Climate & Development Knowledge Network

Advancing gender equality and climate action:

A practical guide to setting targets and monitoring progress

BY MAIRI DUPAR AND PATRICIA VELASCO

Photo: Axel Fassio/CIFOR

Advancing gender equality and climate action:

A practical guide to setting targets and monitoring progress

BY MAIRI DUPAR AND PATRICIA VELASCO

With substantial contributions from

Inga Brill, Andrés Córdova, Harko Koster, Vaidehi Krishnan, Sokundarun Lim, Jennifer Linkletter, Rik Overmars, Beza Tesfaye

This guide was a true collaborative effort among programme staff in the Climate and Development Knowledge Network (CDKN), SNV, Mercy Corps, CARE Ecuador and the Promoting Sustainable Partnerships for Empowered Resilience (PROSPER) consortium, which is part of Building Resilience and Adapting to Climate Change in Malawi.

The guide could never have been completed without the dedication of the programme staff, especially those who gave interviews and contributed texts for the case studies (their names are listed on page 1, above). All the contributors were eager to share their lessons from experience with other climate and development practitioners.

In addition, the authors wish to thank Shehnaaz Moosa and Lisa McNamara of CDKN for their review, Tanya Goodman for editorial support, and Kait Keet and Rosie Campbell of *Design for development* for support with production of the guide. Special thanks to Marieke van Schie from CRAFT (Climate Resilience Agribusiness for the Future) for enabling the SNV team to contribute project time to this publication.

CITATION
This work should be cited as:

Dupar, M. and P. Velasco. (2021). *Advancing gender equality and climate action: A practical guide to setting targets and monitoring progress.* Cape Town: Climate and Development Knowledge Network.

Cover image: Patrick Shepherd/CIFOR

Contents

1. Introduction

There is a gender gap in development

Worldwide, the average of women's human development is behind men's by 5.7% as a whole,[1] based on:

- the ability to lead a long and healthy life, measured by life expectancy at birth;
- the ability to acquire knowledge, measured by mean years of schooling and expected years of schooling; and
- the ability to achieve a decent standard of living, measured by gross national income per capita.

See the Figure 1: Gender Development Index, below.

Women are differently affected by climate change than men

Gender inequalities shape people's vulnerabilities to climate change.

Women have less access to the development services and support – such as adequate healthcare, education and modern technology – that make people more resilient to climate change and other shocks and stressors.[2]

Women's unequal access to resources, their disproportionate responsibility for care of dependents (typically unpaid), and the insecurity and precariousness of their paid labour all contribute to the feminisation of poverty and women's heightened vulnerability to climate hazards. Climate change is a multiplier of existing vulnerabilities and threatens to reverse hard-earned development gains for all people, and particularly for women.

Figure 1: The Gender Development Index

The Gender Development Index measures disparities between women and men in three basic dimensions of human development – health, knowledge, and living standards – using the same component indicators as in the Human Development Index. The number 1 would signify total gender equality; the lower the figure, the more gender inequality there is.

All figures are representative of 2019.
Please see hdr.undp.org/en/content/gender-development-index-gdi *for more on how the index is calculated, and for country-level results.*

Key to this guide

Top tips

Tips for assessing women's specific needs and engaging stakeholders on gender issues.

Knowledge builder

Recommended resources to help you build your knowledge and skills.

Mini case study

Short summaries about gender integration in climate projects, with references for further reading.

Detailed case study

Deeper insights – as related by project staff – on how they set targets for and evaluated progress on gender equality in climate projects.

A study by Building Resilience and Adapting to Climate Change (BRACED) in Burkina Faso, Myanmar, Sudan and Uganda found:

> *'Traditional gender roles that confine women to reproductive tasks, low-yielding agricultural practices and climate-vulnerable livelihoods mean their activities are more likely to suffer from climate variabilities. In all four regions, women's lack of control over productive assets, including land, restricts their capacities to cultivate different crops, manage their access to natural resources or diversify their livelihoods.*[3]'

When crises strike – which, in the context of climate change, can mean extreme events like floods, droughts and storms – gender inequalities can become more acute. This may result in exclusion from life-saving goods and services, including food, because of discriminatory social norms.[4]

Crises may also give rise to increased gender-based violence. This chilling phenomenon is widely recognised in the context of the Covid-19 pandemic and related joblessness and lockdowns.[5] But research has also shown increased gender-based violence in the wake of natural hazards, including extreme weather events. Researchers from IUCN found that after two cyclones in Vanuatu, for example, reports of intimate partner violence rose 300%.[6] What is more, they explained, "in emergency post-disaster situations, we know that shelters can be highly dangerous places for women, as well as for people who identify as non-binary or as part of the LGBTQI+ community."[7,8]

Women's role in collective decision-making is also vitally important. Women have a lesser say in public decision-making, typically all the way from the village or neighbourhood level up to the national level, with few exceptions. Excluding women's opinions, needs and concerns from these forums means that societies are not benefitting from women's wisdom and talents nor from their practical understanding of how to integrate low-

carbon and climate-resilient solutions into diverse work and family life contexts.

Addressing these many forms of discrimination and inequality can help bolster women's capacity to adapt to climate change and manage climate risks more effectively.

Risks of gender-blind approaches, benefits of gender responsiveness

Business-as-usual approaches to climate change adaptation and mitigation projects tend to treat men's needs and concerns as the 'norm' and, as such, are considered 'gender-blind'.

Such gender-blind approaches, however, fail to recognise the differences in how women and men are affected by climate hazards, and the difference in opportunities that women and men have to participate in climate solutions. Gender-blind interventions risk perpetuating or deepening gender inequalities, as well as undermining climate resilience and climate change mitigation goals. A poignant testimony from Malawi shows what can happen without adequate attention to gendered dynamics in households and communities:

> *'One thing that we found out when we did a community assessment is that among our beekeeping farmers, especially the male ones, although they are making money… we find that they didn't have enough food. So, we were a bit surprised because we said 'These people are making money. Why is it that they don't have food?'… Our survey showed that there are some behaviour-related factors that come into play when they have money. Like, they buy motorcycles, they buy fuel for the motorcycles, but they still do not have food. So how do we influence them? So that the money they get is really invested in important things like food, for example, rather than just drinking beer, for example, especially the male beekeepers.* **– Project interview from a project that did not implement an intentional women's empowerment strategy, Malawi.[9]'**

On the contrary, climate-resilient development interventions should be designed and implemented so that they intentionally improve women's and girls' status and agency (meaning, their capacity for individual choice and action).

CDKN's research with partners in India, Peru and Kenya shows the ways in which deliberate gender-responsive approaches have been more effective, and more sustainable, than projects without them.

Specifically, the research confirms that when projects make intentional efforts to involve women in decision-making roles as well as active delivery, they achieve positive results in terms of climate-compatible development goals. This is in contrast to business-as-usual approaches that fail to challenge discriminatory social norms and relegate women to the side-lines:

> *'Had women not participated actively, the outcomes would have been considerably less, maybe around 10-20% of what was achieved. It is largely because of women, and also men, that the project has been sustainable so far, as well as effective in resilience building.* – **Staff member at Asian Cities Climate Change Resilience Network, India.[10]'**

Meanwhile, a similar finding was reported in Practical Action's work in Peru: "When decision-making processes have been opened up to include women, as in Peru, initiatives tend to be better organised and results to be more transparent and comprehensive."[11]

The case studies in this guide, sector by sector, unpack specific examples – at greater length – to show how gender-blind approaches with all their pitfalls can be avoided, and

how the benefits of gender-responsive design, monitoring, evaluation and learning can be captured.

What this means for climate adaptation and mitigation projects

This manual has two principal messages about the benefits of taking gender-responsive approaches to climate adaptation and mitigation projects:

1. Climate adaptation and mitigation projects can be designed and implemented in ways that empower women and advance gender equality (and, therefore, achieve progress on Sustainable Development Goal 5 as well). Gender-blind approaches to climate projects risk exacerbating gender inequality.
2. Designing and implementing climate adaptation and mitigation projects in ways that respond to the specific needs of diverse women, build on their strengths and capabilities, and empower them is vital for achieving climate-related objectives.

These "double wins" are demonstrated in extensive documentation by CDKN and its partners (see Box, right, for a list of useful references), and we build on the evidence base and offer lessons learned in this guide. As a short example of how these double wins work in practice, consider the experience of the Gorakhpur Environmental Action Group (GEAG) in Campernaj, Uttar Pradesh, India (see overleaf).

Key references on why gender matters in climate projects

These publications document how gender-responsive approaches to climate-compatible development result in project designs and outcomes that are more effective and sustainable:

Le Masson, V. and S. Kratzer. (2016). *Gender equality and achieving climate goals*. London: CDKN.

Bhusal, A., L. Sherpa and L. Khatri. (2020). *Climate-smart agriculture takes off, thanks to 'women-friendly' tools and a gender-smart approach*. Cape Town: CDKN.

Mani, N., S. Wajih and M. Dupar. (2020). *Empowering women as climate-smart agriculture leaders proves key to resilience*. Cape Town: CDKN.

Gebremichael, M., B. Ayele, A. Andargatchew and M. Dupar. (2020). *Rural Ethiopian women diversify livelihoods and boost entire communities' climate resilience*. Cape Town: CDKN.

Empowering women as climate-smart agriculture leaders proves key to resilience

In Campernaj, Uttar Pradesh, India, women comprise at least 40% of the agricultural workforce. Gorakhpur Environmental Action Group (GEAG) carried out climate-smart agriculture initiatives in the area, in which they used the following strategies to improve both climate resilience and gender equality:

- reaching out and involving local women's groups in agricultural trainings, so that women attain collective bargaining power and influence
- supporting women to adopt leadership roles in community-based agricultural institutions
- involving both women and men as beneficiaries in agricultural training so that there is transparency and co-ownership[12] between the sexes regarding contributions to and benefits from the programme.

As a result, the project:

- developed women farmers' skills effectively
- made the agriculture sector more climate-resilient, with more reliable yields
- improved income for women
- developed women's personal confidence and bolstered women's standing in the community – including greater female involvement in community decision-making and fewer early marriages among girls.[13]

The bottom line on why gender matters

To summarise why gender matters in climate change adaptation, mitigation and development projects:

- Every person has the right to have their basic development needs met (nutritious food, clean water, adequate shelter and sanitation, education, freedom from personal violence).
- We know that women and girls are not currently able to access these basic needs as well as men – so, women are already behind.
- We know that climate change will undermine development progress in the future, and is already doing so.
- We know that women and girls are more affected by climate change than men and boys (especially through extreme weather events).
- Climate-compatible development is needed to deal with the impacts of climate change now and in the future, and to limit further climate change (as articulated in the Paris Agreement and through countries' Nationally Determined Contributions).
- The development aspect needs to be gender-smart to achieve equality.
- Climate interventions are more effective and have better outcomes if they involve and target women, and harness women's potential.
- The climate aspect also needs to be gender-smart to prevent women from slipping even further behind in having their needs met.

