? (Hybrid? Local? Inputs?)
- Do they practice agroforestry? What varieties? Who in the family, men or women?
- What kind of house and compound would they have?
- What livestock would they own? (How many? Hybrid? Local?)
- Do they rent farm equipment? How many own?
- What sort of transportation do they own?
- How many cellphones? TVs? Radios? Who owns the cell phone? husband or wife, or both?
- Are they involved in any group activities (beekeeping, vegetable growing, credit groups etc.)?
- Do they have any special leadership roles in the community (Church? School? Local governance?)
- Are there elected leaders in this group?
- Are there individuals that others seek advice from?
- Where would they get most of their money? (Remittances? Farm products? Small business?)
- Which of these income sources are generally the greatest?
- What type of credit do they have access to? (Commercial? Informal merry-go-round? Self-help or microfinance?)
- Add your own _____
- Add your own _____
- Add your own _____
- Add your own _____
- Add your own _____
- Add your own _____

Step 9 – Return to your circles and explain to the group that you are interested in understanding how people can move up or down these wealth groups. You can begin by asking some of the following questions:

- Based on these groups, which groups are increasing in size? Why?
- Which groups are decreasing and why? Why?
- Which group is the hardest to get out of? Why?

Alternately, you can go through each individual category and ask participants how families move up or down, probing on the different values, assets and factors enabling this mobility.

Step 10 – Finally, probe the group on general trends in the community. Ask your group to identify the category with the largest number of:

- Female headed households
- Girl child headed households / Boy child headed households
- Elderly heads or disabled/sickness

As you identify these trends, be sure to ask the group why one particular category has a concentration of these types of households.

- Is the number of female headed households in this category increasing or decreasing?
- What factors are making it worse/better? Why? (Repeat for child headed, and other categories).

Variations

1. *Change over time.* Add an additional sorting activity after these basic steps, asking the community to think back 10 years. How was the distribution of beans (households) across categories then? Why has it changed or not changed. This additional step can add very rich information and community analysis to the activity.

2. *Large groups*. If the village has been chosen as the site of a project, Participatory Wealth Ranking is a good tool to do in as large a group as possible. This will improve project-transparency as most villagers will define and help identify potential project beneficiaries through this activity.

3. *Identifying real households.* This activity can also be done using the real households in the village. Instead of using beans or counters, the facilitators can prepare a list of households (adding or eliminating households after cross-checking with the community) and pile sorting the cards based on wealth categories. This version of the activity may generate very rich discussion and reflection on mobility and economic dynamism in the community. It is best to do the activity with the largest number of participants possible to ensure an inclusive product. The facilitators will have to take extra care to mediate conflicts that may arise when using real household names on cards.

Adapted from IFAD "Gender and Poverty Targeting in Market Linkage Operations Toolkit for Eastern and Southern African Division" 2002 (IFAD 2002)

Variation 3

Reporting – Wealth & Vulnerability Ranking

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

What is a typical household?	*What is a "female headed household?"*

Overall Trends for the village (add categories as desired)

Category	Total	Trend	Drivers
Total house holds			
Total female headed homesteads			
Total child headed homesteads			

Household statistics per group (add categories and groups as desired)

	Group A	Group B	Group C	Group D	Group E
Human Capital					
Average # of children					
Average # of disabled/sick					
Average years of education (adult men)					
Average years of education (adult women)					
Physical Capital					
Type of housing					
Average acreage farmed					
Modes of transportation					
Average # cellphones					
Average # of TVs					
Average # of radios					
Social Capital					
Number of influential people					
Average # and types of groups men belong to					
	Group A	**Group B**	**Group C**	**Group D**	**Group E**
Average # and types of groups women belong to					

Financial Capital					
Main source of non agriculture income					
Types of credit accessible					
Type and frequency of selling labor					
Type and frequency of agriculture equipment rented					
Type of agriculture equipment owned					
Food Security – Natural Capital					
Average # of meals/day					
Average # months purchasing food					
Average # months food self-sufficient					
Major crops					
Types of agriculture inputs used					
Tree Nurseries					

Vulnerable Group Trends (add categories as desired)

Group A	Group B	Group C	Group D	Group E
Type:	**Type:**	**Type:**	**Type:**	**Type:**
Size of Group:	**Size of Group:**	**Size of Group:**	**Size of Group:**	**Size of Group:**
Trend:	**Trend:**	**Trend:**	**Trend:**	**Trend:**
Reasons Given:	Reasons Given:	**Reasons Given:**	**Reasons Given:**	**Reasons Given:**
Total (By Household Head)				
Male:	**Male:**	**Male:**	**Male:**	**Male:**
Female:	**Female:**	**Female:**	**Female:**	**Female:**
Child:	**Child:**	**Child:**	**Child:**	**Child:**
Elderly:	**Elderly:**	**Elderly:**	**Elderly:**	**Elderly:**

What do I need more information about? What do I need to clarify? What topics were not covered that/ still want to discuss?

Materials: •markers •Flipchart paper •counters

Perceptions of Women's Empowerment

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 1 – 1 ½ hours

Activity Preparation

- Arrange participants in a circle and clear the ground in the middle.
- Consider this question:

Are there aspects of "empowerment," for example agency, structure, relations, about which you are most interested in learning?_____

_____

How do you think women's empowerment affects your programme or project goals?

_____

Notetaker: When possible, record the thoughts and stories that are shared and not just the "dimensions of empowerment." This instruction is meant to assist the facilitator for the exercise.

Step 1 – Using your own questions or those suggested in Checklist 1, prompt the group to describe empowerment. As people discuss dimensions of empowerment, write them down in your notebook to use as criteria for the next step.

Checklist 1

- Have you ever heard of the term women empowerment?
- How do you define it?
- What is an empowered woman? In the house? In the community?
- What is a woman who is not empowered? In the house? In the community?
- Can an empowered woman and an empowered man live in the same house? Why or why not?

Step 2 – Construct a scale of 1 – 5 on the floor or on paper. The definition of empowerment is much more complex than what is represented in this scale. The purpose of this step is to assess changes in *perception* about empowerment and why.

Step 3 - Take 100 counters and explain to the group that they represent all of the women in the community. Ask a volunteer to distribute the counters along the scale to reflect how they think the women in the village are today with 1 being least empowered, 5 being most empowered.

•••	•••	••••	••••••••••••	•••••
		••••••••••	••••••••••••	•••••
		•••••••	••••••••••••	
			••••••••••••	
			••••••••••••	
1	2	3	4	5

Step 4 – Ask volunteers to redistribute the counters but this time based on how they think women in the village were 10 years ago.

Step 5 – Prompt a discussion about the outcomes. If there is a difference between today and ten years ago, ask the group to explain what has changed. Use your own questions or some of those suggested in Checklist 2.

Checklist 2

- Why have these changes occurred?
- What helped facilitate more or less empowerment for women?
- What were the biggest factors?
- How do men or women feel about the changes?
- Have these changes affected household conflicts? If so, how?
- Have these changes affected the roles that women or men play in the house? On the farm? In off-farm activities?
- Are women good farmers, now? In the past?
- Are women good at keeping livestock now? In the past?
- Are women good at making decisions about agriculture and food security now? In the past?
- Are women good at business, now? In the past?
- What assets do women have access to now? In the past?
- What assets do women own now? In the past?
- What decisions do women make now? In the past?

Variation

Using the same scale, add any of the following dimensions of agricultural work today and ten years ago, as they are relevant to your project:

- Women's access to information about new agricultural practices or technology
- Women's actual *use* of new practices or technology
- Women's ability to make decisions about their own plots
- Women's ability to make decisions about their shared/family plots
- Women's access to markets for selling their products
- Women's participation in or ownership of small business
- Women's ability to control their own income from farms

Discuss the outcomes of these votes to connect the discussion about overall empowerment and how it affects women in these aspects in particular.

Reporting – Perceptions of Women's Empowerment

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date & Session:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Local Ideas of Empowerment/Disempowerment:

Definitions of Empowerment	
Dimensions of Empowerment	(Agency)
	(Structures)
	(Relations)
Dimensions of Disempowerment	(Agency)
	(Structures)
	(Relations)

Proportional piling on scale of empowerment:

Pilings (Numbers in each category)	Notes on explanation	Notes on difference
Today	(Agency)	
	(Structure)	
	(Relations)	
Ten Years Ago	(Agency)	
	(Structure)	
	(Relations)	

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

NOTES

Climate Resilient Agriculture Module

Climate resilient agriculture includes a broad set of practices that sustainably increase productivity and resilience, reduce and/or remove greenhouse gas emissions where possible and enhances the achievement of food security and development goals.

Tools:

This module includes a group of tools that when implemented sequentially provides us with the necessary background information for designing an agriculture programme that can integrate gender, with special consideration for vulnerable groups.

Tool	Suggested Use
Village resources and use map	Two sessions – men and women A baseline understanding of the village layout, identifying resources on which people depend for their livelihoods as well as resource gaps and conflicts over resources.
Wealth and vulnerability targeting	One mixed session Social-differentiation along economic lines to identify vulnerable groups.
Livelihood systems matrix	Two sessions – men and women List of the most important on-farm and off-farm activities and their relative importance to men and women's income, consumption, food security, and household stability.
Seasonal calendar	Two sessions – men and women Annual drivers of agricultural practices, including agricultural labour roles for men and women, climate conditions, food security and resource availability.
Daily activity clock	Two sessions – men and women The different types of activities carried out by men and women in a typical day to understand current and past household and agricultural labour roles and responsibilities.

Tool	Suggested Use
Changing farming practices	Two sessions – men & women Sources for, factors of, users of, and impacts of agricultural changes and new technologies or interventions.
Venn diagrams	Two sessions – men & women Key organizations, groups and individuals working in the community and their services, networking, and community involvement.
Key informants interviews	Understanding institutional strategies and approaches for inclusion and engagement of marginalized groups.

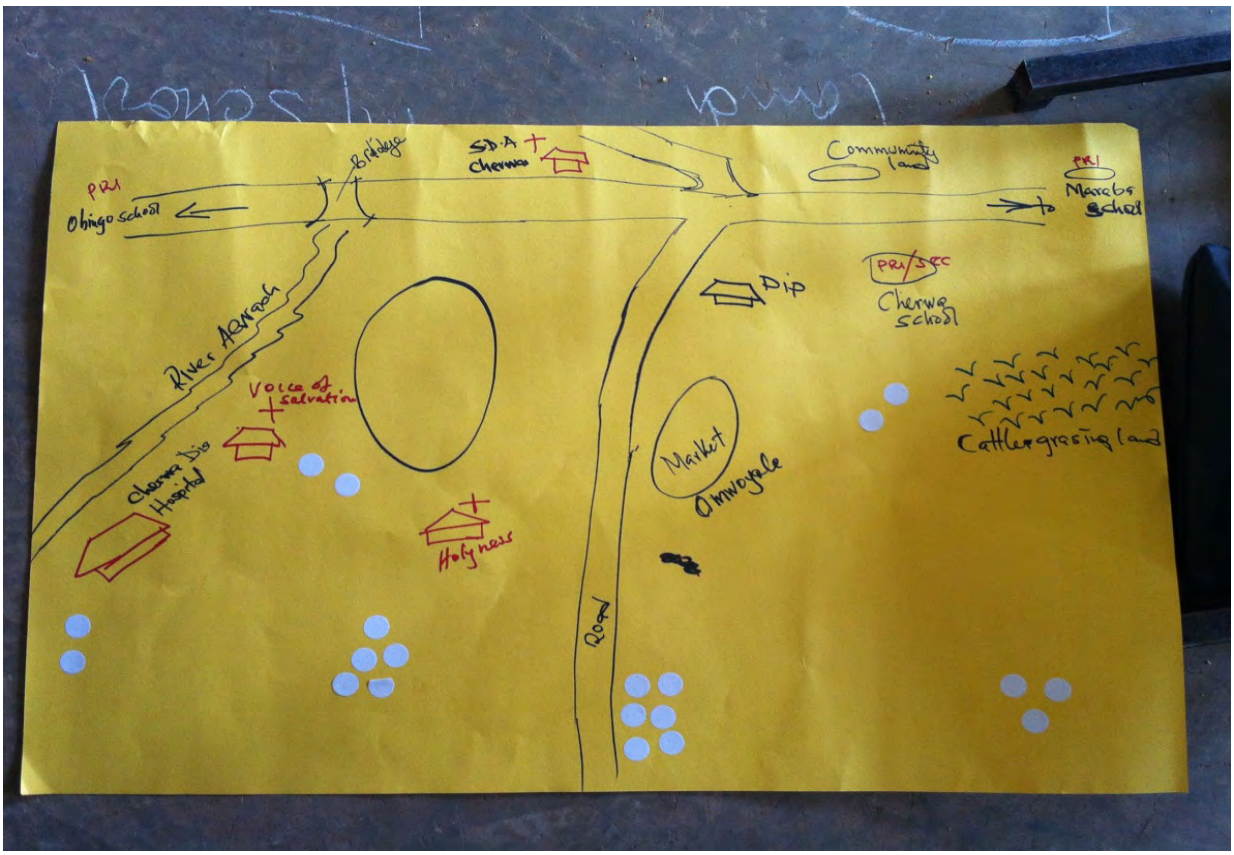
Flexibility and Use:

