# 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)

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**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)

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**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)

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**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)

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### 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)

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**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

### 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

Short-term and immediate

Oriented towards survival

Not continuous

Motivated by crisis; reactive

Often degrades the resource base

Prompted by a lack of alternatives

ADAPTATION

Practices and results are sustained

Oriented towards longer-term livelihood security

A continuous process

Involves planning

Uses resources efficiently and sustainably

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<br><br>• 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<br><br>• Informal trainings by community organizations<br><br>• Helping leaders to plan meetings<br><br>• Bring issues to membership<br><br>• Formal training in record keeping, etc. |
> | Poor communication facilities | • Organization builds communication networks within its membership<br><br>• Breaks down some tasks<br><br>• Discussions for smaller groups<br><br>• 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<br><br>• Design incentives to strengthen local organizations<br><br>• 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.

**Motivational Probing:**

"Why is that?"

"How come?"

"There seem to be different views, can someone explain why?"

**Explanatory Probe:**

"Aha!"

"Really?"

"Is it?"

"How is that?"

**Expansive Probing:**

"Can you tell me more about this?"

"What do you mean by..?"

**Clarifying:**

**Reflective:**

"Oh, so what you are saying is … correct?"

**Silence:**

Use to give space, allow reflection, topic shift

**Group probe:**

"Does anyone else have a similar example?"

"Can someone elaborate on this?"

**Ranking probe:**

"We have identified several issues, which is most important?"

"Why is this issue ranked first?"

**Gesture probe:**

"You seem to be nodding, would you like to add your experience/ opinion?"

**Time probe:**

"Has this always been the case?"

"How has it changed overtime?"

**Diversity probe:**

"Are there different opinions?"

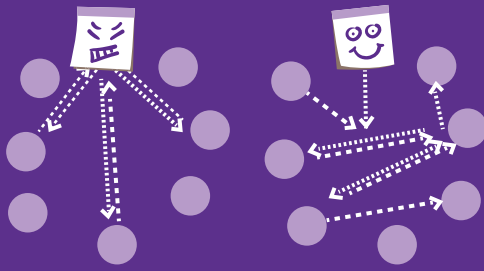"Does everyone agree?"

(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)

# Basic Concepts

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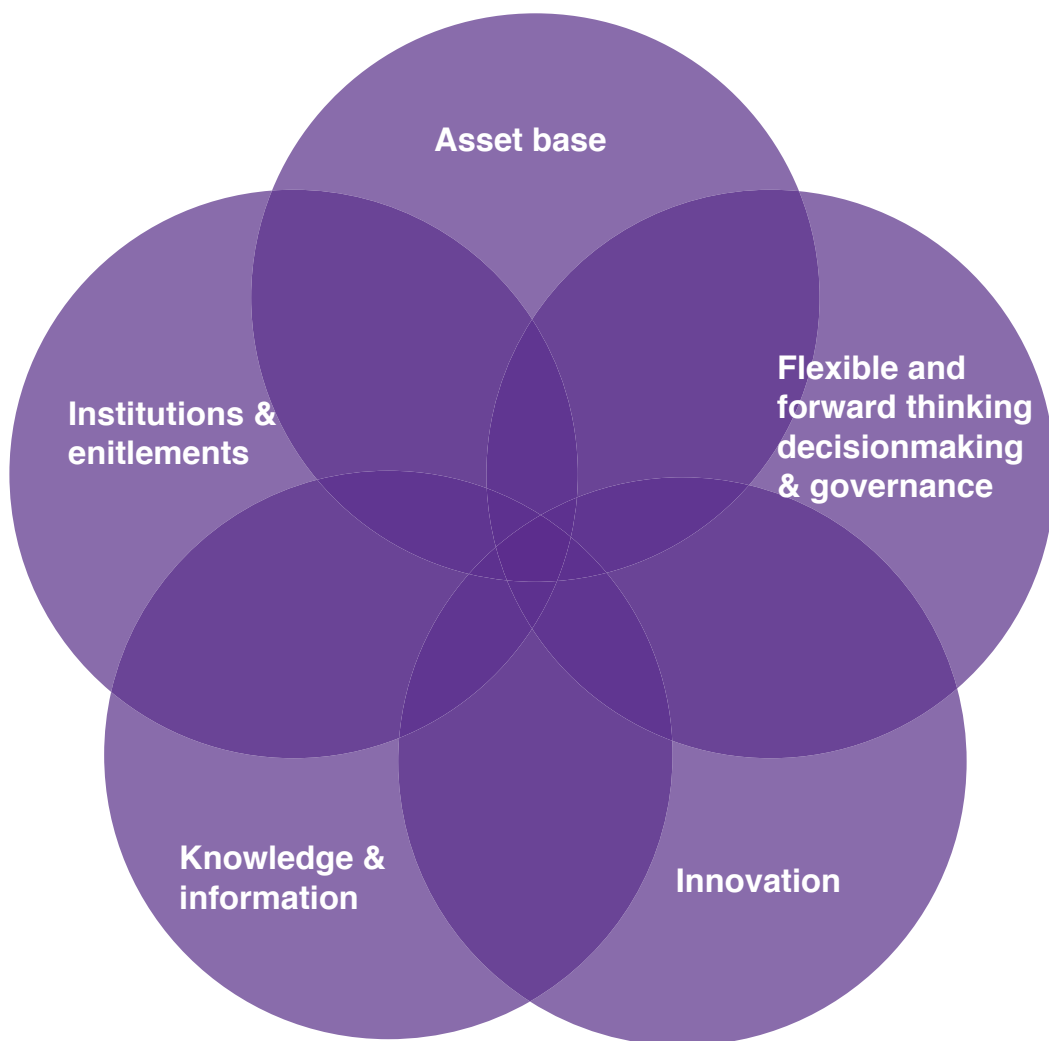
1. **Access and control over assets:** The financial, physical, natural, social, political and human capitals necessary to prepare a system to respond best to a changing climate. This category incorporates the importance of different kinds of capital, often informal, non-monetary or reliant on social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