About this guide: From principle into practice

Moving from the principles outlined above into practice involves integrating a gender-responsive approach at each stage of a project or programme development

cycle. The diagram presents the key steps (based on UN Women, 2016[14] and adapted by the authors).

This guide is predominantly about how to create appropriate gender-related targets in climate projects and the Monitoring, Evaluating and Learning (MEL) system to track them and manage projects adaptively over time. However, the MEL component cannot stand alone: it needs to be integrated into overall climate project design and planning processes that have adequate (and hopefully ambitious) gender goals. This ranges from:

- understanding diverse people's needs and capabilities (Chapter 2), through
- assessing gender-responsive solutions and project planning based on local people's knowledge (Chapter 3), and
- setting appropriate gender-related targets and indicators, and ultimately preparing a MEL system to track progress and learn from implementation (Chapter 4).

This guide uses rich case study examples to unpack how different organisations have:

- developed gender-responsive objectives and targets, appropriate to their sector and context
- created relevant indicators and MEL systems to track and understand progress
- managed their projects adaptively in response to emergent learning.

Figure 2: The climate programme and project cycle

The idea for a guide like this, focused on creating a gender-responsive MEL system, arose when CDKN's staff and partners found a rich market of information about the principles of gender integration, but they could not find enough training resources to explain how to apply the gender integration principles; and they could not find manuals or guides showing how to set up appropriate targets and indicators for specific projects.

CDKN's training modules can be found on www.cdkn.org/gendertraining and were formulated to address the first gap: a need for training. This guide addresses the second gap: the presentation of case studies with project-level indicators and on-the-ground experience applying and tracking these indicators, based on interviews with the project managers.

The case studies are from different regions, have varied funding sources, government requirements and local circumstances, and they have also implemented these MEL systems differently. The case studies focus principally on the dark red circle in the diagram (Figure 2, page 11) – 'Committing the project to a gender-responsive MEL framework'. However, any MEL system must be grounded in adequate gender-based assessments, gender strategies and plans. Therefore, each case study provides specific local, national and project context about how it was developed.

The type of indicators and insights in each case study are completely different, reflecting the contributions from each selected project. The diversity of information and analysis aims to provide readers with a wide range of perspectives from Asia, Africa and Latin America.

Recommended step-by-step guides for integrating gender into climate projects

This guide does not provide detailed step-by-step instructions because other toolkits and publications have already done so. The aim of this guide is to focus on examples of application. The following reading list includes publications that discuss how to integrate gender goals in climate change adaptation, climate change mitigation and climate-related disaster risk reduction projects and programmes, respectively:

Cecelski, E. and S. Dutta. (2011). *Mainstreaming gender in energy projects: A practical handbook*. The Hague: Energeia International Network on Gender and Energy.

International Federation of Red Cross and Red Crescent Societies. (2012). *A practical guide to gender-sensitive approaches for disaster management*. Geneva, Switzerland and Kuala Lumpur, Malaysia: IFRC.

NAP Global Network and UNFCCC. (2019). *Toolkit for a gender-responsive process to formulate and implement National Adaptation Plans (NAPs)*. Dazé, A. and C. Church. (Lead authors). Winnipeg: International Institute for Sustainable Development.

Pearl-Martinez, R. et al. (2020). *The art of implementation: Gender strategies transforming national and regional climate change decision-making.* Gland, Switzerland: IUCN.

UN Women. (2016). *Leveraging co-benefits between gender equality and climate action for sustainable development: Mainstreaming gender considerations in climate change projects.* New York: UN Women.

Photo: World Food Programme, Malawi

2. Understanding people's needs

This chapter provides a conceptual overview of how to understand and measure people's vulnerability, risks and resilience associated with climate change and with reference to gender and other forms of social diversity. It does not provide a detailed guide to different assessment tools, but rather focuses on sharing concepts and suggesting specific, tried-and-tested tools for further reading and application.

There are three key steps for 'understanding people's needs' in the context of climate action planning and so establishing an effective project baseline. The chapter unpacks each of these steps in turn:

Steps to take	Why do it?
1 Form a representative stakeholder committee to guide programme and project efforts (see Figure 3, opposite)	To ensure that all relevant social groups have a meaningful voice in the data-gathering and situation analysis phase, and to encourage their input to decision-making. To ensure plans are socially viable.
2 Gather gender-disaggregated data on how people are and could be impacted by climate change. Relevant information includes national and local law and policy frameworks, traditional and customary practices, and patterns and opportunities in all applicable sectors.	To ascertain whether and to what degree women and men are differently impacted by climate change at present, and which future threats and risks they face.
3 Understand whether women and men have different development priorities.	To recognise and respect the differences and identify a range of solutions that will work for different groups.

Step 1: Form a representative stakeholder committee

Participatory processes are very important to jointly determine 'understanding people's needs' in the context of climate action planning because:

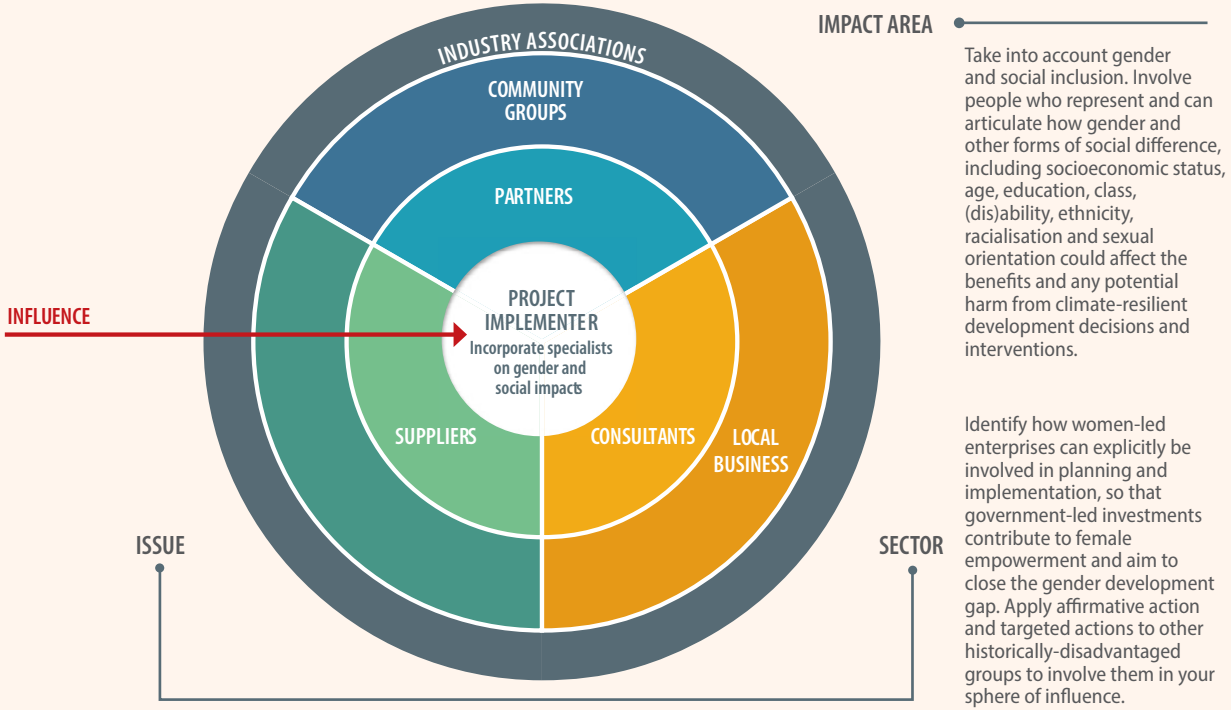
- stakeholder consultation can effectively engage different groups through participatory processes
- participatory processes are particularly helpful in situations where there is controversy or complexity and a need to build consensus around possible solutions.

To determine who should be involved, you can identify:

- which groups may be able to provide information that would contribute to the development of the climate action plan, strategy, or project
- which groups would be involved in the implementation
- which groups would be able to support the implementation
- which groups are most likely to be affected by the implementation
- whether it is viable for each major stakeholder group/interest group to send both a female and a male representative, with specific Terms of Reference to highlight issues from a gendered perspective.

Figure 3: Sphere of influence for climate-resilient development planning

A representative stakeholder committee should not just involve those who have commissioned the work and are directly supervising it. The committee should also involve representatives of those groups that are affected by the project.



Source: From the ICLEI-ACCCRN resilience toolkit, see www.iclei.org (used with permission)

Step 2. Gather gender-disaggregated data on how people are and could be impacted by climate change

As represented in Figure 4, the leading framework for identifying climate risks arises from the Intergovernmental Panel on Climate Change (IPCC)'s Fifth Assessment Report (2014).[15] It specifies that:

> *"The risk of climate-related impacts results from the interaction of climate-related hazards (including hazardous events and trends) with the vulnerability and exposure of human and natural systems. Changes in both the climate system (left in the diagram) and socioeconomic processes, including adaptation and mitigation (right in the diagram), are drivers of hazards, exposure, and vulnerability."*

The concept of climate risk refers to the potential that, due to some climate-related hazard, adverse consequences impact on people's lives or what they value. This potential, in turn, depends on the combination of three factors: hazard, exposure and vulnerability.[16] The main characteristics of these are briefly explained below.

Climate hazard

Climate hazards are the physical phenomena in our environment, including how they are expected to change over time.

Examples include changes in temperature land and sea, rainfall, extreme weather events (tropical storms, heatwaves, droughts, dust, flooding, etc.), sea level rise, thawing ice; and secondary cascading events (such as glacial lake outburst floods, landslides, wildfires, etc.).

Determining climate hazards requires different global, regional and national information, which may include downscaled information. Climate information may be provided that can show decision-makers how future changes in the climate may be expected to affect human populations and different sectors of the economy. To better understand climate hazards, sources of information are available via national meteorological agencies or regional centres. An innovative new facility to show climate projections is the IPCC's regional climate atlas and regional reports on the physical science of climate change (https://www.ipcc.ch/report/ar5/wg1/atlas-of-global-and-regional-climate-projections/). The World Meteorological Organization (WMO) also developed a tool to assess current and future climate hazards: https://climateinformation.org/create-report/.