This module can be used independently to prepare for a climate-resilient agriculture programme, or in conjunction with any other module to prepare for a programme with multiple climate change and gender objectives. If used in conjunction with other modules, the research team should take care to plan the sequential roll-out of tools so as to avoid repetition. For example, a baseline village map developed in Module 1 can be added to Module 2 to identify livelihood resources and matched with Module 3 to identify areas of with mitigation potential. The tools in this module are designed to sequentially build on each other. However, if you already have the information generated by one or more of the tools, you can easily drop them and concentrate your time and resources on the other tools.

Materials: • Flip chart paper • Stickers • Markers • Beans or other counters • Other objects to mark landmarks • Chalk

Village Resource and Use Map

This tool can be adapted to provide baseline information about actual and perceived resources that are important to both men and women. The activity in its entirety can be found in the Co-Production of Knowledge module on page 97.



Materials: • List of households in village (optional) • 100 Counter • Markers • Flip Chart Paper • Chalk

Wealth and Vulnerability Ranking

This tool can be adapted to provide baseline information about the differences between community-defined socio-economic groups in the community. The activity in its entirety can be found in the Co-Production of Knowledge module.

Materials: • Flipchart paper • Colored Markers • Cards

Livelihood Systems Matrix

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 1 hr

Material Preparation

- Note takers should prepare their notes using these columns.

Agricultural Income	Responsibilities, decision-making and control	Marketing	Income management
Kale	Women plant kale exclusively without men's help.	Women sell in local markets without input from husbands	Women keep income and spend money on foodstuffs
…	…	…	…
…	…	…	…
Non-Agricultural Income	**Responsibilities, decision-making and control**	**Marketing management**	**Income management**
Milking	Mostly women produce milk from goats and cows, men do so as well	Men re-sell milk to local distributor	Men generally keep income, sometimes sharing with women.
…	…	…	…
…	…	…	…

Activity Preparations

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.

Facilitator: You will likely find different perceptions between men and women about responsibilities and decision-making regarding production, marketing and income. You may find that women and men sell products in spite of previous agreements in the household, or without informing their partners, during times of scarcity. It is important for the facilitator to probe with sensitivity on how men and women negotiate their roles.

NOTE: Livestock, fishery or other activities can be included in "on farm activities".

Step 1 - Introduce yourself (or team) and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 - Break the focus group into two. Ask group one to make a list of the most important on-farm income sources for women [or men, if working with men]. Ask group two to make a list of most important off-farm income sources.

Have a volunteer from the group or your co-facilitator write or draw on cards what the group comes up with as they discuss.

Step 4 – Have the group re-convene and ask a volunteer to help rank which on-farm activities generate the most income for women [or men] by arranging the cards according to most important to least.

Step 5 – Ask another volunteer to assist with ranking the off-farm activities.

Women On-Farm	Women Off-Farm
1. Maize 2. Beans 3. Milking 4. Tomatoes	1. Basket Making 2. Laundry 3. Drying small fish

Step 6 - Once you have your two lists based on the gender of you focus group, ask some of your own probing questions or use some provided in Checklist 1 for each on-farm or off-farm activity in which you are interested.

Checklist 1					
	Use	Who decides how it is used?	If sold or traded, who does it?	Who keeps income?	What/ how is income spent?
Maize 	Consumption, sold during emergency, for pigs				
Beans 					
Dry Fish 					

Step 7 – You may also choose to probe each on farm and off farm activity deeper using some of the following questions:

Checklist 2
Land Access and Use
• If a crop, where is it planted? In your home garden, on your own plot, on your husband's plot, on shared plots?
• Do you own any land either alone or jointly with someone?
• Do you own, personally (or share with others in your household), the land you farm?
• If not, how do you access land? Do you rent it from someone? Exchange labour for access? Have a communal or group plot?
• Does your husband or wife have separate plots he or she farms?
Marketing
• If the crop or product is sold, who sells it? Men, women, both, groups?
• Do spouses seek permission before selling it?
• If it is sold, who keeps the income? Men, women, shared?
• In times of emergency or hunger, is this crop or product sold for extra income? Is this done with or without the permission of your spouse?

Variations

1. *Proportional piling.* When doing ranking exercises, it is often difficult for a group to remember a long list of items to rank. To solve this you can draw a circle on the ground for each item, and label it by writing the name or drawing a picture. Then give the group a pile of 100 beans and ask them to divide the pile to show the relative importance of the items in terms of contributing to a household's food security. After discussing and counting, gather up the beans and repeat the exercise first for household income, and then women's income.

2. *Grouping.* Depending on the perceptions you are trying to gather, you may break your respondents into different types of group that address diverse gender roles. For instance, you can ask both the group of men and women the same questions, but about men's major activities.

Reporting – Livelihood Systems Matrix

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Farming systems matrix (add categories as desired)

Agricultural Income	Responsibilities, decision-making and control	Marketing	Income management
Non-Agricultural Income	**Responsibilities, decision-making and control**	**Marketing management**	**Income management**

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: • Poster paper • Colored Markers

Seasonal Calendar (Gender Roles)

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages

Time: 1-1 ½ hours

Material Preparation

- Prepare the following three posters on poster paper:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

- Are there particular crops, livestock, or fishery practices that your project is focusing on? If so, you may want to replace “most important food crop” and “most important crop bringing income” with your desired agricultural product.
- As a note taker, make sure to arrange your notes using the following headings:

Notebook view:

Steps for Maize	Roles	Method	Inputs / Tech Used
Clearing fields	Only men	By hand, burning	Hoe and machete
Applying fertilizer	Only women	From local cow manure	By hand
Buying seeds	Only men	In local agro-vet store	--

Note: Not all communities understand time or seasonality based on a 12 month calendar. Be conscious of the community's own perception of season and adjust your calendar as needed.

Activity Preparation

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.

Step 1 - Introduce yourself (the team) and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 – Explain to the group that you want to know more about women's [or men's] roles on and off the farm in a typical year. To begin the conversation, ask participants to name the main food crop they grow and consume in the household.

Step 4 - Then, ask the participants to describe all of the steps needed to produce this crop - from purchasing seeds to storing after harvest. Make sure to note any special equipment, inputs or management techniques mentioned. Note them down as a flow chart:

Crop: Maize	Who	Method	Input/Tech
Decide how much maize to grow			
↓			
Rent land		From wealthy landowners	
↓			
Clear land		Burning	By hand
↓			
Prepare land			Donkey Plough
↓			
Planting			By hand
↓			
Etcetera			

Step 5 – Referring to the steps mentioned, go through each one probing participants on *who* in the household is responsible for the work. Their labour roles may be shared or done collectively so be sure to probe on whether the labour is *mostly* the man or the woman's responsibility. This may also be a good time to ask about land ownership and access. Who owns the land on which this crop is farmed? If it is not the participants, how do they gain access to the land?

Repeat this listing for any particular crops in which you are interested.

Step 6 – Now that you have your agricultural labour roles listed by crop, shift the conversation to the calendar. Explain to your focus group that you want to discuss broadly how a typical year looks in the village by season.

Once you present the calendar to the group, it is usually easiest to start by asking about rainfall patterns and seasons. Ask participants to define which months represent a typical rainy season(s) – colour-in and labelling each month as they decide. Repeat this for other climactic or seasonal events. Refer to the checklist for suggestions.

Step 7 – Now refer back to your list of agricultural roles and responsibilities and add each step into the calendar.

Step 8 – You may also want to probe for how these various changes in labour roles or in any of the suggested topics in Checklist 1 in the last 5 or 10 years.

Checklist 1	
Weather and climate: • Rainy season • Hunger season • Flood • Extreme fog • Extreme heat • Extreme cold • Hail • Frost Add your own: • _____ • _____ • _____	**Food security & livelihood:** • Months of purchasing food • Months when households spend the most money • Special occasions affecting income (school fees, religious festivals ect.) • Months when livestock is sold • Months with most pests, disease ect. Add your own: • _____ • _____ • _____

An example calendar:

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Rainy Season												
Hunger Season												
Maize	Clearing	Preparing	Planting		Weeding 1		Weeding 2		Harvest			
Livestock			High disease								Sell for emergencies	Sold for school fees

Variations

Other dimensions that can be measured:

1. *Non-farm activities.* What are the main non-farm activities of people in the village? List the top five that earn the greatest income. Indicate the time of year when these items are made and when they are sold. Indicate who (men, women) make them and who sells them.

2. *Infrastructure* – A seasonal review of infrastructure availability and use, and related hazards.

3. *Nutrition and health* – A seasonal review of socially disaggregated human health status and hazards, which can be related to climatic and production patterns.

Reporting – Seasonal Calendar (Gender Roles)

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook : Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Insert a photo of the timeline below:

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Crops (add crops and steps as desired)

Steps	Roles	Method	Inputs / Tech Used	Period
Crop 1:				
Crop 2:				

Changes (add categories as desired)

Climate
Hungry season

Crop 1:
Crop 2:
Livestock species 1:
Livestock species 1:
Livestock species 2:
Agroforestry

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: •Flip chart paper • Stickers • Markers

Daily Activity Clocks

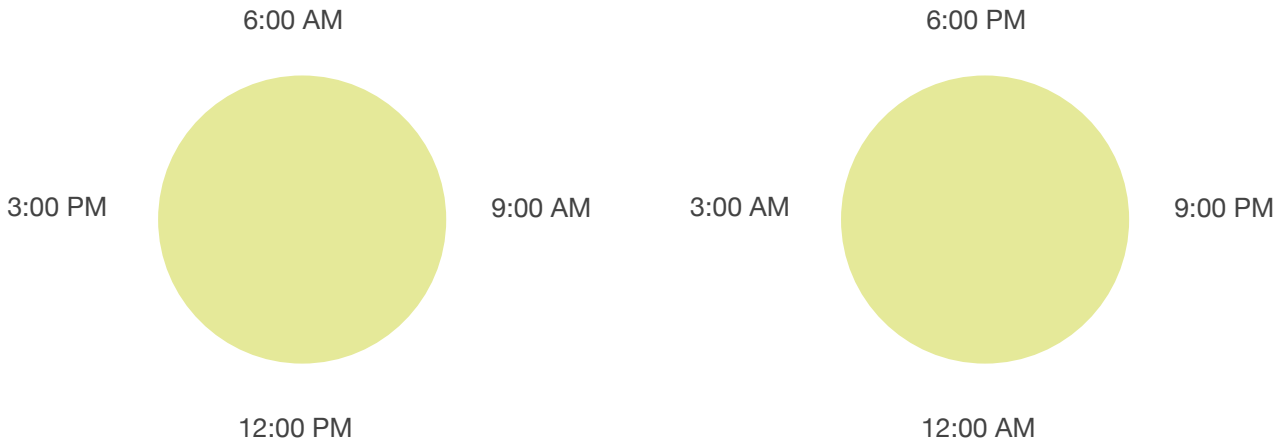
Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 30 minutes - 1 hour

Material Preparation

- Prepare two clocks, one for the day (6:00 AM to 6:0 PM) and one for the night (6:00 PM to 6:00 AM), either on poster paper or on the ground in the middle of the circle, as shown below.