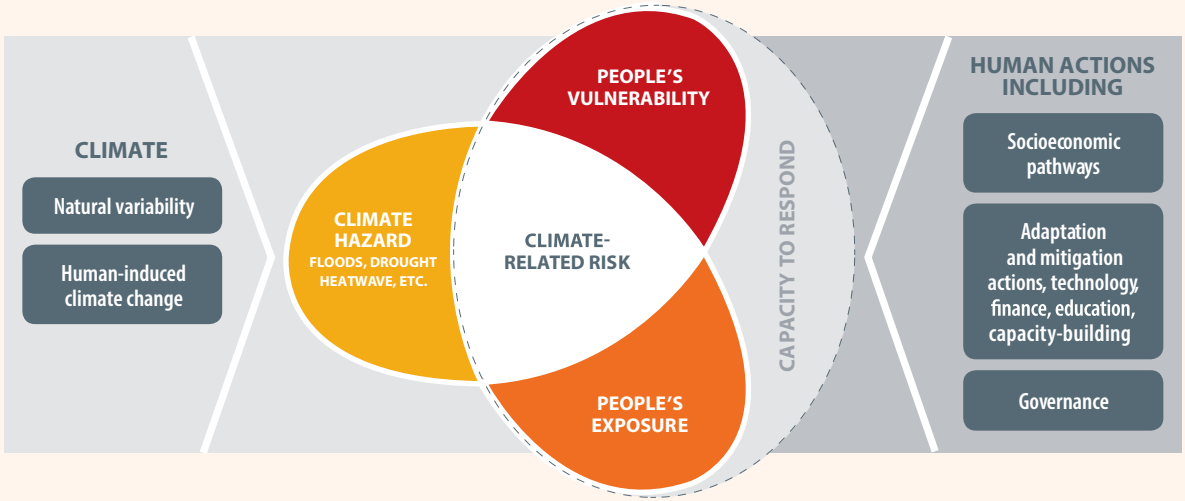
Exposure

Where you are affects your climate risk, depending on the degree to which your location is exposed to a particular climate hazard and its impacts. There are a number of places and settings that could be adversely affected.

Examples include low-lying islands and coasts (exposed to sea level rise), flood-prone river valleys (exposed to glacial outburst floods) and steep hillsides (exposed to landslides, weather-related erosion). Certain locations are also more exposed to heatwaves or monsoonal changes.

Determining people's exposure to climate hazards requires extensive mapping. Where possible, this mapping should also be responsive to dynamic changes over time. It does not have to be purely an expert- or scientist-led effort; many successful mappings of exposure to climate hazards have been citizen science initiatives. In this approach, local people are trained in the use of simple data collection tools, e.g., via a mobile phone app, and they input data in real time and/or over a time series, to record the exposure

Figure 4: Intersecting elements of risk



of people and assets to hazards such as floods. Good examples of how this has been done are the Clima Sin Riesgo project in Lima, Peru (see https://climasinriesgo.net/, bilingual) and a watershed flood risk mapping exercise in Jamaica.[17]

Vulnerability

Who you are, affects your climate risk and can impact your propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements, including sensitivity or susceptibility to harm and capacity to cope and adapt.

- **Sensitivity:** refers to the characteristics of the system and/or people that make them more susceptible to being affected.

  Examples include physical attributes, such as your age, health, (dis)ability, etc. insofar as they relate to climate action or socioeconomic status and education, which affects what you can afford to do, what access to information you have, and what the social/cultural attitudes are regarding what you are permitted or expected to do, etc. Women are not homogenous groups, and the issues of women are different in different circumstances e.g., issues in female-headed households vs male-headed households, women in polygamy vs monogamy, etc.

Adaptive capacity: often refers to the capacity to adapt to, anticipate and absorb climate extremes and disasters[18]. Sometimes the term also refers to external conditions that make the system or people more susceptible to being affected.

Examples include the presence or absence of risk management committees and early warning systems where people live, which can impact the degree to which they are affected, as well as influence their access to information and support.

Table 1: Tools for assessing people's vulnerability to climate risks

Below is a brief comparison of three helpful tools for assessing people's vulnerability to climate change impacts.[19,20,21]

Tools and how they work	ODI/ActionAid assessing resilience toolkit	CRiSTAL climate risk assessment: adaptation, livelihoods	GIZ and EURAC climate risk and vulnerability
Quantitative assessment of people's resilience	Yes	No	Yes
Qualitative assessment	Yes	Yes	Yes
Define project scope and prioritise activities	No	Yes	Yes
Analysis of impact of the climate intervention on different groups of people	No	Yes	Yes
Amount of time taken to work through tool	5-10 days	2-5 days	Depends on the unit of analysis, but at least 3 months
In the communities or desk-based?	In communities	In communities	Both
Does it require training/support?	Yes, for quantitative part only	Preferably, yes	Preferably, yes

How climate risk assessment, including gender, highlighted women's and men's different needs

Using the ODI tool, disadvantaged groups and gender differences were investigated in Nepal. The tool uses a questionnaire that investigates four areas to help populate relevant indicators for women and men (and, if desired, different social/ethnic groups).

The tool generates a score to measure women's resilience and a score to measure men's resilience, and these can be combined with case study narratives that are prepared, in parallel, through research in communities.

In Nepal, the tool looked at the resilience of women and men from different ethnicities/castes in relation to flooding in Bardiya district.

The main findings were:

- Men are more resilient to natural hazards and climate change than women, regardless of the caste or ethnic group from which they come.
- Men have more access to economic resources and to information about climate hazards.
- Women feel less safe in emergency shelters.

ECONOMIC

Access and control of economic resources makes it easier for people to prepare for and respond to disasters.

Includes measurement of:

- Household's overall economic strength
- People's access to personal finance
- Access to and control over resources
- Engagement in enterprises

SOCIAL

People's health status, education levels and access to social support from family and friends are critical to their resilience.

Includes measurement of:

- Personal disaster preparedness
- Prevalence of gender-based violence
- Migration patterns

INFRASTRUCTURE

Reliable infrastructure ensures communities can reduce the initial effects of a disaster and recover faster.

Includes measurement of:

- Extensiveness and reliability of basic service infrastructure: safe locations, housing, clean water, sanitation, transport, power, communications
- Whether there is a functioning early warning system

INSTITUTION

This category examines the extent to which people are able to participate in decision-making and to influence the process of public insitutions.

Includes measurement of:

- How effective the government is in implementing disaster management activities
- Whether people trust local government

https://odi.org/en/publications/building-resilience-for-all-intersectional-approaches-for-reducing-vulnerability-to-natural-hazards-in-nepal-and-kenya/

Gender analysis

It is extremely important to use tools that complement the climate analysis described above, such as interviews, focus groups, among others, particularly for assessing exposure and vulnerability in terms of sensitivity and adaptive capacity of people to these climatic hazards.

One of these tools is gender analysis. Gender analysis is a critical aspect of understanding different people's needs.

Gender analysis:

- looks at differential power, well-being, life-chances between the genders
- sees gender as a social construct
- focuses on social institutions which promote gender discrimination
- highlights the specific needs and participation rates between different groups.

Gender analysis must be done early in the design and planning process because it can provide insight into the different perspectives and circumstances of women and men within the targeted policy/project/programme sector. Such analysis should include, but is not limited to, understanding women's and men's roles, needs, rights, priorities, access to and control over resources and decision-making processes. In addition, consideration must be given to recognising women's and men's socioeconomic relationships and how they are differently impacted by, for example, age, ethnicity, income, class and health.

An in-depth gender analysis involves the collection of sex-disaggregated data and information, which can be done in a variety of ways, including through vulnerability and capacity assessments as well as stakeholder and livelihood analyses.

Classic gender analysis questions are:[22]

- Who does what? How? Where? When? Why? (Division of labour)
- Who uses what? How? Where? When? Why? (Access to natural resources)
- Who controls what? How? Where? When? Why? (Decision-making control and power)
- Who knows what? How? Where? When? Why? (Information and power)
- Who benefits from what? How? Where? When? Why? (Benefit sharing)
- Who is included in what? How? Where? When? Why (Participation)

Some of the most important guiding questions for assessing the sex-disaggregated impacts of climate change are:[23]

- What is the impact of climate change on individuals, households and communities?
- What factors determine women and men's differential vulnerability to climate risks, and how do these factors affect their adaptive capacity and mitigation measures? If these climate-smart practices are scaled up, what are the implications for gender relations and the environment, and how are these implications connected?
- How can the environmental, social and economic sustainability of climate-smart interventions be ensured and, especially, how can the equal and equitable participation and distribution of benefits to women and men be guaranteed?

Specific questions to inform gender-responsive mitigation efforts are:

- How are men's and women's contributions to greehouse gas emissions linked to poverty?

- Where and how are women and men engaged in resource use?
- What technologies and emission levels are associated with the gendered division of labour?
- How can women and men be equitably engaged as agents of change in mitigation efforts?

These questions, applied to different social groups that are also disaggregated by, for example, age or marital status, ethnicity, (dis)ability as well as gender, can further highlight important information from which to establish people's needs and priorities and develop project interventions.

By facilitating inclusive and gender-equitable stakeholder engagement and doing a robust analysis of gender at the beginning of the project, as outlined in this chapter, programme managers can:

- determine the types of activities needed in the implementation stage
- assign the budget and resources necessary for building gender expertise, hiring gender experts, conducting research and workshops in communities, and other necessary gender-responsive activities
- have data to inform the monitoring and evaluation process.

Step 3. Understand whether women and men have different development priorities

Women and men may have different priorities for development. Depending on the gender-prescribed roles they have in society and in the local economy, they may experience greater burdens or opportunities created by climate change.

Once the impacts of climate change have been determined and how they differentially affect women and men, it is also important to find options (both adaptation and mitigation) to cope with or reduce these impacts. Considering gender during the process of prioritising these options will help to ensure that the range of actions adopted address not only the differing needs of women, men, and people of other gender identities, but also that the implementation of the related actions will yield equitable benefits. Projects can also encourage participants to think and act beyond gender stereotypes and expand their ideas about what is possible.

The next chapter will provide details on assessing gender-responsive solutions and planning.

Photo: World Bank

3. Assessing gender-responsive solutions and planning

A method for planning project interventions (UN Women, 2016) is the 'problem tree' analysis.

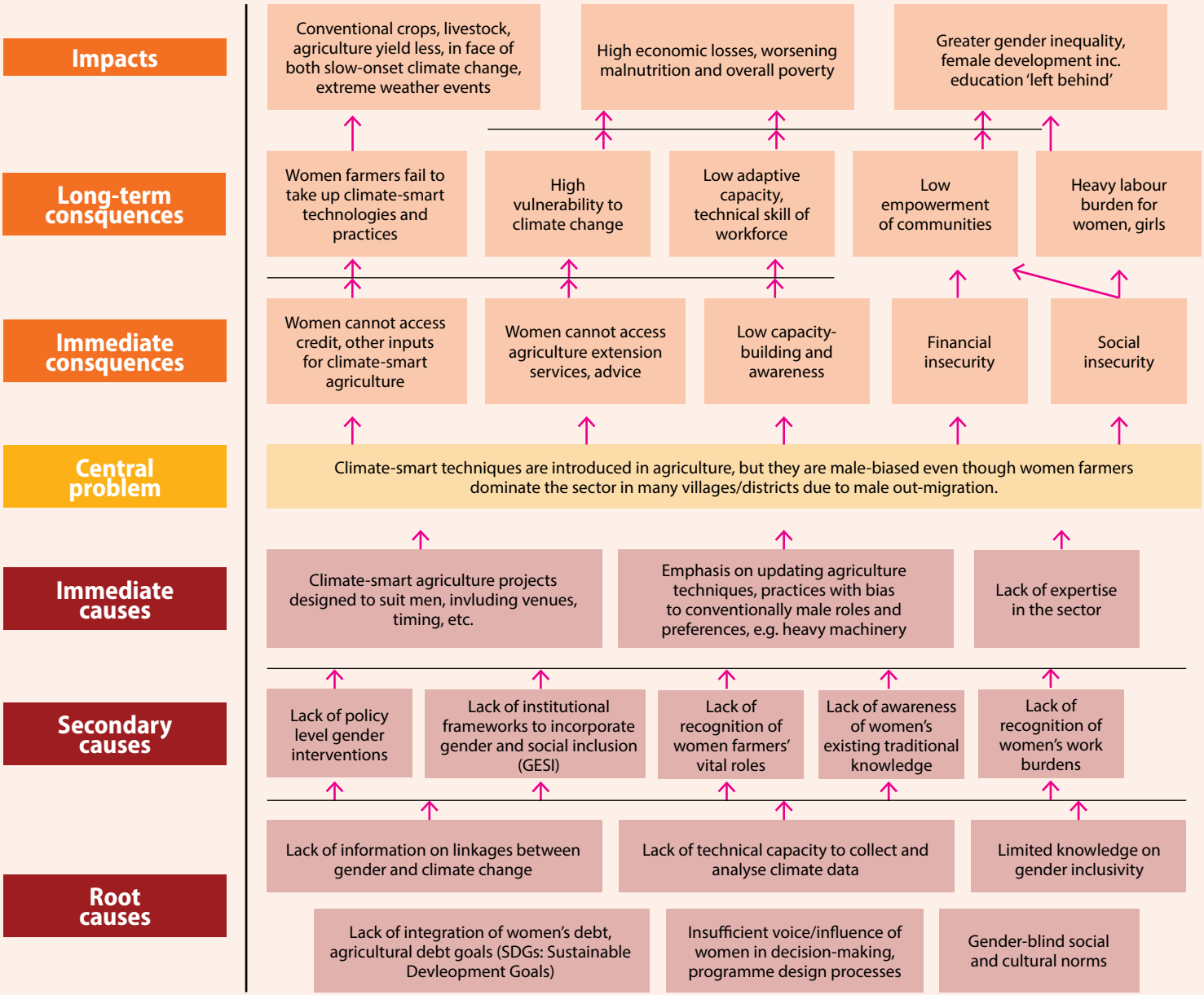
The problem tree analysis models causes and effects. It helps to find solutions by visually mapping the causes and effects around a problem and the linkages among them. The central problem does not need to be women-centred or gender-focused, but the gender-responsive risk assessment carried out beforehand will point to gender-specific causes, effects and impacts.

In order to construct a problem tree, take the following steps. Figure 5, opposite, demonstrates the steps with a real-life example from CDKN's work in Nepal. A blank template for the problem tree can be accessed on the webpage www.cdkn.org/gendertraining

- Identify the central problem: this is the climate change situation that requires attention or the central problem that women face in the sector (e.g., 'few farmers practice climate-smart methods').
- Determine the causes of the problem by asking "why" until it is not possible to go further. There are immediate or the most obvious and visible causes (e.g., 'farmers don't have enough information'), and less evident but important underlying or secondary causes (e.g., 'most farmers in the area are women and there are no skills trainings that are targeted to them').
- The fundamental or structural causes of the main problem are the root causes (e.g., 'women are not recognised for their agricultural roles'; 'women have so many care-giving responsibilities that they have no time to take part in training').
- Identify the effects of the main problem by asking "what are the consequences?" until it is not possible to go further.
- Connect the problem with cause-effect arrows clearly showing key links.
- Once you have completed the problem tree, you can think about project interventions that could address the causes of the problem. If you like, you could turn the cause-effect and problem statements into "what ifs":
    - 'What if skills training in climate-smart agriculture were offered to women?'
    - 'What if trainers asked the women what time of day is most suitable for them?'
    - 'What if women were permitted to take their babies and young children to the training and/or childcare was provided?' etc.

The analysis of how to overcome the causes of the problem – coupled with knowledge of the project's budget and scope – leads to a project strategy and plan.

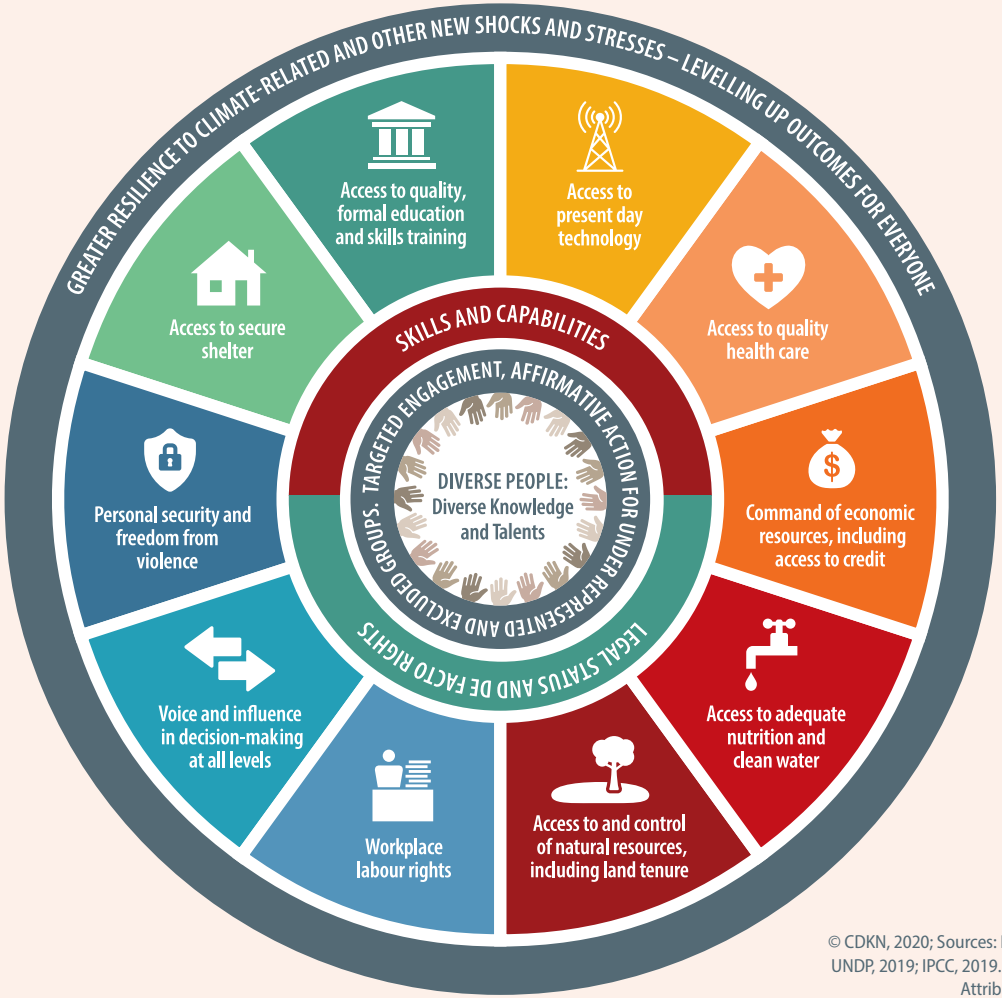
Figure 5: Problem tree analysis: Nepal climate-smart agriculture case study



Geeta Sandal, CDKN, based on UNFCCC, 2016

Figure 6: The resilience wheel

CDKN's resilience wheel can help pinpoint which capabilities, services, and rights people have or lack and how that affects their responses to climate change. Once these are identified, ideas for solutions can be offered.



Identifying solutions

The problem assessment, using the problem tree and resilience wheel, leads to an analysis of solutions and possible interventions by:

- Determining the types of activities needed in the implementation stage.
- Pointing toward the budget and resources necessary for building gender expertise, including hiring gender experts, conducting and funding other necessary gender-responsive activities.
- Informing the monitoring and evaluation process.
- Ensuring that the gaps, barriers and challenges preventing the equitable participation of women as decision-makers and beneficiaries can be overcome rather than reinforced.

Gender-responsive prioritisation of climate actions may involve:

- Applying participatory and inclusive approaches to prioritise climate actions for implementation (for example, by holding stakeholder workshops for different groups and/or in different parts of the country).
- Facilitating separate prioritisation processes for people of different genders and social groups (for example, through parallel discussions during stakeholder workshops).
- Ensuring transparency in the prioritisation process by documenting how priorities were identified and who participated in the process.
- Engaging women and men, including representatives of marginalised groups, in the development of criteria for prioritisation at different levels.
- Using the criterion of "contribution to gender equality" for prioritising solutions, linking to the results of the gender analysis and assessing the extent to which activity options address inequalities.

Setting project goals

The purpose and goal of the climate change intervention should include associated gender goals: the intended project outcomes should be gender-specific.

Gender should be reflected in the outcomes, which at the high level of 'development outcomes' are society-wide changes towards which the project contributes, for example:

- increased number of women in climate-smart jobs in the economy relative to established baseline
- increased proportion of the population in climate-resilient, secure jobs and increased gender equality in the population who have climate-resilient, secure jobs or sources of income
- increased overall uptake in the use of climate-smart technologies and increased gender equality in the uptake of such technologies.

Gender should also be reflected in the immediate outcomes and outputs for which the project is directly responsible. The project in question would need to specify the exact improvement they are seeking to achieve, with reference to the project's baseline. This should ensure that adequate activities are designed and budgeted to improve women's and girls' wellbeing.