Activity Preparations



- Arrange participants in a circle and clear the ground in the middle.
- Review the seasonal calendar to recall the month or time of year in which the workload is heaviest for the men or women.
- Consider these questions:

Is there a time of year in which you are most interested?_____

_____

Facilitator: Asking about the roles of the other gender, as well as if/how their roles are changing, may be effective for encouraging more discussion.

Are there certain household or agricultural labor roles about which you want to be sure to ask?_____

_____

Are you interested in recording men and women's perceptions of each other's roles as well? If so, consider making time for the variations provided.

Step 1 – Introduce yourself and the team and then the activity.

Note taker: It is more important to capture the discussion that happens throughout this exercise, than it is to capture the details from the clock about exact times of activities. Most of the data will not be shown in the visual of the clocks.

Step 2 - Ask the participants to introduce themselves, and note the name and any special information for each individual (youth, elderly, disabled, for example)

Step 3 – Begin by asking the participants to identify the month or period in which their **workload is the highest**. Explain that you want to learn what participants do in a typical day during that period.

Step 4 - Ask the group what time they wake up and the first thing they do. Let them discuss and come up with an 'average'. Draw a line from the central dot to the hour mentioned for the start of that activity, and a second line from the central dot to the hour mentioned for the end of that activity. Write or draw the activity into the pie space created.

Step 5 - Ask volunteers from the group to take over the drawing and writing, and continue showing their activities during all 24 hours of the day.

For simultaneous activities that both require significant attention for example weeding and caring for children, write them in the same piece of the circle. For activities that overlap but are not equitable in required attention, write or draw the main activity in the circle and use an arch outside of the circle for the secondary activity.

Step 6 – Use your own probing questions to discuss household and agricultural labor roles for men and women, for example, or refer to Checklist 1 for some suggested questions.

Checklist 1

- Do men have any household tasks? Cleaning? Cooking? Childcare? Fetching water?
- Do you think this is changing or will ever change?
- Have these changes affected conflicts within the household?
- Today, what are the main roles men or women ONLY have on the farm?
- What are the shared roles on the farm?
- How have these roles changed in the last ten years?
- Why have these roles changed?
- How have these changes affected conflicts within the household?
- Are these daily activities different for any certain group of men or women in the community? If so, how?
- Are these daily activities different for any certain families, for example those with multiple wives or husbands, female-led households, grandparent-led households, etc.?

Variations

You may want to divide the focus groups into smaller clusters for this activity. More variations in labour may be recorded if you choose this method, which can better represent the reality of socially differentiated groups. It can be interesting to do this exercise by livelihood group. What does a pastoralist's day look like compared to a farmers?

You can ask the group/s to perform the same exercise for a different season. You may be interested in, for example, what a group's workload looks like during a relatively labour-free part of the year.

In addition, you can ask the women's group to create a clock for the average man, and ask the men's group to create a clock for the average woman. This way you can compare at a later stage men's and women's perceptions of each other's activities.

Also try disaggregating groups by age and asking the adult men to draw a clock for adolescent boys and/or adolescent girls, or adult women to draw a clock for adolescent boys and girls. This will help you understand the importance of children's labour relative to education and household livelihood, and may give you some insight into how much leniency household decision-makers are willing to give for education.

Be creative in how you use the different spaces (pieces of pie) to visually represent information. For example, once the clock is complete give the participants a pile of 100 beans to show the activities they feel are relatively more demanding or labour intensive compared to others. Or they can show the activities they find relatively enjoyable and rewarding compared to others. Or you can ask them to place a stone or other marker to show activities during which they obtain other benefits, like sharing information with others.

Reporting – Daily Activity Clocks

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Insert photo of the daily activity clocks:

Record any key quotes, stories or testimonies collected during the session. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Season or month being represented: _____

Peak labour time/activity _____

*Slack labour time/activity*_____

Daily activities starting from the first in the day (add activities as desired)

Activity	Timing	Description	Differences between ages and socio-economic groups

Household and agricultural labor roles:

Role	Who performs it? Men? Women? Both?	Changes in role over time?	What caused these changes to occur?	What are the impacts of these changes on households?

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: •Flip chart paper • Markers

Changing Farming Practices

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 1 hr

Material Preparation

- Find a large open space and set up the ground or paper as shown below:

Categories	2014	2009
Rainy season		
Hungry season		
Crops		
Livestock		
New technologies		
ADD YOUR OWN		

- Set up your notebook as shown below to make note taking easier:

Categories of Change	2014	2009	Why	Who was Affected	Who Introduced It	Effects on the community	Trends
Rainy Seasons							
Hungry Season							
ADD YOUR OWN							
ADD YOUR OWN							
ADD YOUR OWN							

Activity Preparation

- Familiarize yourself with baseline or background data regarding changes in farming practices in the village over the last 10 years.
- Decide on the timescale to probe. It is likely that the community will be able to recall about 5 years – 10 years with relative ease.

- Consider these questions:

About which changing practices do I want to learn using this tool?_____

_____

Which categories will I include in the table to probe in-depth?_____

_____

What time scale is most applicable for my work? 5 years? 10?_____

_____

Facilitator: You can also take **2 to 3 minutes** to remind people of political parties in power, major global events to help them remember.

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves, and note the name and any special information for each individual (for example youth, elderly, disabled)

Step 3 - Warm up the participants by asking them about **disasters and environmental events** over the timescale**.** These events are easier to recall and their details are often agreed upon by most people (for example drought, famine, flood, hurricane).

The facilitator or co-facilitator should note these events on the timeline with description, detail, and year and month if possible.

Step 4 – Use your knowledge of the baseline or background data to prompt the group to talk about the major changes to the other agricultural practices in which you are interested. Note the year and the change on the timeline.

Ongoing – Use your own probing questions that arise during the session or refer to the topics and questions in Checklist 1 for more suggestions.

Note taker: The "Who Introduced It" category in your notes can also include information on innovators or early adopters of farm practices. **It is very important to note gender or other specific characteristics of people involved**.

Checklist 1	
Categories of Changes in Practice or Condition	**Example Probing Questions**
Rainy seasons (irregularity of rainfall, heat waves, cold spells..) **Drought seasons** **Hungry season** *(Plentiful season ect)* **Crops** *(hybrid? Local seeds? Intercropping? Pests?)* **Livestock** (*Diseases? New management practices?)* **Forest Products** *(fodder, fuel, tree planting)* **Non-Agricultural Income Sources** *(seasonal work, loans)* **New technologies introduced for farming**	**Changes in seasons:** • What are the rainy seasons like this year? How was it two years ago, five years ago? In the past? Why are these changes occurring? • How did these changes effect farming? • How did it affect the household? Who does it affect the most (Men, women, children)? How? • How did it affect income/costs? • How did it affect nutrition? • How did it affect physical security and safety? • How did it affect food security? • How did it affect crop yield, soil condition, water quality etc.? • Did it change relationships between husbands, wives? • Did it challenge, improve or cause tension between social groups? Men and women? Rich and poor? **Changes in new practices or technologies:** • How did you learn about this new practice? Who provided you with the information? Were women or men targeted first? Rich or poor? • Who implemented the change first, women or men? Particular households? How did it spread? • What was needed to make the change? Did you need new technology or information? How did you go about getting what you needed to make the change? • If the change required new technology, who owns the technology, women or men? Who uses it, women or men? • Did the change create any problems? For whom, women or men? • Did you face obstacles to implementing the change? What were they? Institutional, organizational, cultural or personal hindrances? • Did you keep the change in place or return to previous practices? • What is hindering you from making more changes to your farming practices to deal with the challenges you are facing? • Is the use of the technology or practice increasing or decreasing? Why?

Variation

The same exercise can be used for planning with a community. This time the very bottom of the line will represent the present, and as you move up the line you move further into the future.

Reporting – Changing Farming Practices

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker(s):
Facilitator(s):

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert a photo of the timeline below:

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Changing conditions and practices (insert additional conditions/practices and columns as needed):

Conditions and practices	Descriptions and Changes	Perceptions of why changes are occurring	Who adopted the changes - gendered aspects of access/ adoption/use/ information, etc.	Impact of changes on individuals and community
Rainy Season				
Drought Season				
…				
…				
…				
…				

What do I need more information about? What do I need to clarify? What topics were not covered that I still want to discuss?

Materials: • Colored Markers • Paper circles of different sizes (optional) • Flip Chart Paper • Chalk

Venn Diagrams

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 30 minutes-1 hr

Material Preparation

- Cut 20-25 circles out of paper in small, medium and large sizes.
- If you know different organizations working in the village, you may want to bring a small print out of logos that can be used for the activity.
- On flip chart paper, make three separate columns listing “Organizations”, “Groups” and “individuals”.
- Set up your notebook as shown below to make note taking easier:

Our area of focus:					
Organizations					
Name	Years in village	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the organization?
Groups					
Name	Years in village	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the organization?

Key Individuals				
Name	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the person?

Activity Preparation

- Arrange participants in a circle and clear the ground in the middle.
- Consider: Which organizations, groups or individuals do you know of and want to learn about in particular? _____

Facilitator: Youth groups, women's groups, agricultural associations and financing groups, are often operating in communities. If they do not come up naturally in the discussion, it might be helpful to ask about these.

Keep your list to 15 or fewer total organizations, groups and individuals to keep the exercise manageable.

Step 1 – Introduce yourself and the team and then the activity.

Step 2 – Ask the participants to introduce themselves, and note the name and any special information for each individual (youth, elderly, disabled, etc.)

Step 3 – Ask the participants to identify impactful organizations, local and external, that provide services related to your area of focus (for example projects and activities that improve agriculture). Follow up by asking for a list of organizations that are non-agricultural (finance, healthcare, women's empowerment, etc.).

Step 4 – Repeat for "Groups" and "Individuals".

Step 5 – Once list is complete, ask questions about the work of the organizations, groups and individuals in the community. Refer to Checklist 1 for potential probing questions.

Checklist 1

- What are the objectives of the organization?
- How long has the organization existed in the village?
- What has been its most successful project in the village? Why? Who benefited?
- Does it have links with outside organizations? For what purpose?
- Who are the main beneficiaries? Men, women, young, old?
- Does one group (social and/or gender) rely more on the organization than others?

TIP: To capture more information on the "flatness" or directionality of relationships between organizations and communities, arrows can be drawn between circles indicating the flow of information.

Step 6 - Repeat for the "Groups" and "Individual" categories as applies.

Step 7 - Explain to the group that through discussion you will transfer all of the organizations, groups and individuals on to circles. The participants should decide which list item deserves a small, medium, or large circle to represent its relative importance to your area of focus (e.g. improved agriculture).