Examples of how to set disaggregated, gender-specific project goals and outcomes:

- women's and girls' nutrition in the project target area improves, as well as men's and boys' nutrition
- women's income improves in the project target area, as well as men's income.

The proposed activities planned to deliver the project outcomes should be gender-specific. Examples of gender specificity and gender responsiveness in the project activities:

- targeting of women in climate-smart vocational training
- targeting of women for access to microfinance to acquire climate-smart technologies, agricultural inputs, business capital, etc.

Projects should target specific, named groups of women and girls to ensure their differential needs are met.

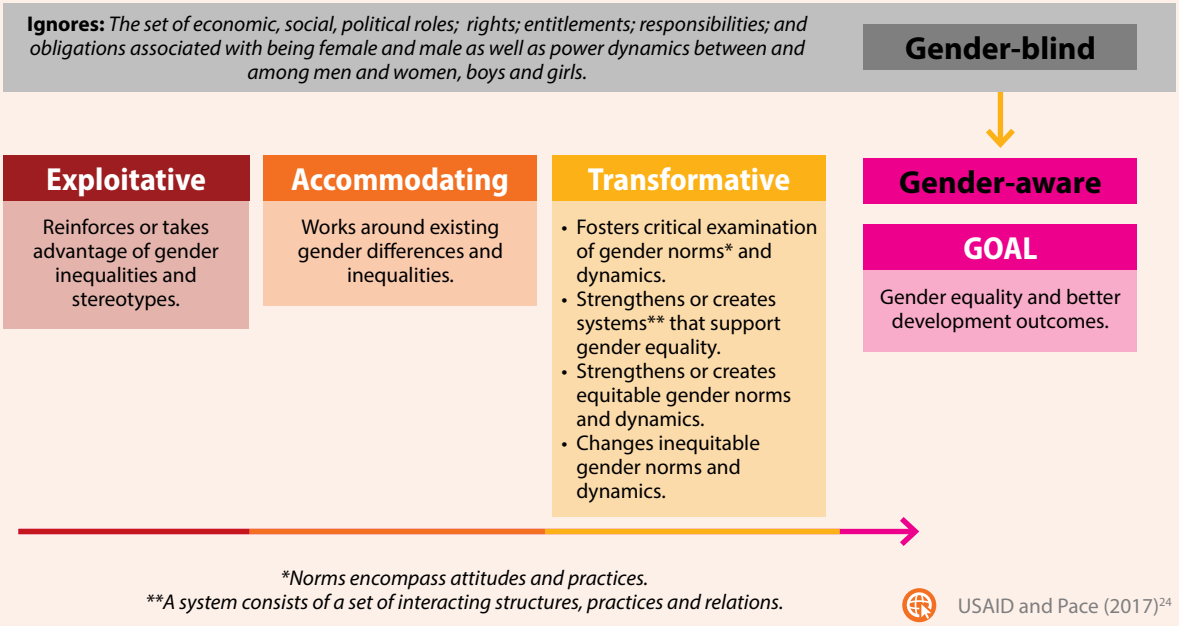
Examples of targeting specific named groups in project outcomes and activities:

- targeting Dalit (lower caste) women and women from in Nepal (as opposed to all women)
- targeting the specific needs of adolescent girls in Peru (as opposed to all girls or all women).

Projects should avoid perpetuating current forms of discrimination against women and girls.

After designing potential interventions, it can be helpful to assess goals, outcomes, outputs and activities against a gender integration continuum chart (see below) to ensure that these efforts are truly advancing gender equality and not backsliding on equality.

Figure 7: Gender integration continuum



USAID and Pace (2017)[24]

Gender budgeting

A gender-responsive budget is a budgeting process to translate gender objectives into financial commitments, by:

- Assessing the project budget through a gender lens: identifying the impact of the various expenditures on women and men with the aim of creating more equitable delivery of services (outcomes) and more equitable opportunities (see Box, right, for an example).
- Ensuring that there is sufficient flow of resources to activities that address women's needs and perspectives, and reduce the structural barriers that impede their participation.
- Insisting that a gender-responsive budget is drawn up from the beginning because doing so in retrospect is far less effective.

Aligning budget with gender-responsive objectives: Lessons from Nepal[25]

A project in Nepal worked with women farmers to understand how climate-smart agriculture technologies could deliver multiple development and wellbeing benefits for them and their families. In particular, the women farmers identified income stability and food security objectives. To accomplish these goals, the project integrated climate-smart agriculture into the government's regular work programme at provincial and municipal levels. Women were encouraged to participate in and adopt the climate-smart technologies introduced by the agriculture programme. At the same time, the NGO, LI-BIRD, engaged women political leaders in the process through 'travelling seminars', which enabled them to have interactive discussions with women farmers and learn about on-the-ground realities of agriculture and climate change. Through this initiative, women political leaders developed a deeper understanding of the issues and formulated important messages for advocating in policy processes.

This project created budget lines to support all the gender-responsive activities that the project team identified during the early assessment and consultation phases. The team specifically assigned budget to the achievement of the project's gender-smart, climate-smart agricultural goals. In this respect, it provides an example of a 'gender-responsive budget'.

4. Monitoring, evaluating and learning (MEL)

How to approach MEL in climate change initiatives

Climate and development agendas highlight the importance of monitoring, evaluation and learning (MEL).

> *'Monitoring is the continuous process of data collection on the performance of interventions. Evaluation provides systematic ex-post assessment of the merit, worth or significance of an intervention. Learning should be integrated into all processes to reflect upon the information generated by monitoring and evaluation and to continuously improve interventions based on the evidence gathered.'*[26]

MEL should be (or become) an integral part of routine project management and is critical to the success of the objectives. MEL can provide early indications about the direction in which a project is moving and help determine whether or not that direction is the correct one towards the achievement of established goals. In addition, the application of MEL processes regularly presents an opportunity to have a clear and impartial view of the implementation of actions in a project, and identifies how and who is really receiving the benefits of these actions.

In a context of climate change and gender equality, MEL provides a better understanding of how gender gaps can be reduced when climate actions (adaptation and mitigation) are instigated. It also allows the measurement and evaluation of gender-related changes over time, showing how far and in which ways the gender equality and equity objectives are being achieved.

The key steps for building a monitoring system according to several frameworks, regardless of whether an evaluation will also take place are:

Step 1. Define the intervention logic: use an existing theory of change and logframe, or develop them, as the main tools for monitoring and evaluating progress and the impacts of an intervention.

Step 2. Define key indicators.

Step 3. Select data collection tools.

Step 4. Deploy the system to aggregate, analyse and report on results.

Step 5. Concurrently with the other steps, define for whom project-related learning would be useful, and how; set learning questions, undertake learning enquiries, feed back, reflect and make sense of learning, including project management implications, and initiate further learning enquiries as needed.

Gender and climate change indicators

An indicator in general can be described as a reference point against which changes over time can be evaluated. A gender and climate change indicator will measure the extent to which the climate change project objectives and activities have helped or hindered the promotion of gender equality and women's empowerment. For example, an indicator can show to what extent implementing climate change mitigation and adaptation actions has narrowed gender gaps.

A gender-sensitive indicator will seek to measure changes related to gender roles and inequalities to foster equitable participation, including the equitable and fair distribution of the benefits of a climate action. Gender-sensitive indicators require the generation of data that is disaggregated by sex, age, ethnicity,and other socio-economic variables appropriate to the project or programming context.

Table 2: Key MEL frameworks and guidelines for reference

A variety of MEL frameworks or guidelines have been developed by international agencies to ensure effective and efficient implementation of projects and programmes. Examples include:

MEL framework	Description
Global Environment Facility (GEF) Adaptation Monitoring and Assessment Tool	This tool introduces a revised results framework for the GEF Adaptation Programme, structured around three objectives with associated outcomes and indicators. Its objectives are the following: • Enable more comprehensive portfolio-level monitoring and reporting on progress and outcomes, based on more consistent definitions and methodologies. • Introduce, where appropriate, qualitative tools and methodologies that allow portfolio-level monitoring and reporting to go beyond quantitative outputs. • Establish appropriate indicators and methodologies for monitoring progress and outcomes in line with evolving guidance by the UNFCCC COP. • Seek, where appropriate, greater consistency with the tools and methodologies used by other funds, programmes, and agencies.
The CGIAR Monitoring, Evaluation and Learning Support Pack	This is a guide and compilation of documents, templates, examples and experience sharing. It can be searched by user groups (programme manager, project manager, M&E expert), stages along the research for development lifecycle (design, implementation, closure) or by thematic areas. The resource materials or links to useful external sources are graded for each group and stage as very important, useful, optional. CGIAR provides a downloadable toolkit to access the templates and examples and an upload functionality by which to invite colleagues and partners to add any useful resource to the toolkit as well. Important note: the pack motivates you to cite the resources appropriately.
Tracking Adaptation and Measuring Development (TAMD) by IIED	TAMD is a conceptual framework to monitor and evaluate climate change adaptation. It provides step-by-step guidance to develop a robust M&E system that can be used as part of local and national planning systems, or to assess and compare specific projects. This framework can be used for local and national government officials, development partners and NGO staff seeking to develop adaptation plans and M&E in different contexts.
Monitoring, Evaluation and Learning Framework for Social Analysis & Action by CARE	Social Analysis and Action (SAA) is one of CARE's models for gender transformation and this MEL framework provides guidance to staff implementing SAA. It offers the following: • Presentation and explanation of the SAA's Theory of Change • Guidance on Gender and Power Analysis, a minimum standard for using SAA • Identification of what is important to monitor throughout the process of implementation • Suggested methods and tools to monitor and evaluate changes facilitated by SAA – including qualitative methodologies and cross-cutting and sector-specific quantitative indicators for monitoring and evaluating changes in agency, relations and structures.
UKCIP AdaptME toolkit	AdaptME supports the user to think through some of the factors that can make an evaluation of adaptation activities inherently challenging and provides ways to design a robust evaluation. This toolkit helps the user to: • Refine the evaluation purpose and objectives. • Reflect on what the user is trying to evaluate and the logic behind this. • Understand how specific traits of climate adaptation can make evaluation challenging and how these can be overcome. • Draw out, understand, and re-evaluate assumptions. • Consider how progress and performance might be best measured and evaluated. • Identify examples, good practice and techniques which may help ensure the evaluation is robust in the context of climate change. • Prioritise evaluation activities, recognising that evaluations need to be proportionate to the investment and are resource-limited.

Types of indicators

Indicators can be quantitative and qualitative. The quantitative indicators show the information disaggregated by gender and its changes over time; for example, the percentage increase in credit available for women to purchase climate-smart technology or inputs in a particular sector compared to men. Qualitative indicators capture descriptive information that also shows changes over the time; for example, the opinions of a specific group about the impacts on forest conservation project´s activity. Another example may be the level of confidence, independence or self-esteem of women compared to men in the sector and how that impacts their ability to address climate change. Both types of indicators can be complementary to each other.

In programmes, projects and policies, indicators are measured at different levels of the theory of change or logical framework in terms of impact, outcome, output and activities.

Tips for setting effective climate change and gender indicators

- Clearly incorporate gender in the objectives, theory of change and logframe, and budget of a project.
- Use a gender analysis to feed the MEL system as a baseline for measuring the indicators over time.
- Indicators must be relevant to the needs of the users and at a level that the users can understand and analyse.
- The specific characteristics of each gender indicator must be carefully considered. All indicators must be gender-disaggregated.
- Both qualitative and quantitative indicators should be used.
- Indicators must be developed in a participatory way, involving all key stakeholders.
- Each indicator should have a set target and time frame.
- Indicators must be SMART: Simple, Measurable, Attainable, Realistic, Time-bound. Indicators should also be SPICED: Subjective, Participatory, Interpreted and Communicable, Cross-checked and compared, Empowering, and Diverse and disaggregated.[27]
- The method for how each indicator will be measured and what tools will be used for monitoring and evaluation must be verified.
- Gender experts should be engaged to guide projects and programmes through these stages.

Later, this manual will show examples of the indicators in climate change projects or programmes, but Table 3 will illustrate other examples per sector.

Table 3: Sample sectoral indicators for women's empowerment in climate programmes

Sector	Indicators
Energy	• Changes in the labour burden of women and men (e.g., number of people reporting a significant reduction in the time spent for collecting fuel). • Women's perception of using fuel-efficient stoves, rated on a scale.
Transport	• Women and men's usage of low emission or 'clean' public transport. • The satisfaction of both women and men with the use of clean public transport, ranked on a scale of 1-5.
Forest	• The number of women in leadership and decision-making roles or positions in the community where forests are under community-based protection.
Agriculture	• The percentage change in crop yield per hectare and year as a result of conservation agriculture, with figures disaggregated by female-headed households and male-headed households. • The rate of participation of men and women per district engaging in conservation agriculture over time.
Water	• The changes in the labour burden of women and men as a result of project activities (e.g., number of persons reporting a reduction in the time spent for collecting water in hours per day).
Early warning system	• The percentage of male and female community members who receive information from the system.

United Nations Development Programme (UNDP, 2020)[28]

Photo: Patrick Shepherd/CIFOR

Methods and tools for gender-responsive MEL

It is important to have a MEL strategy that will not only link the results and indicators with the objectives of the project, but also where methods and instruments of data are clearly established. This strategy should also establish who is responsible, who will coordinate the activities of the MEL, how these results will be disseminated, and how the participation of all key actors will be enabled.

Some tools for MEL are shown in the following table:

Table 4: MEL Tools

Phase	Data sources	Frequency of collection
Monitoring	• Registration forms • Surveys and questionnaires • Interviews • Focus groups • Concrete experiences and oral testimonies • Secondary data analysis • Field trips	• Depending on the tool and budget can be every month, every three months, or six months. • Ongoing
Evaluation	• Donor reporting (annual, midterm and final) • Participant success stories • Strategic planning meetings	• Biannual and annual
Learning	• Implementing process for improving project results • Adaptive management plans • Learning meetings and workshops • Mid-term project reflection and evaluations • Narrative experiences for the beneficiaries • Stories of change using Most Significant Change (MSC) methodology • Videos • Policy briefs	• Biannual and annual • End of the project

MEL systems and results and important for transparency and accountability to the people and communities who are served by projects and programmes. They also deliver transparency and accountability to donors, and help managers understand a programme's performance and how to improve it. MEL systems also have a potential role in shaping the design and implementation of future programmes, when the results and lessons are shared and debated.

Technical reports (including annual reports, evaluation reports and learning reports), policy briefs, events (both internal and external ones), videos, photos, newsletters, stories, blogs and press releases are different kinds of tools that programmes may develop, to share results and findings with stakeholders.

Insights and good practices for gender-responsive MEL include:

- Establish a MEL plan with the general and specific objectives of the MEL system and processes.
- Assign a realistic budget for the project or programme MEL.
- Define which actors should be involved in all the phases of MEL and involve them fully.
- Consider gender in planning participatory MEL methods, timing and scheduling, and in determining who is conducting MEL activities.
- Incorporate mixed methods (see Table 4) to collect the information.
- Base all aspects of MEL on a gender-based and participatory approach where beneficiaries (women, men and communities) and different stakeholders actively participate, for example, by contributing to the identification of gender indicators.
- Follow gender-aware practices and ethical standards. For example, take into account the best times for interviewing women and provide facilities for childcare and disability access; commit to making interview responses confidential and anonymous where appropriate.
- Ensure that the baseline and initial data gathering is, at least, disaggregated by sex, but preferably also by other key areas of social difference, such as age and (dis)ability.
- Employ a gender specialist not only in the project implementation phase, but also in the MEL process.
- Raise awareness and understanding of gender issues among both the project delivery and MEL teams (e.g., through training if necessary).
- Establish a regular "gender reflection meeting" for different project staff to exchange learning on gender approaches and activities. Engage non-project gender experts if possible for peer review of the results.
- Communicate the results of the MEL effectively with relevant stakeholders, as it is key for improving the project as well as for accountability.

CASE STUDY

Photo: xx

Cambodia Horticulture Advancing Income and Nutrition programme (CHAIN)

Agriculture – Climate change adaptation

Project location: Kratié, Stung Treng, Preah Vihear and Oddar Meanchey, Cambodia

Authors: Sokundarun Lim and Rik Overmars; CHAIN, SNV[29]

Project dates: CHAIN is a project of the Swiss Agency for Development and Cooperation (SDC). It started in 2014 and will run until the end of 2022.

Partners: Implemented by SNV in a consortium with the Swiss Foundation for Technical Cooperation (Swisscontact) and local partners: Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Women's Affairs (MoWA), NGOs and private sector partners.

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

SNV

CHAIN
គម្រោង បន្ថែ ផ្លែឈើ កម្ពុជា

Climate and development goals

The main objective of the CHAIN programme is to support low-income, smallholder farmers to increase their productivity and income and to improve food security, nutrition and climate resilience. CHAIN does this by developing and strengthening horticulture value chains through a markets systems development approach, in close collaboration with public and private sector actors.

Agriculture represented 22.83% of Cambodia's GDP in 2020;[30] and is the main employer in rural areas. Approximately 19% of the rural population is at risk of falling back into poverty due to environmental and economic shocks, and the recent Covid-19 pandemic. In addition, natural disasters and scarcity of water resources because of climate change have great, potentially negative impact. The provinces targeted by the programme have high poverty rates and the highest levels of food insecurity in the country.

When the project began, most of the fruit and vegetables consumed in Cambodia were imported from Vietnam and Thailand. Cambodia's scarce production was inefficient because producers were poorly organised, had limited access to agricultural inputs and new technologies, used inefficient and time-consuming farming methods, and were poorly motivated to trade in markets. All of this affected the marketing of the products and depressed communities´ incomes.

In Cambodia, the annual temperature has increased over the last decades, and projections indicate that it may rise to 2.7ºC by 2060.[31] Consequently, the number of extremely hot days has increased dramatically – as has the number of drought days. A heatwave in 2016 destroyed many plots of vegetable farms.

Annual precipitation is expected to increase this century: the proportion of total rainfall during monsoonal storms is projected to increase by up to 14%[32]. Shorter, wetter rainy seasons and longer, more drought-afflicted dry seasons are expected. The resulting negative impacts on agriculture include soil degradation and the increased incidence of pests and diseases, for example, the invasion of flea beetle larvae, which can lead to severe destruction of vegetables, particularly root and leaf vegetables. Sea level rise, another aspect of climate change, is projected to cause increased salinisation of soils in coastal areas.

Women, men, agriculture and climate risk: the baseline

Women comprise around 65% of farmers in Cambodia. In the four CHAIN target provinces, an average of 70% of women are involved in homestead gardening and around 60% in semi-commercial and commercial farms. Women take care of the entire planting process and are in charge of the harvest, as men tend to migrate to the city or to neighbouring countries to look for jobs. Although men are involved in commercial production, women are generally the ones who trade fruits and vegetables within their communities. The gender analysis carried out for the CHAIN programme also shows that women who sell vegetables keep the money for later investments or for family expenses. Therefore, women are instrumental in generating family income and making decisions about its use. However, despite their central role in agriculture, women face great constraints. The gender analysis found that, at the programme's inception in 2014:

- Women had more limited access to resources such as land, credit and agriculture inputs than men. Their average level of education was lower, and they lacked access to technical trainings for better agronomic practices, climate-smart technologies and market linkages. Women had access to smaller amounts of land: 1.1 hectares, compared to 1.5 hectares for male-headed households.
- Gender norms and stereotypes prevailed, such as women's being responsible for household activities and family care. Therefore, women's time for participating in meetings and accessing market information was reduced. This issue was further exacerbated when men migrated to the city or other countries for work and women's time poverty increased further.
- Technical and financial service providers lacked gender responsiveness, limiting their effectiveness in serving women.
- Individual production in very small quantities weakened the economic power of women producers in local and remote markets. A more commercial market oriented production would attract more buyers and more market participation by women.
- There was a lack of inclusive value chain development policies. This, too, hindered market access by women producers and meant there was a lack of dialogue between women producers and buyers. These gaps hampered collective actions towards gaining competitiveness and sustaining business relationships.

Some of these constraints and inequalities exposed women farmers to climate risk, more than men farmers. For example, women's time-poverty and reduced mobility meant that they had reduced access to weather and climate information and to training on climate-smart agriculture.

To identify and analyse the gender-based constraints in agriculture, the programme used a toolkit by AgriProFocus (available here: https://agriprofocus.com/toolkit) to collect information about women's and men's differential access to and control over assets, resources and services.

Setting gender-responsive targets

CHAIN adopted a gender-transformative approach. Since its conception, the programme has considered that both countering gender constraints and empowering women economically will transform unequal gender relationships at all levels (household, farmer groups, multi-stakeholder platforms).

The approach considered that women are economically empowered when they meet the five key, "non-negotiable" dimensions (see Box on page 37).

Women's economic empowerment

This approach considers that a woman is economically empowered when she meets the five key "non-negotiable" dimensions.