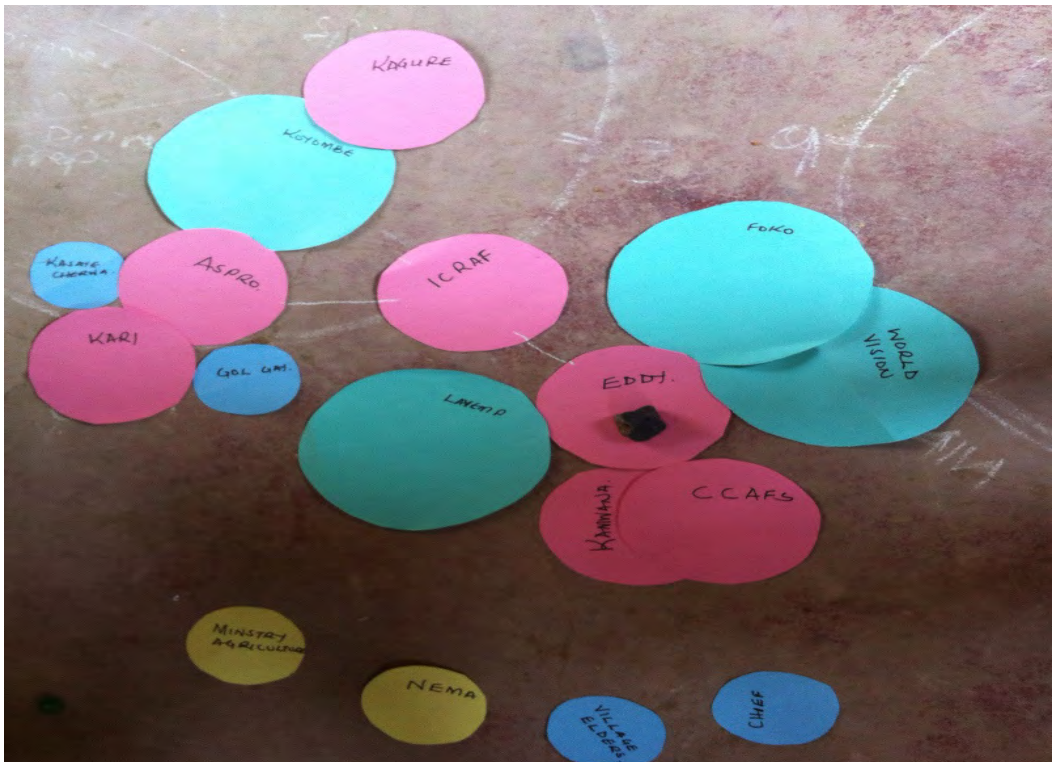
Step 8 - Ask the participants if the organizations work together or have overlapping memberships. The circles should be placed as follows:

	= no contact
	= information passes between organizations
	= some co-operation in decision-making, planning and/or implementation
	= a lot of co-operation in decision-making, planning and/or implementation

Note taker: No need to be as concerned with recording the details of the diagram. Focus on recording the discussions that are had and the stories that are told. The diagram should always be captured with a picture to reduce the burden on the note taker.

Step 9 - Deepen the discussion with probing questions. Some suggested questions can be found in Checklist 2.

Checklist 2	
Topics	**Suggested Questions**
Gender *(management roles, participation)* **Information** *(access, sources, uses)* **Social inclusion** *(not just of gender, elderly, marginalized groups, youth)*	• Who holds decision-making roles in the organization? • Does the organization have both men and women participating? If so, in what ways are they participating? • Do women provide input in this organization? If so, how do the men react to it? • Does the organization work specifically with women in agriculture or natural resources management? • Does the organization provide information on farming practices? If yes, what is the nature of this information? • Who accesses the information provided by the organization? Men? Women? How they access it? • Are the specific needs of young and elderly people taken into account by the institution? If so, how? • Are there specific needs of marginalized groups for example ethnically, financially, socially marginalized, taken into account by the institution? If so, how?



Variations

Elements can be added to Venn Diagrams to represent more information than simply the importance of an organization and the degree of its relationship with other organizations. For example:

1. Lines can be added to create a network diagram that shows formal relationships for instance organizations that meet once a month to discuss and plan for food security in the village. Different types of lines (dotted, dashed, solid) or different colors can be used for different networks.

2. Arrows can be added to show the direction of information flow about your area of focus within the network. The usefulness of information can be indicated by the strength of the arrow (indicated by its thickness), or the frequency of communication.

3. Different colored circles can be used to indicate perceptions regarding groups of organizations. For example, green can be used to indicate organizations that the participants perceive to be friendly and easy to work with, while red is used for those that use too much scientific language or that do not seem to respect farmers.

4. Try doing this exercise with key informants from the organizations themselves so that you gain an idea of how the perceptions of research/development workers correspond to the perceptions of community members.

Reporting – Venn Diagrams

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Insert photo of Venn Diagram here:

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Actors in area of focus (insert additional names as needed)

Our area of focus:					
Organizations					
Name	Years in village	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the organization?
Groups					
Name	Years in village	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the organization?

Key Individuals				
Name	Activities in village	Greatest perceived benefit	Conflicts?	Who relies most on the person?

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: • Colored Markers • Paper circles of different sizes (optional) • Flip Chart Paper • Chalk

Key Informant Interviews

Participants: Identify one or two people involved in each organization's activities (preferably one man and one women).

Time: 20-45 mins

Activity Preparation

- Review the Venn Diagram and Changing Farming Practices Timeline results and identify the organizations that intervene with the target community in which you are interested in learning.
- Review any other organizational or institutional profiles that have already been completed in the target region, such as the CCAFS Organizational Baseline Survey.
- Make a list of organizations below about which you would like to learn, including community based organizations (CBOs), farmer groups, local women's groups, farmer associations, local NGOs, international organizations, civil society groups, local government, extension services, etc.
- Contact the organizations and make appointments for interviews.

Step 1 - Welcome the project staff member and introduce the research team and the objective of the exercise.

Your introduction can look like this:

"Thank you for participating in this interview. We are interested in learning more about the kinds of new agricultural practices that have been taken up by men and women, and how and why these changes have come about. We would like to hear about your project or the activity in which you are involved, by asking some questions that focus on the approaches, strategies and institutional arrangements you employ to share the benefits of your interventions."

Step 2 Organizational profile - Focus first on the organization itself. You are not trying to get all the details of their projects, but rather to 'tease out' lessons regarding strategies, approaches, rules, etc. that are being employed (or not) to enhance low-income men and women's participation in, and benefits from, such initiatives. Refer to Checklist 1 for some suggested questions.

Checklist 1

- What kind of organization (e.g. CBO, NGO, public, etc.) is yours and at what level does it work (e.g. local, national, regional, international, etc.)?
- What is the purpose or focus of your organization?
- How long has it been working in the target community?
- What kinds of people in the community does your organization target? Who has access to the services provided by the organization? Do young and elderly people have access to the services? Does one group in the community rely more on the organization than others?
- What is the relative importance of climate change in the portfolio of your organization?
- What are your organization's objectives in terms of supporting climate-resilient agriculture?
- What has the organization encouraged related to climate change mitigation and/or adaptation?
- What is the organization doing well?
- What do you do in areas of climate-resilience from which others can learn?
- Are there any areas for potential expansion of climate related activities that your organization is not able to currently support?
- Considering all the organizations that are working in the target community, what do you see are areas for potential expansion?
- Which organizations are linked with yours? How? For what purpose?

Step 3 Climate-resilient agriculture activities - Next focus on the organization's activities in your target community that promote climate-resilient agriculture. You can use the following SEAGA guiding questions from Checklist 2.

Checklist 2
• What types of improved agricultural practices are being implemented? • Who is participating in the project? Approximate percentage of men and approximate percentage women? Approximate percentage of youth and elderly? • How do they participate? (for example as individuals, within groups)? • How are benefits shared? • In what roles do women farmers participate? Are women involved in the leadership structure or decision making? • Do women face certain constraints to joining the project compared to men? If so, what are they? • What interventions benefit more women compared to men? Vice versa? What, if any, approaches have you used to work toward equitable benefit sharing? • What kinds of strategies and approaches have you used to encourage inclusive participation? (e.g. of low-income men and women, youth, other marginalized groups) • What, if any, strategies have you employed to encourage marginalized groups to adopt improved agricultural and natural resource management practices?

Step 4 - Give your interviewee the opportunity to ask anything, add anything, make clarifications, or make either specific or general comments on the study issues. Thank them for coming and explain that you are excited about the information they provided.

Reporting – Key Informant Interviews

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group (Organization, CBO, name):
Interviewee (Name & Role):
Date&Session:
Note Taker:
Interviewer:

Data Notebook: Insert your full transcript from the interview before moving forward. Work as a research team to record the exact words and phrases used by the interviewees.

Provide any observations or thoughts you have about the interview in general. What biases do you think affected the interview and in what way(s)? How do you think this is reflected in your data?

NOTES

Climate Information Services Module

Climate information is the relevant information for adaptation to climate change, long-term planning and early warning systems. This module hopes to identify and understand available and potential sources of weather and climate-related information in a community, how this information is disseminated, and how beliefs, access and use have changed over time. There are also tools to help evaluate national weather and seasonal forecasts in terms of understanding and use.

Tools:

This module includes a group of tools that when implemented sequentially provides us with the necessary background information for designing an agriculture programme that can integrate gender, with special consideration for vulnerable groups.

Tool	Suggested Use
Climate information ranking	Two sessions – men and women Assess different sources (both individuals and organizations) of weather and climate-related information and their credibility, legitimacy and salience.
Information networks game	Two sessions – men and women Creating profiles of access and control over information channels.
Scientific forecasting	Two sessions – men and women This questionnaire assesses levels of understanding and use of existing weather and seasonal forecasts.
Key informant interviews	Understanding institutional strategies and approaches for inclusion and engagement of marginalized groups.

Flexibility and Use:

This module can be used independently to prepare for a climate-resilient agriculture programme, or in conjunction with any other module to prepare for a programme with multiple climate change and gender objectives. If used in conjunction with other modules, the research team should take care to plan the sequential roll-out of tools so as to avoid repetition. For example, a baseline village map developed in Module 1 can be added to Module 2 to identify livelihood resources and matched with Module 3 to identify areas of with mitigation potential. The tools in this module are designed to sequentially build on each other. However, if you already have the information generated by one or more of the tools, you can easily drop them and concentrate your time and resources on the other tools.

Materials: • Poster Paper • Markers • Counters

Climate Information Ranking

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 1 hr

Material Preparation

- Review the concepts of **weather, climate and probability.**

As a facilitator being very clear about the difference between weather and climate is important before discussing forecasting with your focus group. It may also be the case that you ask the focus group to define weather first! Many languages do not have a word for "weather" but refer to rains or wet and dry seasons. Weather in general refers to short term conditions such as rainfall, temperature, humidity, wind, floods, hail etcetera. A *weather prediction* therefore is about rainfall, temperature, humidity, moisture in the next **1 - 10 days**. Climate generally refers to the average patterns in weather that exists in a region over time.

Forecasts issued by the National Weather Service often use a "PoP" (probability of precipitation) statement, which is often expressed as the "chance of rain". If there is 40% chance of rain predicted in x Province, it means that the forecasters are 40% **'confident'** that it will rain. That also means that forecasters are 60% **'confident'** that it will *not* rain.

- Be sensitive to local belief systems.

Anticipate this activity to bring forth **traditional knowledge** and practices of anticipating weather. There may include natural signs, myths and beliefs, or stories that have been passed down which may shape local understandings of weather and climate. Interviewers may encounter a lack of response around traditional sources initially for a number of reasons. For example:

- The information is exclusive to certain groups/ages
- The information is considered sacred/secretive
- The information is considered "backward"
- The information is in conflict with a particular identity

Changing attitudes around the validity, value or use of these beliefs should be noted and probed further if appropriate.