1. **Economic advancement**, increased income and return on labour.
2. **Access to life chances and opportunities** (e.g., skills development, education, information, job openings).
3. Access to **assets, support functions and services to advance economically** (e.g., land, inputs, financial services, extension and business development services).
4. **Agency** (ability to make and influence decisions within different spheres including household finances, community, farmer groups, etc.).
5. **Manageable workload**. This last dimension is closely intertwined with time and mobility and linked to productive, reproductive and community roles.

The CHAIN programme was designed according to a Market for the Poor (M4P) approach. M4P aims to develop market systems that function more effectively, sustainably and for the greater benefit of poor people, offering them the capacity and opportunity to enhance their lives.

In each phase of the programme, gender strategies were developed to: (a) reduce women's heavy workloads, (b) free up time for training and other capacity-building activities, (c) enhance women's limited decision-making abilities at household level, (d) develop gender-responsive service delivery among other stakeholders, and e) strengthen women's businesses. It is important to note that in the development of these strategies, there was a gender specialist on the team, and all project team members and implementing partners received gender-sensitivity training.

CHAIN phase I motivated many small farmers to intensify the production of fruits and vegetables, showing the demand for these products and bringing them closer to direct buyers. At the same time, phase I included activities to strengthen knowledge and access to technologies in nutrition awareness, as well as introduce highly productive agricultural technologies (such as raised beds, trellises, quality seeds and drip irrigation).

CHAIN phase II incrementally strengthened business-to-business working models and promoted further cultivation of locally-produced vegetables to high quality standards and increased productivity. Together, these efforts contributed to increasing the local supply from 50% to 60% of total vegetable consumption in the target provinces, and to substantially increasing household income.

CHAIN phase III aims to scale up these approaches for year-round production and to integrate smart water solutions and climate-resilient water resource management with selected farmer groups and districts. Furthermore, it will support the development of a national horticultural policy and provincial public strategies for vegetable development.

CHAIN has enabled women to achieve their aspirations of earning their own money and contributing financially to the family. Through modern production techniques, especially plastic mulching and drip irrigation, women not only increased their income but also saved on labour, and became more resilient to climate change (droughts). As a result, there have been shifts in gender dynamics in the household through economic empowerment of successful females earning respect, recognition and decision-making power. Women are more active in business and there is increased collaboration between husband and wife. As women have gained more decision-making and financial responsibilities, it is important to ensure they are not overwhelmed with these responsibilities as well as with the traditional roles of household caretaker, caregiver, etc. In that sense, the programme continues promoting the sharing of tasks among household members, especially with those households that do not shift into this naturally, once the woman becomes more financially active.

Monitoring, evaluating and learning: sample indicators

Gender considerations were incorporated from the outset of the programme and in its ongoing processes. For monitoring and evaluation, the programme identified gender-related indicators to establish at baseline level and against which to monitor progress over time. Almost all indicators are disaggregated by gender. The indicators are at the goal (impact) level and at the level of outcomes and outputs. Depending on results of mid-term review of the programme, modifications of targets (numbers) took place.

The indicators at impact level and from one outcome are shown for the first phase of the CHAIN programme in Table 5.

> “Born and raised as a shy woman, I never dare to speak my mind. Through CHAIN, I was encouraged, given the opportunity to speak and share my thoughts to the public. I now dare to speak even to the provincial governor.”
>
> **Yan Sopheak, female trader, Kratie**

Table 5: Overall goal (impact): to increase income and food security of smallholder farmers' households in targeted rural areas in Cambodia		
Impact indicators	**Target**	**Assumptions/risks**
• Number of homestead farmers that increase income by an average of US$100 per year. • Number of processors that increase income by an average of US$100 per year from processing activities. • Number of household members, men and women, that have increased intake of food covering basic needs of essential nutrient components (proteins, vitamins, minerals). • Percentage of targeted farmers that are able to articulate how their household resilience has improved due to the project. • Number of aware households that improve dietary diversity for individual members.	• 1,000 commercial farmers (50% female). • 5,000 homestead farmers (95% female and 10% ethnic minorities). • 200 processors (80% female and 10% ethnic minorities). • 24,000 household members men and women (min. 4,000 ethnic minorities). • 60% of targeted farmers. • 80% of aware households.	• Sufficient people in low-density populated provinces participate in project activities. • Extra vegetables produced and marketed does not lead to reduction in household vegetable consumption. • Willingness of risk-averse poor farmers to effectively invest in raising their productivity and marketing. • Bottom-up approach is respected throughout the project for sustainable and effective results. • No distrust related to recent domestic conflict (including land ownership). • No distrust of ethnic minorities affecting the services offered. **Means of verification:** Baseline study, mid-term evaluation and final evaluation.
Outcome 1: Commercial and homestead producers and processors (male- and female-headed households) increase productivity by adapting improved technologies		
• Number of commercial farmers with increased yields. • Number of homestead farmers with increased yields. • Number of homestead farmers that have adopted the model for improved homestead farming for household consumption and marketing of vegetables. • Number of processors that have started to adopt new practices related to processing activities. • Number of processors that have taken up improved processing methods and improved throughput. • Number of households that are aware of importance of dietary diversity intake. • Percentage of farmers that are satisfied with the services provided to them.	• 1,000 commercial farmers (50% female). • 5,000 homestead farmers (95% female and 10% ethnic minorities). • 5,000 homestead farmers (90% female and 10% ethnic minorities). • 200 processors (80% female and 10% ethnic minorities). • 200 processors (80% female and 10% ethnic minorities). • 5,000 households aware of importance of dietary diversity intake. • 75% of farmers are satisfied with the services provided to them.	**Assumptions:** Expectation of free distribution of inputs is not hampering the participation in CHAIN. Target groups are interested in adopting practices even though they might be rather labour-intensive. **Risks:** Land concessions reducing farmers' interest to invest. Remoteness of project area from commercial areas decreases interest of private sector to invest. Seasonal labour shortage due to rural-urban migration. **Means of verification:** Baseline study, mid-term evaluation and final evaluation; list of trained households; interviews with farmer groups, traders, and processors; and monitoring reports.

Insights from using this approach

Progress was monitored on a yearly basis and compared against the gender equality and women's economic empowerment objectives, as well as indicators in the logframe. Various methodologies and tools were used to evaluate and monitor progress, including:

- desk research analysing the official mid-term and final evaluations (including dietary diversity intake for nutrition)
- in-depth and rapid interviews with target groups, such as farmer groups, traders, and small and medium enterprises (SMEs)
- focus group discussions with the beneficiaries and key stakeholders involve in the programme
- minutes of groups and field monitoring reports
- copies of contracts and interviews with farmers groups, SMEs providing agricultural inputs and participating traders
- copies of marketing strategies
- sales records of farmers groups and SMEs
- membership satisfaction surveys
- records of loans taken by targeted farmers from micro-finance institutions and farmers' savings groups
- production records at farm level.

With the support of a gender consultant and a communication officer, implementing agencies wrote annual case studies and policy briefs, and the project team leader disseminated these lessons learned through different media channels, such as conferences, advocacy workshops and dialogues.

After the second phase finished, qualitative research was conducted and a document with stories of significant change with key CHAIN stakeholders was developed. These analyses aimed to identify the impact of the CHAIN project at different levels (individual, household, community, clusters, provincial and national), to learn what types of change had been most valuable to project stakeholders, and to capture personal stories from the CHAIN project to better communicate the experience of significant change, including unexpected changes, systemic changes, and trends.

Web page: https://youtu.be/R45oZTbPf_o

Video: https://www.youtube.com/c/SNVNetherlandsDevelopmentOrganisation

> "A lot changed since joining CHAIN. [I] have more knowledge and profit, I am happy and satisfied – before I felt like a kid who didn't know how to read and write. Before I had no idea about farming, now I know benefits of covering land and drip irrigation and how much to spend."
>
> **(Mrs) Ven Dika Uon, Stung Treng Province (shown right), agriculture input supplier**

Photo: CHAIN project

CASE STUDY

Photo: EnDev III, Tanzania

Energising Development (EnDev) Tanzania

Energy sector – Low-carbon development

Project location: Rural areas of Tanzania

Author: Inga Brill, SNV[33]

Climate and development goals

The overarching goals of the Energising Development (EnDev) programme in Tanzania, implemented by SNV, are to tackle energy poverty, increase access to cleaner energy sources for households, and increase the amount of sustainable income for women and men. First launched in 2013, EnDev is now coming to the end of a third phase (EnDev III), which built on the learning and the achievements of the earlier years.

EnDev III Tanzania's programmatic objectives include developing markets and sustainable supply for improved cook stoves. "Improved" is defined as a cook stove that is more efficient, emits fewer emissions and/or is safer than traditional cook stoves. EnDev III builds on existing local supply chains for improved cook stoves to support the production, distribution and sales of clean and marketable cook stoves that meet the needs of rural households. Until recently, EnDev III also ran a results-based financing programmes to develop the market for small-scale solar products in areas of Tanzania that particularly lack electricity infrastructure. The focus of this case study is on the cook stove part of the programme.

Project dates: 2013-present

Partners: EnDev III is funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), the Netherlands Ministry of Foreign Affairs (DGIS), the Norwegian Ministry of Foreign Affairs and the Norwegian Agency for Development Cooperation (NORAD) and the Swiss Agency for Development and Cooperation (SDC). The programme is co-managed by Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH and Netherlands Enterprise Agency (RVO.nl).

Women, men, poverty and energy: the baseline

The World Bank found that 49.4% of Tanzanians live below US$1.90 a day,[35] but women find it harder to get paid work than men. For every unemployed man (defined as 15 years old or above and seeking work), there are 1.6 women looking for paid work.[36]

Tanzania scores better than other African countries in the Africa Gender Index; however, women still spend 3.7 times as long on unpaid domestic and care work than men do.[37] And Tanzania's gender gap on economic dimensions of development is lower than the continental average, at 0.507 (where 1 is gender parity). This measure includes secure, decent employment; access to credit; mean wage and salary; participation in business, etc.[38]

The Government of Tanzania is committed to rolling out sustainable energy projects to fill the current energy access gap.[39,40]

The energy gap is large for the population as a whole. According to Tanzania's Energy Access Use Situation Survey II (EASUSII) of 2020, electrical connectivity in any form (grid or solar) was recorded amongst 36% households (68% of households in urban areas, 19% of rural households). The Government has set a target of 75% for national electrification by 2033.[41] This is in the context of frequent droughts, which have impacted hydropower capacity.[42] Biomass represents 90% of the of total primary energy consumed in Tanzania.[43] Of this amount, the residential sector consumes about 70% of total, which is explained in large part "by the use of inefficient stoves for cooking with firewood and charcoal".[44] A recent report found that "only about 8.1% of households in Tanzania use clean energy sources for cooking. In 92% of households, it is mainly women, as the ones responsible for cooking, who bear the burden of collecting firewood and using inefficient technologies. This negatively affects their health, time and productivity."[45]

Setting gender-responsive targets

EnDev III's approach to clean energy development seeks to be gender-responsive in several ways. The programme promotes women's equal participation in the programme as cook stove producers and behaviour change communication advocates – and also targets women as buyers and users of improved cook stoves.