- Reflect on the specific climate and weather information sources that your project is interested in. What are these? _____

  _____

- If you have identified specific information sources for your project, you may choose to use them in the ranking exercise purposefully to assess perceptions of their "Credibility" and "Salience" (Step 6-8)

Activity Prep

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.

Note takers must be very aware of climate versus weather information. Focus group participants may often mix the two types of information together, but be aware to note the differences in your reporting sheets as well as in your notebook.

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 – What is probability? We recommend warming up the focus group by discussing local concepts of "probability". You may find that the local concept challenges scientific forecasting. This opening discussion may prompt rich information on trust, myth, religion and science as well as shifting cultural beliefs due to increased variability of weather from climate change.

Checklist 1
Is there a local word or concept for probability? **(*We suggest using the English term first so as not to pre-define the concept.)**
Can anyone explain what probability is? (not just in terms of weather)
Can anyone think of a time where they made a decision based on high or low probability of something happening?
Has anyone made such decisions based on probabilities related to the weather?

Step 4 – Now that you have defined probability, begin a discussion on weather information and climate information. Make a list of the different sources of **weather** information (short-term weather) community members use then probe each source using some of the questions from Checklist 2.

Step 5 – Repeat this for climate information (long term patterns or seasonal information, particularly related to agricultural practices).

Checklist 2
What are different sources of weather (or climate) information in this community?
Who produced that information?
What specifically did you learn last time you went to the source?
What did you do based on that information?
Who made the decision to act? Husband, wife, girls, boys? What happened?
Has your opinion on the type of information you used changed over time? Why?

Step 6 – Once your list of weather and separate list of climate information sources have been made, begin a proportional piling activity.

Starting with weather information sources, draw or write each major source on the ground or on paper, drawing a circle around each source. Distribute 100 beans or counters in the middle and ask the group which source they think is the most "credible". Sometimes this can be described as the source that is most "trusted".

Once the focus group has finished their proportionally piling, ask probing questions on why they piled the way they did. You can use questions like those in Checklist 1 if you choose.

Step 7 – Continuing with weather information sources only, ask the group to proportionally pile once more, based on which source is the most "salient".

Just because a certain source is trusted, or recognized as credible, doesn't mean that it is the most 'salient'. Salient information is information that is actually relevant to farmer's needs. Does the source of information give them valuable information that they are able to use? Or is it badly timed, on crops and practices that farmers are not interested in, too expensive for farmers to implement etcetera. These are all factors that affect an information source's "salience".

Ask probing questions to understand the rankings based on salience.

Step 8 – Repeat this process for climate information sources.

Checklist 3
‘Why is this information more useful than the others?’
‘What is it about this information that makes it less relevant to your needs?’
‘Why is there such a big gap in the levels of trust you have for the information from these sources compared to the others?’

Reporting – Climate Information Ranking

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Weather forecasting sources:

Source	Weather info.	Who produced it	Actions resulting	Decision-making on actions	Changes on use

Proportional piling for weather forecasting session:

Sources	Counters for legitimacy (trust)	Counters for credibility (usefulness)	Counters for salience (how needed info is)

Legitimacy of Sources:

Source 1	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Source 2	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Weather forecasting sources:

Source	Weather info.	Who produced it	Actions resulting	Decision-making on actions	Changes on use

Proportional piling for weather forecasting session:

Sources	Counters for legitimacy (trust)	Counters for credibility (usefulness)	Counters for salience (how needed info is)

Legitimacy of Sources:

Source 1	Narratives on legitimacy
	Narratives on credibility
	Narratives on salience

Source 2	Narratives onl egitimacy
	Narratives on credibility
	Narratives on salience

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: • Flip Chart Paper • Markers

Information Flow Map

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 1 hr – 1 1/2 hrs

Activity Preparation

- What sort of information will your project aim to communicate? _____
- Who (men, women, youth, most marginalized, landless?) will your project seek to focus on?

  _____
- Based on your project's audience and needs, you and your team should prepare 1 or 2 specific scenarios to map with the community.

Sample Scenarios:

Information type: Long-term seasonal information	**Scenario statement:** "The national metreological service predicts a very long dry period this season."
Information type: Information targeting women of child-bearing age.	**Scenario statement:** "The health clinic will hold a workshop on nutrition, child and maternal health."
Information type: Specialized, time sensitive information	**Scenario statement:** "Oh no! A new disease is affecting livestock. Farmers will need to vaccinate livestock."
Information type: Agricultural extension information	**Scenario statement:** "There is a new short maturing variety of seed available for farmers."
Make your own _____	Make your own _____

- Arrange participants in a circle.
- Clear the ground so that a large area can be seen and used by all.

Facilitator Notes:
Go through one scenario at a time, starting with one "starting point" at a time. If "radio" is one starting point, map radios before moving on to "NGO meeting" or "newspaper".

Also, It is very important to understand WHO - men, women, children, wealthy men or poor women, gets information and when. Make sure to show how different actors overlap. If women are contacted first, and then re-occur as information sharers or recipients later, make sure to loop your lines back to women every time they come up.

Step 1 - Introduce yourself (or team) and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (for example youth, elderly, disabled)

Step 3 – Explain that you will be playing a game to understand how news travels through the village.

Begin by reading out your scenario statement, and then, consider prompting a discussion by first asking, "How does this information enter a community?" Then, "From that starting point, how does the information flow between different people?" and so on.

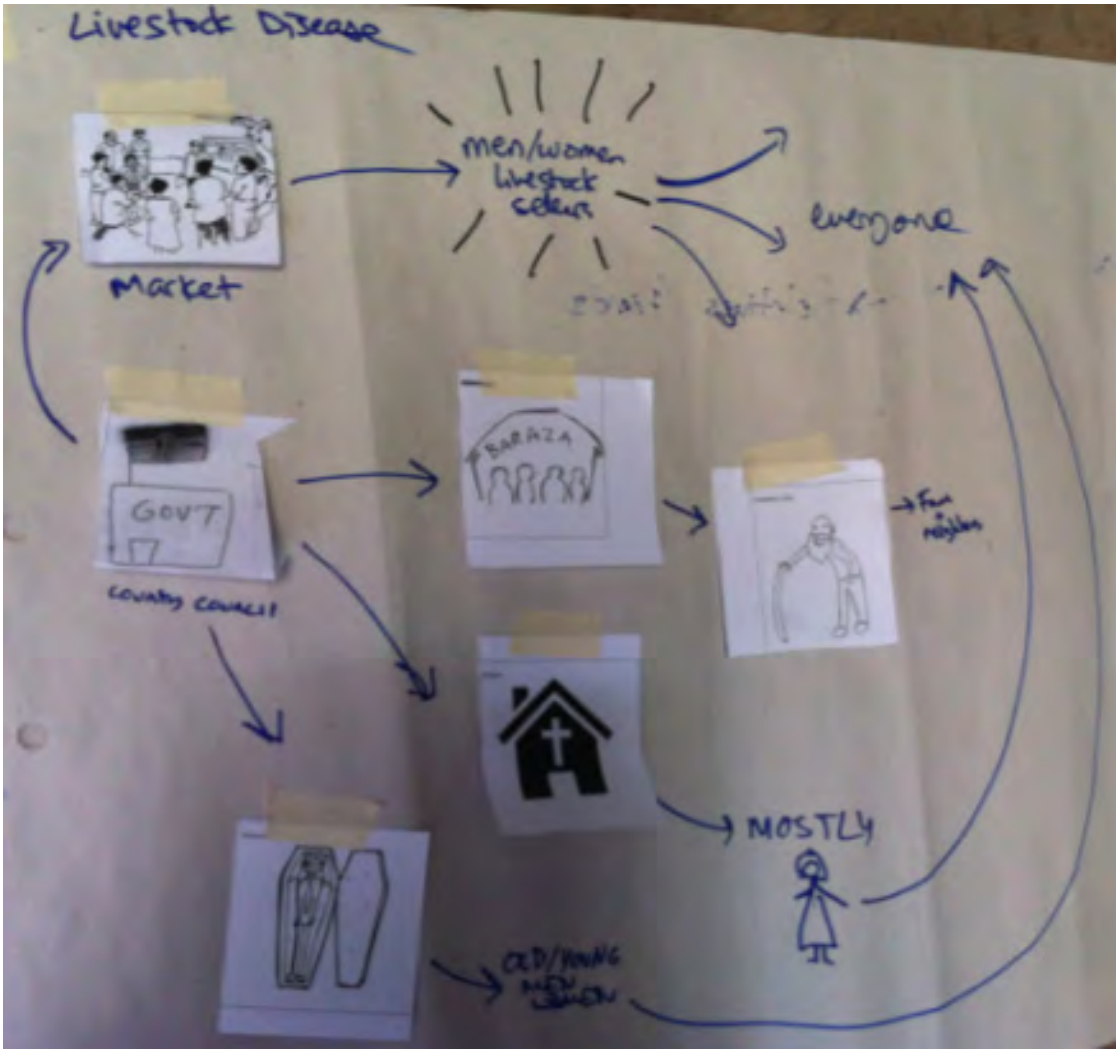
Step 4 - As you are discussing each scenario, draw a map of all the actors, technologies, places and meetings involved.

Each scenario should be mapped on its own poster

TIP: It is important to capture the information being discussed as a picture of a network. We often think of information flow as being linear, either from a source at the 'top' to recipients at the 'bottom', or up and down in the form of a feedback loop. But in a community, information most often travels through a network of places and people as nodes in that network. By visualizing that network, facilitators and participants can see how rich and complex it is, and who helps spread information and why.

Note takers:

There will be a plethora of information gathered during this game outside the parameters of the questions posed. Note down information such as perception, use and access to information specific to different social groups in additional columns as needed.



Step 5 - After reading out your scenarios, present your map back to the focus group. Use your own probing questions or those provided in Checklist 1 for more information of interest.

Checklist 1
• Who first hears about it (men, women, wealthy, poor?), why? • Are women the first ones to receive information? Why or why not? • Who or what group in the village is usually left or hears last about this information? Why? • In your opinion, is access to important information equal or unequal between different people in the village? Why or why not? • If it is unequal, how can it be improved?

Step 6 – If your project is focusing on specific technologies or platforms for information sharing, consider using the questions in Checklist 2 to better understand issues of information access, use and control.

Checklist 2	
	Technology:
Access	• Who has access to this technology? Who does not? Why?
Control	• Who owns it? Is it shared? Who does not own it? Why?
Use	• Do [men/women/youth] need permission to use it? From who? Are there those who are not allowed to use it? Who? Why? • How often do [men/women/youth] use it? Why? • Is it easy or difficult to use? Why?
	Meetings / Platforms:
	• Who attends meetings? Who does not? Why? • Do [men/women/youth] need permission to attend? Can they go alone? Are there those who are not allowed to attend? Why? • Is it easy or difficult to attend? Why? • If you attend, do you get to speak or contribute to discussion?

Reporting – Information Flow Map

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert photograph of Scenario 1

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Information flows:

Scenario 1	Who are the primary receivers?	Who does not hear or hears last and why?	Suggestions on improving access
Scenario 2			
Scenario 3			
Scenario 4			
Scenario 5			

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Materials: • Notebook • Recording, printed or copy of current scientific weather and climate forecast used in the community

Scientific Forecasting

Time: 1– 2hrs

Step 1 - Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves and note the name and any special information for each individual (youth, elderly, disabled etcetera)

Step 3 – Explain to the group you want to understand if people have ever used weather forecasts. Show the group an example of scientific forecast that is currently used in the community.

Ask them the following questions:

1. Have you ever seen or heard a forecast like this?	
If yes: 2. Where do you listen/see the forecast? Who made it? When and how often do you listen/read it? 3. Do you share the information with anyone? When, where? How often? (It is more productive to ask about a specific instance rather than "in general', for example, "The last time you used this forecast, who did you share it with? When? How often?") 4. What would make the forecast more trustworthy? 5. Would it make a difference if you received a daily forecast by radio, TV, mobile phone and/or newspaper? Why or why not?	If no: 2. Now that you have seen what a weather forecast can look like (or heard what it can sounds like), would you want to receive this? Why or why not?

Reporting

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. Work as a research team to record the exact words and phrases used by the participants in the session.

Insert the scientific **forecast** presented and note down any additional information provided by participants regarding the weather forecast session not captured in the table above.

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Reporting for daily weather forecast discussion

Participants who use scientific forecasts	Participants who do not use scientific forecasts
Who uses this forecast?	Who does not use this forecast?
	Would they like to receive forecasts? Why or why not?
Who produced the forecast they use?	
Where and how often do they use this forecast?	
Who do they share it with?	
What factors allow them to trust or not trust this forecast?	
How can trust be improved?	
Preferred channels and factors for preference.	

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other tools? What topics were not covered that I still want to discuss?

Key Informant Interviews

Participants: Identify one or two people involved in each organization's activities (preferably one man and one women).

Time: 20-45 mins

Activity Preparation

- Review the Venn Diagram and Changing Farming Practices Timeline results and identify the organizations that intervene with the target community in which you are interested in learning.
- Review any other organizational or institutional profiles that have already been completed in the target region, such as the CCAFS Organizational Baseline Survey.
- Make a list of organizations below about which you would like to learn, including community based organizations (CBOs), farmer groups, local women's groups, farmer associations, local NGOs, international organizations, civil society groups, local government and extension services

_____

_____

- Contact the organizations and make appointments for interviews.

Step 1 - Welcome the project staff member and introduce the research team and the objective of the exercise.

> Your introduction can look like this:
>
> "Thank you for participating in this interview. We are interested in learning more about the kinds of new agricultural practices that have been taken up by men and women, and how and why these changes have come about. We would like to hear about your project or the activity in which you are involved, by asking some questions that focus on the approaches, strategies and institutional arrangements you employ to share the benefits of your interventions."

Step 2 Organizational Profile - Focus first on the organization itself. You are not trying to get all the details of their projects, but rather to 'tease out' lessons regarding strategies, approaches, rules, etc. that are being employed (or not) to enhance low-income men and women's participation in, and benefits from, such initiatives. Refer to Checklist 1 for some suggested questions.

Checklist 1
• What kind of organization (e.g. CBO, NGO, public, etc.) is yours and at what level does it work (local, national, regional, international)?
• What is the purpose or focus of your organization?
• How long has it been working in the target community?
• What kinds of people in the community does your organization target? Who has access to the services provided by the organization? Do young and elderly people have access to the services? Does one group in the community rely more on the organization than others?
• What is the relative importance of climate change in the portfolio of your organization?
• What are your organization's objectives in terms of supporting climate-resilient agriculture?
• What has the organization encouraged related to climate change mitigation and/or adaptation?
• What is the organization doing well?
• What do you do in areas of climate-resilience from which others can learn?
• Are there any areas for potential expansion of climate related activities that your organization is not able to currently support?
• Considering all the organizations that are working in the target community, what do you see are areas for potential expansion?
• Which organizations are linked with yours? How? For what purpose?

Step 3 Climate-resilient agriculture activities - Next focus on the organization's activities in your target community that promote climate-resilient agriculture. You can use the following SEAGA (CCAFS-FAO 2012) guiding questions from Checklist 2.

Checklist 2
• What types of improved agricultural practices are being implemented? • Who is participating in the project? Approximate percentage of men and approximate percentage women? Approximate percentage of youth and elderly? • How do they participate? (for example as individuals, within groups)? • How are benefits shared? • In what roles do women farmers participate? Are women involved in the leadership structure or decision making? • Do women face certain constraints to joining the project compared to men? If so, what are they? • What interventions benefit more women compared to men? Vice versa? What, if any, approaches have you used to work toward equitable benefit sharing? • What kinds of strategies and approaches have you used to encourage inclusive participation? (for example of low-income men and women, youth, other marginalized groups) • What, if any, strategies have you employed to encourage marginalized groups to adopt improved agricultural and natural resource management practices?

Step 4 - Give your interviewee the opportunity to ask anything, add anything, make clarifications, or make either specific or general comments on the study issues. Thank them for coming and explain that you are excited about the information they provided.

Reporting – Key Informant Interviews

NOTE: When possible, complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group (Organization, CBO, etc.):
Interviewee (Name & Role):
Date:
Note Taker:
Interviewer:

Data Notebook: Insert your full transcript from the interview before moving forward. Work as a research team to record the exact words and phrases used by the interviewees.

Provide any observations or thoughts you have about the interview in general. What biases do you think affected the interview and in what way(s)? How do you think this is reflected in your data?

NOTES

Mitigation Module

Mitigation of climate change involves reducing Green House Gas emissions and/or enhancing the capacity of 'sinks' for GHGs, for the ultimate purpose of stabilising their concentration in the atmosphere; aims to reduce global *exposure* to the effects of climate change (SPC 2011). Tools in this module can be used to identify existing agricultural practices addressing climate vulnerability in order to improve co-benefits and mitigation impacts. They can also help better understand social cohesion and equity on a community level for implementing mitigation projects and benefits sharing.

Tools:

This module includes a group of tools that when implemented sequentially provides us with the necessary background information for designing an agriculture program that can integrate gender, with special consideration for vulnerable groups.

Tool	Suggested Use
Changing farming practices timeline	Two sessions – men and women Identification of mitigation & adaptive practices along with key actors and target beneficiaries.
Co-Benefit analysis	Two sessions – men and women Understand potential community incentives for and challenges to adopting proposed mitigation projects.

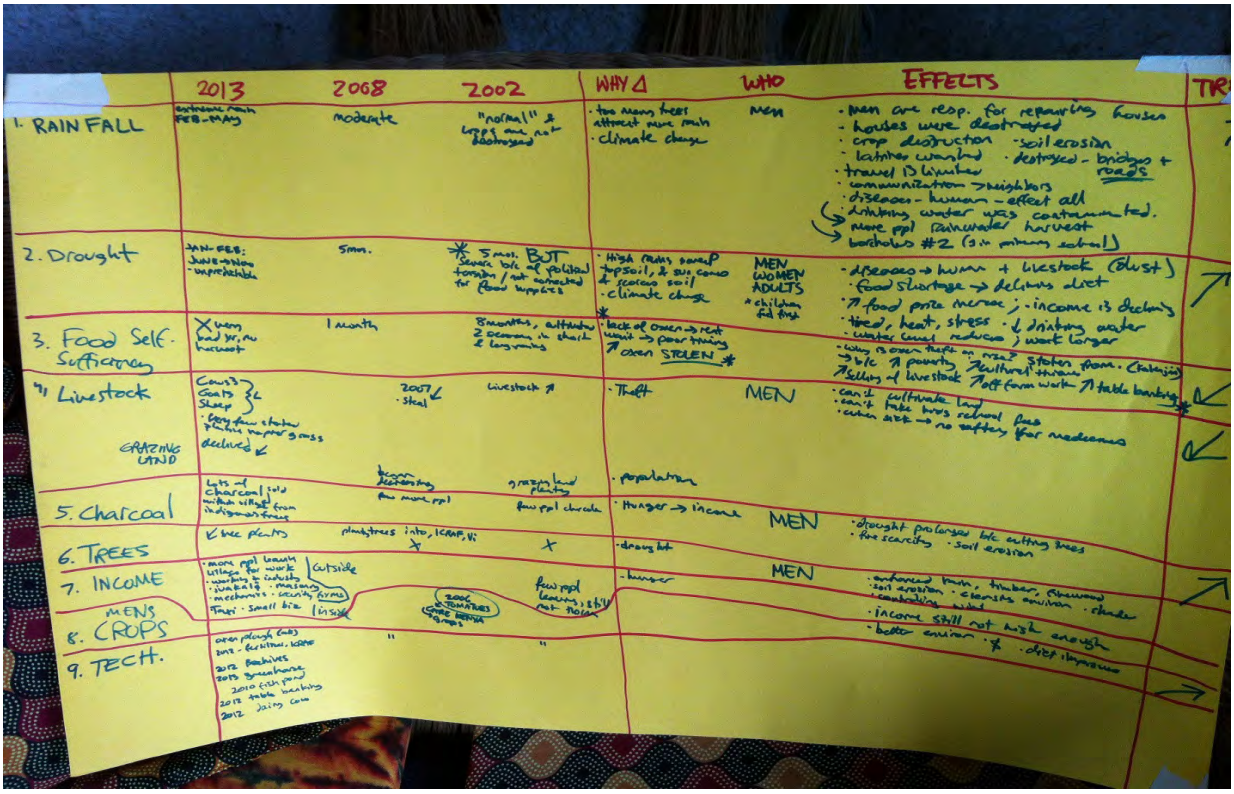
Flexibility and Use:

This module can be used independently to prepare for a climate-resilient agriculture programme, or in conjunction with any other module to prepare for a programme with multiple climate change and gender objectives. If used in conjunction with other modules, the research team should take care to plan the sequential roll-out of tools so as to avoid repetition. For example, a baseline village map developed in Module 1 can be added to Module 2 to identify livelihood resources and matched with Module 3 to identify areas of with mitigation potential. The tools in this module are designed to sequentially build on each other. However, if you already have the information generated by one or more of the tools, you can easily drop them and concentrate your time and resources on the other tools.

Materials: • Flip chart paper • Markers

Changing Farming Practices Timeline

This tool can be adapted to probe specifically for information about new practices in the community already support increased carbon sequestration and mitigation. The activity in its entirety can be found in the Co-Production of Knowledge module.



Materials: • Flip chart paper • Markers • Counters or beans

Co-Benefit Analysis

Participants: Separate groups of men and women [8-10] of mixed socio-economic status and ages.

Time: 30 mins - 1 hr

Material Preparation

- Set up your notebook as shown below to make note taking easier:

Practice:		
Benefits ***(included number from piling!):***	*Burdens* ***(included number from piling!):***	*Discussion Notes:*

Activity Preparation

- Arrange participants in a circle and clear the ground in the middle.
- Review the list of current agricultural practices that you already know or that you recorded during the Changing Farming Practices Timeline.
- Consider these questions:

About which practices or interventions do I want to probe?

_____

Do you want to ask men and women about the same topics or different ones? If different, record which practices you will ask the men and women's groups about. _____

_____

NOTE: This exercise is very flexible and can be used to assess particular interventions as well.

Note taker: Remember to note down as much as you can of the discussions that the group members have as they decide upon the benefits, burdens and rankings of the practices. The lists of benefits and burdens and the ranking are not as important as the explanations and stories that explain why.

TIP: You may want to do a separate chart for agricultural benefits/burden and non-agricultural benefits/burden.

Step 1 – Introduce yourself and the team and then the activity.

Step 2 - Ask the participants to introduce themselves, and note the name and any special information for each individual (youth, elderly, disabled, etc.)

Step 3 – Begin the discussion by asking about one agricultural or non-agricultural change that is of interest to you. Probe the focus group to understand the different benefits and burdens from each practice.

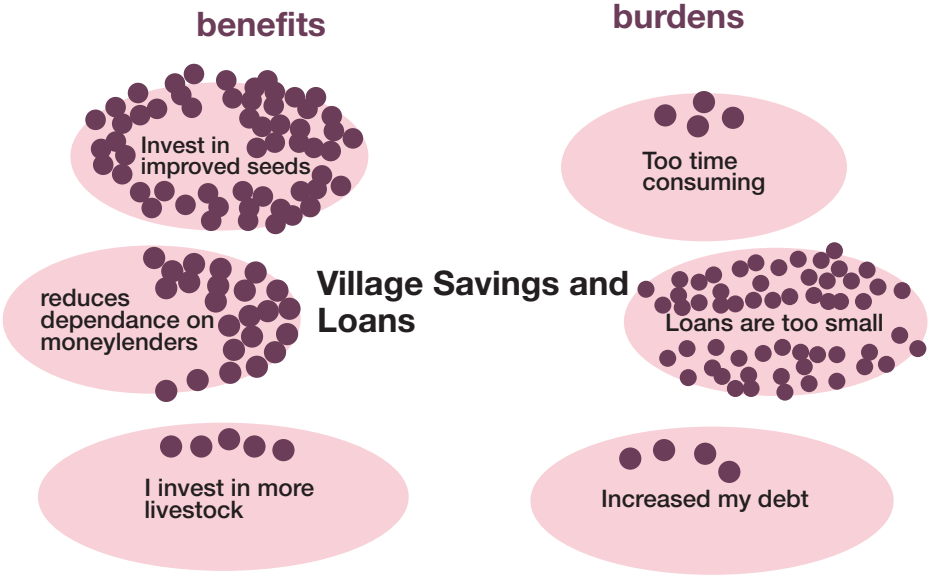
Step 4 - Once lists of benefits and constraints have been noted, ask a volunteer to list or draw them out on many sheets of paper or on a large poster.

Step 5 – Take 100 counters or beans and explain that they represent all of the men or women (depending on the disaggregated group). Ask a volunteer to distribute the counters between the benefits from the practice first. Encourage the group to work together to create a distribution upon which they agree.

Step 6 – Repeat this step but for the burdens of adopting the practice. Discuss the results as a group to gain more insight about the perceptions of the benefits and burdens.

Step 7 – Follow the same process for each practice of interest. Record the benefits, burdens and discussion notes for each practice.

Ongoing - Use your own probing questions that arise during the session or refer to the topics and questions in Checklist 1 for more suggestions



Checklist 1	
Categories of effects and requirements for practices	Example probing questions
Resources (soil, water, forest, land) Labor, time and tools Knowledge and skills Health and nutrition Income and expenses Access and information	Agricultural Practices: • How does this activity affect soil quality? • How does this activity affect water sources? • How does this activity affect forest resources? • How does this activity affect crop diversity? • How does this activity relate to land tenure? Is land required? Rented? Shared in common? Privately owned? • Who has control over land? Who has access to land? How does those who do not own land gain access to it? • How is the burden of labor for this activity shared? Who does most of the work? Is it done in a group? • Does this activity require buying or renting of equipment? Can all groups or individuals in the village afford the equipment? If not, how is it shared? Who cannot afford it? • Are there seasonal or time constraints associated with the equipment? Who operates the equipment? Who rents it? Agricultural and Non-Agricultural Practices: • How time consuming is this activity? How does it affect amount of labour for men? For women? For children? • Is there special knowledge required to do this activity? Who holds this knowledge? Who does not? • How does this activity effect household food security or consumption? • Does this activity have any nutritional benefits? Who makes the decision to invest in nutrition? Who in the family does it benefit the most in terms of nutrition? • How does this activity affect overall family income? Who keeps the income? Is it shared? • Is the income from this activity channelled into long-term investments like education, businesses, loan repayment? Who makes the decision to invest? Who benefits most? • How is information shared within a group or household engaged in this activity or among individuals? • Are there small businesses that have grown from this activity? Do men, women or children run these businesses? Are there associations that run the business? Is the membership of associations mostly men, women? How are decisions made in associations? How are benefits shared?

Reporting – Co-Benefit Analysis

NOTE: Complete this form with the entire research team—facilitator(s), co-facilitator(s), note taker(s), and anyone else who participated in some way—to produce a more complete report of the session for your database.

Venue:
Group:
Date:
Note Taker:
Facilitators:

Focus group discussion members (insert number of participants, add categories as desired)

Men	
Women	
Youth	
Elderly	
Disabled	

Data Notebook: Insert your full transcript from the session before moving forward. ***Work as a research team to record the exact words and phrases used by the participants in the session.***

Provide any observations or thoughts you have about the session in general. What biases do you think affected the session and in what way(s)? How do you think this is reflected in your data?

Proportional pilings (relative importance):

Practice:		
Benefits ***(included number from piling!):***	*Burdens* ***(included number from piling!):***	*Discussion Notes:*

Practice:		
Benefits ***(included number from piling!):***	*Burdens* ***(included number from piling!):***	*Discussion Notes:*

What do I need more information about? What do I need to clarify? What information gathered supports or disputes information gathered with other sessions? What topics were not covered that I still want to discuss?

NOTES

Analysis

This manual is intended to provide you with PAR tools and techniques to collect quality data that is pertinent to gender-sensitive climate change projects, programmes and research. This manual is not focused on guiding data analysis because this process can be very different depending upon your research objectives and purpose. Below, however, we have provided a list of good practices and some useful analysis concepts and techniques to assist those who are new to the research process.

Best Practices for Data Collection

BEFORE AND DURING DATA COLLECTION:

Decide on inductive or deductive research. If you are doing deductive research, the research purpose and objectives have already been defined, so you need to ensure that your team is clear about what you are trying to collect data on. If you are doing inductive research, you are going to uncover your research purpose and objectives during the community research process, by using the Co-production of Knowledge modules, based upon community-defined goals, priorities and realities.

Make analysis part of your project design! From the beginning of the research process, you need to consider how you will do analysis. As mentioned, the quality of your analysis is reliant upon the quality of your data, so considering how your data collection design can be used to get critical information with primary tools and then triangulate with other tools will produce more substantiated data for analysis. Daily data entry with the entire research team will also be an essential part of recording quality data. Additionally, preliminary analysis should be done throughout the data collection process. After your team finishes data entry or as you are preparing for a community presentation, discuss what information that you gathered was especially salient and relevant.

Understand your unit of measurement. From the beginning of the research process, you should decide which unit of measurement, for example individuals, households, community-wide, district among others you want to analyze. After you make this decision, you will be able to adjust the tools and questions to probe for questions that will get you information about the particular unit of measure. If you probe, for example, for information about household level changes, you cannot extrapolate, or make general statements about, what is happening at the community or district levels. You will face validity issues if you do not decide upon and adapt your research tools to the unit of measurement in which you are interested.

Reflect on researcher and participant biases. As you are completing the reporting sheets after each session, take time to consider how the participant identities (for example local politician, government employee, chief) and research team identities (e.g. affiliated with organization that provides services or information) or the context of the session (for example location, length, interruptions) may have affected the data you collected. Reflecting on biases throughout the process will help you to improve the quality of your data by determining what you need to triangulate and to probe further into confirm or dispute validity.

No analysis during notetaking! The notes that the note takers record must be as close to what participants actually say, in their own words. If note takers only record summaries of what participants share, then they have already analyzed the primary data source. They have excluded what they judged to be unimportant and recorded only what they see to be the main idea. Summarizing will result in incomplete data and possibly misrepresenting what participants actually say and think about their experiences. Note takers must practice throughout the tool review and pre-test processes how to record exactly what participants say. This will ensure that the analysis is done separately from data collection and results in more accurate data.

Identify main themes or topics of interest. Before and during the data collection process, outline specific topics and themes that you specifically want to probe into and learn about. Narrowing your focus early will keep your data collection and analysis manageable and directed.

AFTER DATA COLLECTION AND ENTRY:

Decide upon a systematic way to analyze. Once you have completed your data collection in the communities, decide upon a strategy for processing your data. You may have a large database that needs to be synthesized into a report. To accomplish this, you may want to consider using techniques such as categorizing, coding and contextualizing (definitions below).

Involve many team members in the process! Qualitative research is unique in that those that collected the data can often provide critical perspectives that drive the data analysis process. Consider ways of incorporating your research team into your data analysis process, by perhaps having the team categorize or code together. Your team members may have viewed different comments or situations differently, so talking through them during the data analysis process can lead to incredibly rich insights and to a more comprehensive analysis.

INCORPORATING ANALYSIS INTO YOUR DESIGN:

The success of your analysis, relies directly upon the breadth, depth and overall quality of your data collection and entry. As you are going through the data collection process, you should consider how the following key concepts are incorporated into data collection and how they affect your analysis.

During an interview or focus group, information provided by informants is explored for internal consistency by **probing** with directed questions. When an interviewee responds to a question, the interviewer usually asks additional questions to verify and deepen his or her understanding of the participant's viewpoint. Probing will allow you to learn more about a statement or story that a participant shares.

As you are collecting data, you need to consider any **conflicts of interest**, or potential alternative interests your informants might have. Participant motivations are important to reflect upon and to interpret the information you gather. Why are they participating in the session? How do they stand to benefit and how does this affect the ways in which they participate?

As you begin to hear many opinions during the focus group, **weigh the evidence** gathered from different sources to make a judgment on which to prioritize and investigate further. You have time, travel and logistical limitations to your community research process, so it is critical that you weigh the evidence to set research priorities.

When you are making your research plan, consider how you can use the different tools and informant interviews to triangulate the data that you are gathering. **Triangulation** is an analytical process where data collected by different methods and from different sources is compared. This is used to explore patterns and coherence, as well as to understand the bias of different informants. It occurs during a focus group when pursuing many participants' opinions on the same topic. It occurs when comparing focus group results to national statistics through cross-analysis, and it occurs during final analysis as you consider the entire database.

TYPES OF ANALYSIS:

When you are preparing to conduct your research project, you need to consider the type of data that you are seeking. You can collect quantitative, semi-quantitative and qualitative data that will all convey different information from the same data. Each type of analysis has advantages and disadvantages which need to be weighed before collecting data. You may want to consider using mixed methods, using both quantitative and qualitative analysis, as well, to make your analysis more holistic.

Quantitative research measures of "how much" of something there is, expressed as a specific number with a unit. For example, a distance of 10 kilometres. Quantitative data can be simpler to analyze, but in some cases, this type of data can only be collected in limited ways.

In **semi-quantitative** research, researchers assign a numeric quantity to particular pieces of information, although the unit of measure may be irregular. Data can be created from qualitative data by using systems of ranking or prioritization, like in the Co-Benefit Analysis and Wealth & Vulnerability Ranking tools. This type of analysis may allow you to perform some statistical tests, but it may also be more difficult to collect.

Qualitative research is more descriptive and considered to be subjective. Instead of a specific quantity and unit of measure, a distance might be described as "further" than another. Qualitative analysis is able to record a wide variety of responses, but it may be more difficult to analyze.

TECHNIQUES FOR ANALYSIS:

This manual is focused on providing you with skills, tools and methods for doing qualitative research and analysis mainly, and some semi-quantitative as well. Below we have provided some suggested tools for completing a qualitative data analysis of the database that you have compiled from your reporting sheets on each session. These techniques will help you systematically process the large amounts of data you have collected, in order to be able to understand and synthesize your data.

Categorization is a useful technique, which involves segmenting data and rearranging it into categories that facilitate counting or comparison between things in the same categories. Categorization can also be very useful for organizing data into broader themes by identifying and simplifying variations and trends in the data. The entire research team can easily be incorporated into the categorization process by providing each member a few categories upon which to focus and to segment the data for as they go through the database.

Coding is a technique used in qualitative research for labeling or indexing text. When coding, the research team will segment text into analytical units based upon themes that you define as a team. These terms are defined by what they include and exclude. For example, a code for "agricultural labour roles" includes division of labour, livestock, cropping decision-making and marketing decision-making but excludes household labour roles and off-farm activities. You segment the data based upon these defined codes to identify themes that reoccur in the data.

Contextualizing is another helpful technique for understanding your data. When you are contextualizing, look for relationships that connect processes and events, as well as antecedents and consequences, within a context. Identifying these relationships will help you uncover a coherent meaningful whole by capturing and conveying complexity and nuance.

Adapted from "Good Practice: Introducing key principles in participatory research," by Christine C. Jost on June 11, 2014 at CARE-CCAFS Gender and Participatory Research Training in Bolga, Ghana.

Bibliography

Aguilar, L., 2009. Training manual on gender and climate change. Gland, Switzerland: International Union for Conservation of Nature and New York, USA: United Nations Development Programme. Available at http://data.iucn.org/dbtw-wpd/edocs/2009-012.pdf) [Accessed November 4, 2013]

Ashby J, Kristjanson P, Thornton P, Campbell B, Vermeulen S, Wollenberg E., 2012. CCAFS Gender Strategy. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available at: www.ccafs.cgiar.org

Asian Development Bank, 2013. Gender equality and food security: Women's empowerment as a tool against hunger. Mandaluyong City, Metro Manila, Philippines: ADB. Available from http://www.adb.org/sites/default/files/ pub/2013/gender-equality-and-food-security.pdf) [Accessed November 4, 2013]

Ayers, J. et al., 2012. Participatory monitoring, evaluation, reflection and learning for community-based adaptation. Manual for local practitioners. , pp.1–85. Available at: http://www.care.org/sites/default/files/documents/CC-2012-CARE_PMERL_Manual_2012.pdf.

Baum, F., MacDougall, C. & Smith, D., 2006. Participatory action research. *Journal of epidemiology and community health*, 60(10), pp.854–7. Available at: http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2566051&tool=pmcentrez&rendertype=abstract [Accessed August 18, 2014].

Brooks, N., 2003. Vulnerability, risk and adaptation: A conceptual framework. , (November), pp.1–20. Available at: http://www.tyndall.ac.uk/sites/default/files/wp38.pdf.

CARE International, 2010. Adaptation, gender and women's empowerment. Climate change brief. *CARE Insights*, (October), pp.1–6. Available at: http://www.care.org/sites/default/files/documents/CC-2010-CARE_Gender_Brief.pdf [Accessed August 14, 2014].

CARE International, 2009. *CARE International Gender Policy*, Available at: http://gender.care2share.wikispaces.net/file/view/English+CI+Gender+Policy+and+FAQ.pdf.

CARE International, 2011. Gender and community-based adaptation in africa. Gender and Community-based Adaptation Learning Workshop organised by the Adaptation Learning Programme for Africa. *Communique*, pp.1–4. Available at: www.careclimatechange.org [Accessed August 14, 2014].

CARE International, 2012. CARE Gender Toolkit. *Good Practices Framework – Gender Analysis*, (May). Available at: http://gendertoolkit.care.org/ Pages/core.aspx [Accessed August 28, 2014]

CCAFS, 2014. CGIAR Big Facts. *Big facts on climate change, agriculture and food security*. Available at: http://ccafs.cgiar.org/bigfacts2014/# [Accessed August 15, 2014].

CCAFS, 2012. Tackling the gender gap in agriculture. *The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)*, pp.1–4. Available at: https://cgspace.cgiar.org/bitstream/handle/10568/27647/CCAFS_Gender.pdf?sequence=1 [Accessed August 14, 2014].

Castaneda, A.C. & Acquah, N.K., 2012. More Equal - More Resilient: Why CARE International is making gender equality and women's empowerment a priority for community-based adaptation. *CARE Insights*, pp.96–97. Available at: http://insights.careinternational.org.uk/media/k2/attachments/care-issue-brief-gender.pdf [Accessed August 14, 2014].

Chambers, R., 1983. Rural poverty unperceived. In *Rural development: Putting the last first*. England: Longman Group Limited, pp. 1–27.

Chambers, R., 1994. The Origins and Practice of Participatory Appraisal *. *World Development*, 22(7), pp.953–969. Available at: http://www.sciencedirect.com/science/article/pii/0305750X94901414.

Chaudhury, M., Kristjanson, P., Kyagazze, F., Naab, J.B., Neelormi, S., 2012. Participatory gender-sensitive approaches for addressing key climate change-related research issues: evidence from Bangladesh, Ghana, and Uganda. Working Paper 19. Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security.

Creative Research Systems, 2012. Survey research aids. *Sample Size Formulas for our Sample Size Calculator*, p.1. Available at: http://www.surveysystem.com/sample-size-formula.htm [Accessed August 19, 2014].

Daze, A., Kaia, A. & Ehrhart, C., 2009. *Climate Vulnerability and Capacity Analysis Handbook* First., CARE International. Available at: http://www.careclimatechange.org/cvca/CARE_CVCAHandbook.pdf.

Doss, C., 2011. If women hold up half the sky, how much of the world's food do they produce? ESA Working Paper No. 11–04. Rome: Agricultural Development Economic Divison Food and Agricultural Organisation of the United Nations.

Doss, C., Kieran, C., 2014. Three Things You Need to Know about Sex-disaggregated Data. *Policies Institutions and Markets*, *IFPRI*. Available at: http://www.pim.cgiar.org/2014/05/06/three-things-you-need-to-know-about-sex-disaggregated-data [Accessed August 28, 2014]

Elias, M., 2013. Tips for asking gender-responsive questions. , pp.9–10. Available at: http://www.bioversityinternational.org/uploads/tx_news/Tips_for_asking_gender-responsive_questions_1659_01.pdf.

FAO, 2009. Bridging the gap: FAO's programme for gender equality in agriculture and rural development., pp.1–31. Available at: http://www.fao.org/3/a-i1243e/.

FAO, 2014a. Climate change. *Food and Agriculture Organization of the United Nations*, p.1. Available at: http://www.fao.org/climatechange/49373/en/ [Accessed August 15, 2014].

FAO, 2014b. Climate change terminology. *Food and Agriculture Organization of the United Nations*, p.1. Available at: http://www.fao.org/climatechange/65923/en/ [Accessed August 15, 2014].

FAO, 2014c. Food and Agriculture Organization CFS Home. *Committee on World Food Security*, p.1. Available at: http://www.fao.org/cfs/cfs-home/en/ [Accessed August 15, 2014].

FAO, 2012. *GENDER AND CLIMATE CHANGE RESEARCH IN AGRICULTURE AND FOOD SECURITY FOR RURAL DEVELOPMENT TRAINING GUIDE*, Rome: Food and Agriculture Network. Available at: http://www.fao.org/docrep/015/md280e/md280e00.pdf.

FAO, 2011. The state of food and agriculture 2010–2011. Women in agriculture: Closing the gender gap for development. Rome: Food and Agriculture Network.

Hannah, H. & Jost, C., 2011. Public Health Participatory Epidemiology. Introductory Training Module, manual for trainees. , (June), pp.1–214. Available at: https://cgspace.cgiar.org/bitstream/handle/10568/24715/OneHealthManual.pdf?sequence=1.

Hennink, M., Hutter, I., Bailey, A., 2011. *Qualitative Research Methods*. London: SAGE, 2011.

IFAD, 2002. Gender Strengthening Programme for Eastern and Southern Africa Division: Gender and poverty targeting in market linkage operations. , pp.1–151. Available at: http://www.ifad.org/gender/tools/gender/Toolkit.pdf.

IPCC, 2007. *Climate change 2007: The physical science basis. Summary for Policymakers*,

Jost, C., 2011. *Livestock and Climate Change in the Pacific Island Region Workshop Report*. Secretariat of the Pacific Community, Nabua, Suva, Fiji, 22-25 August, 115 pp.

Kambou, S.D. et al., 2006. *Walking the Talk : Inner Spaces , Outer Faces A Gender and Sexuality Initiative*, Washington, DC.

Kristjanson, P., Jost, C. & Ferdous, N., 2014. Participatory approaches for gender-sensitive research design. , (5), pp.1–2. Available at: https://cgspace.cgiar.org/bitstream/handle/10568/35729/CCAFS CCSL Learning Brief No 5_gender.pdf?sequence=1.

Kvale, S., 1996. The interview situation and the quality of the interview. In *Interviews: An introduction to qualitative research interviewing*. California: SAGE publications, pp. 124–159.

Kyazze, F.B., Owoyesigire, B., Kristjanson, P., Chaudhury, M, 2012. Using a gender lens to explore farmers' adaptation options in the face of a changing climate: Results of a pilot study in Uganda. *CCAFS Working Paper No. 26.* Copenhagen: CGIAR Research Program on Climate Change, Agriculture and Food Security.

Lambrou, Y., Nelson, S., 2010. Farmers in a changing climate. Does gender matter? Food security in Andhra Pradesh, India. Rome: Food and Agriculture Organization of the United Nations.

Mikkola, M., 2012. Feminist perspectives on sex and gender. In E. N. Zalta, ed. *Stanford Encyclopaedia of Philosophy (fall 2012 edition)*. Available at: http://plato.stanford.edu/archives/fall2012/entries/feminism-gender/ [Accessed August 14, 2014].

Moser, C., 1998. Unit 1: A conceptual framework for gender analysis and planning. *International Labour Organization*, p.1. Available at: http://www.ilo.org/public/english/region/asro/mdtmanila/training/unit1/moserfw.htm [Accessed August 15, 2014].

Peterman, A., Behrman, J., Quisumbing, A., 2010. A review of empirical evidence on gender differences in nonland agricultural inputs, technology, and services in developing countries. Washington DC: International Food Policy Research Institute.

Tirado, MC, Meerman, J., 2010. Climate change and food and nutrition security. In: Thompson B, Cohen MJ, eds. The impact of climate change and bioenergy on nutrition. Rome: Food and Agriculture Organization of the United

Nations and Dordrecht, The Netherlands: Springer Science+Business Media BV. Available at doi:10.1007/978-94-007-0110-6_4.

Pretty, J.N. et al., 1995. *A trainer's guide for participatory learning and action:* First edit., London: International Institute for Environment and Development.

Roncoli, C., 2013. Qualitative Research Track- Field Research Methods. *CCAFS Training and Strategizing Workshop on Gender and Climate Change*. (October) Training. Available at : http://gsl.worldagroforestry.org:8076/conference/program-and-documents [Accessed August 28, 2014]

[UNDP] United Nations Development Programme, 2010. Gender, climate change and community-based adaptation. *A guidebook for designing and implementing gender-sensitive community-based adaptation programmes and projects.* New York, USA: UNDP.

[UNDP, GGCA] United Nations Development Programme, Global Gender Climate Alliance, 2012. Overview of linkages between gender and climate change. Policy Brief. Available at: http://www.gender-climate.org/Content/ Docs/Publications/UNDP_Policy-Brief-Overview-of-linkages-between-gender-and-climate-change.pdf [Accessed November 4, 2013]

[WEDO] Women's Environment & Development Organization, 2008. Gender, climate change, and human security: lessons from Bangladesh, Ghana and Senegal. New York, USA: WEDO. Available at: http://www.wedo. org/themes/sustainable-development-themes/climatechange/gender-climate-change-human-security [Accessed November 4, 2013]

WFP & FAO, 2005. *Socio-economic and gender analysis for Emergency and Rehabilitation Programmes*, Rome. Available at: ftp://ftp.fao.org/docrep/fao/008/y5702e/y5702e00.pdf.

World Bank, Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, 2009. *Gender in agriculture sourcebook.* Washington DC: World Bank. Available at: http://sitersources.worldbank.org/intgenagrlivsoubook/resources/completebook.pdf [Accessed November 4, 2013]

Wright, H., Chandani, A., 2014. Gender in scaling up community based adaptation to climate change. *Community based adaptation to climate change: Scaling it up.* New York, USA: Routledge

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