For cook stove production, a large proportion of producers are women. The improved 'Jiko Matawi' cookstoves promoted by the project come in two models including kiln-fired clay and kiln-fired clay with a metal cladding exterior. The Jiko Matawi is a dual-fuel stove that can accommodate either charcoal (traditional charcoal or sustainable briquettes) or firewood within the same stove. In order to ensure sustainability of cook stove enterprises developed through the programme, EnDev sought to enrol producers who were already clay or metal artisans and needed specific technical training to become improved cook stove producers and add the Jiko Matawi to their existing line of products. Many of these artisans were women.

The programme set out targets and indicators (see Table 6) to ensure that women were provided with a 'fair share' of participation in the production, marketing and sales of cook stoves. Behind the targets are some very carefully designed programme activities to facilitate women entrepreneurs' success, as follows:

- **'Participatory Action Learning for Sustainability' (PALS).** PALS initiatives bring together the producers of the improved cook stove and their spouses for a two-day workshop. The key outcome of a PALS workshop is the

> "EnDev's drive is to improve the lives of the most vulnerable people, ensuring no-one is left behind. Economic opportunities and green jobs are created by building markets for modern, renewable energy. EnDev contributes to reducing greenhouse gas emissions to protect our planet's climate. Its approach is to empower structural, self-sustaining change; kick-starting market and sector development that evolves further without support by EnDev."
>
> **Source: EnDev 2020 Global Report[34]**

Photo: EnDev III, Tanzania

setting of a family vision for a happy life and understanding how the cook stove business and other income-generating activities can contribute to achieving this vision.

- **'Clean Cooking Advocate' women's groups.** The approach works closely with local leadership at a district level to identify women who are trained as Clean Cooking Advocates (CCAs). These women lead behaviour change communications campaigns in their communities. Based on the community health worker model, the advocates visit their neighbours door-to-door and set meetings to educate on clean cooking practices for health and reduction of the use of forest resources for cooking fuel. CCAs are also trained as sales agents for Jiko Matawi. This means they have an opportunity to earn income, which motivates them to continue their community behaviour change work.

- **Role-modelling women's leadership.** High performing, successful women cook stove producers, i.e. 'champions', are interviewed on video. These videos are shared with new women producers as a way of motivating them about how their businesses and lives can change through engagement in the programme. These champions go on to co-facilitate trainings organised by SNV.

Monitoring, evaluating and learning: sample indicators

The indicators for the project measure the:

- percentage of cook stove producers involved who are women
- performance of the businesses disaggregated by gender
- number and percentage of women participating in behaviour change communications.

These are detailed in Table 6.

Insights from using this approach

SNV intentionally profiles successful women as part of its cook stove training programmes, by using videos that capture lessons and insights from earlier women participants. When training begins for a new cohort, trainers play a video profiling a successful woman, which motivates those who are younger or less experienced and instils them with greater confidence. This aspect of capturing learning from earlier training cycles to motivate participants in later cycles – by way of role-modelling – is credited by programme managers as a key ingredient to women's solid achievements.

A further, effective approach has been SNV's support for women to access productive assets and their facilitation of intra-household conversations (e.g. between spouses) about the growth of the business.

Once cook stove producers have been trained, they must pass a quality assurance check, then they can enter into the results-based incentives aspect of the programme. For every cook stove they sell, they get a certain number of points. The EnDev III programme does not provide cash, but rather, productive assets, such as a ceramic mould or smart phone, in return for the points. The producers themselves decide which asset to choose.

EnDev III has documented that women's access to productive assets increases women's standing in the household and brings the household prestige. Over time, the programme has seen that older husbands, who are proud of their successful wives' accomplishments, have advised younger husbands to 'stand behind' their entrepreneurial spouses. Husbands of women who have been in business for longer and have become leaders in their community have stated that when their wives are in leadership positions, it helps the whole family.

In summary, the EnDev III team's tips on gender integration for other programme managers, based on its experience, are:

- Profiling female role models is a very effective approach for motivating other women.
- Identify high-performing women who are willing to create mentorships with young women via the programme and/or document their stories, which can be shared more widely.
- For entrepreneurship-based programmes, find a way to involve the spouse in discussing how the business impacts the household and what the implications are. When wives are targeted for skills development and financing, engage the husbands through a participatory learning approach to have conversations about the business.
- Sometimes conversations between the sexes are not held because of cultural taboos. Adopting an artistic approach can help bring issues to the surface in a non-threatening way. For example, in participatory learning sessions, women and men draw their respective visions of a happy household on different sides of the paper, then discuss the differences and plan how to resolve them into a unified vision.

Table 6: Indicators monitored by EnDev III*			
Indicator	**Baseline (2019)**	**Outcomes measured (2020)**	**Outcomes measured (August 2021)**
Number of total improved cook stove producers trained and working to sell stoves	80 producers 13 regions	106 producers; 16 regions	150 producers, 17 regions
Percentage of trained cook stove producers who are women	37 female producers 46% total	44 female producers, 41% total	70 female producers, 46.6% total
Number of new Matawi (improved) cook stoves produced as a result of project activities, sold to and in use by Tanzanian households	50,924 units (Jan-Dec 2019), 4,234 units/month	79,582 units (Jan-Dec 2020), 6,631 units/month	69,121 (to 31 Aug 2021), 8,640 units/month
Proportion of customer base served by Matawi cook stoves attributable to women producers	27,243 units sold by female producers 53% total sales (Jan-Dec 2019)	36,704 units sold by female producers, 46% of total sales	39,440 units sold by female producers, 57% of total sales
Number of EnDev-supported cook stoves purchased in target regions, attributable to women Clean Cooking Advocates producers (3 producers)	3,376 units (Jan-Dec 2019), 281 units/month	5,882 units (Jan-Dec 2020), 490 units/month	6,111 units (to 31 Aug 2021), 764 units/month

* These did not have specific targets, but the team monitored actual achievement.

Video: Hassan Bussiga, SNV Project Manager, tells the story of the EnDev funded Tanzania Improved Cookstoves project (TICS): https://youtu.be/nhrFTjpuI0o

Web page: https://snv.org/project/energising-development-iii-tanzania

CASE STUDY

Photo: World Food Programme, Malawi

Promoting Sustainable Partnerships for Empowered Resilience (PROSPER) *part of the Building Resilience and Adapting to Climate Change (BRACC) programme*

Climate-smart agriculture, improved nutrition, integrated watershed management and natural resources management, shock-sensitive social protection, finance and insurance, market systems development – Climate adaptation and disaster risk reduction

Project location: Balaka, Chikwawa, Mangochi and Phalombe districts, Malawi

Authors: PROSPER project team[46]

Climate and development goals

PROSPER aimed to build the resilience of households and communities, strengthen shock-sensitive social protection, expand climate-smart agriculture, reduce exposure to hazards and risks, achieve food and nutrition security, and diversify and improve income generation and economic opportunities.

It sought "a reduction in extreme poverty and an end to the recurrent cycle of hunger and humanitarian assistance in Malawi" through strengthening the resilience of over 950,000 low-income and vulnerable people to withstand current and future weather- and climate-related shocks and stresses, and to achieve their full economic potential.[47]

In practice, PROSPER's multi-million dollar programme across four districts of southern Malawi involved the following activities in pursuit of its goals, targeting the different levels (individual, household, community, ecosystems, markets and governance) necessary for resilience:

- Promoting climate-smart agriculture and good agricultural practice.
- Organising events with private sector and district authorities to promote farmers' access to high quality agricultural inputs (certified, improved and drought-tolerant seeds, inoculants and key agro-chemicals).
- Strengthening agricultural extension services.
- Disseminating agricultural and market information.
- Developing market systems by promoting private sector engagement and demonstrating pro-poor business initiatives.
- Promoting access to financial services for rural households, including credit and loans, insurance products and entrepreneurship training.
- Enabling women and men to engage in sustainable land use and watershed management, while addressing resource, social and gender constraints.
- Supporting community-led solutions through participatory planning processes.

Project dates: December 2018 - July 2021

Partners: Concern Worldwide, CUMO Microfinance, Food and Agriculture Organization of the United Nations (FAO), GOAL, Kadale Consultants, Malawi Resident Coordinator's Office of the United Nations, United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), United Nations World Food Programme, United Purpose.

PROSPER
PROMOTING SUSTAINABLE PARTNERSHIPS FOR EMPOWERED RESILIENCE

- Supporting community-managed disaster risk reduction through local contingency plans, strengthening community disaster management committees, building flood mitigation engineering works linked to watershed management, and building multipurpose evacuation centres in disaster-prone areas.
- Supporting the national Department of Disaster Management to reactivate the district disaster risk management coordination structures, including re-activation of technical sub-committees, such as the early warning sub-committees (at district level) and building a Disaster Risk Management Information System.
- Supporting shock-sensitive social protection to address shocks and stresses (those caused by weather and climate, and others), including the multi-dimensional effects of the lean season on households and communities.
- Promoting enhanced nutrition through communications for behaviour change, running care groups, radio programmes and other methods.

Women, men, marginalised groups, vulnerability and risk: the baseline

Malawi has a robust laws and policies for gender equality, but there is relatively little awareness of these in society[48] and inadequate implementation, so gender-related discrimination is deep-rooted in practice:

> *'Structural inequalities are deep-rooted and persistent in Malawi and remain a key obstacle to progress on women's equality and social inclusion. Malawi is a highly patriarchal society and gender inequalities are deeply entrenched. This is reflected in women's engagement in low-income activities and unpaid care, limited ability to engage in decision-making, limited access to resources and assets, higher illiteracy rates, inadequate access to systems and services (including education and healthcare) and high rates of gender-based violence. Polygamy can exacerbate inequalities, while widowhood, divorce, and separation are associated with lower social inclusion.'*[49]

According to the African Gender Index, in which a country's score of 1 indicates gender parity between women and men, and any score between 0 and 1 indicates inequality (with low numbers toward 0 illustrating extreme inequality), Malawi has a score of 0.5.[50]

In PROSPER's target districts of Balaka, Chikwawa, Mangochi and Phalombe, men are seen as providers and the ones who control the household's money, while women are seen as the 'utilisers' of what men provide.[51] Married women have limited influence over decision-making in the household and little control or ownership over household assets.

All districts have high rates of polygamy, gender-based and sexual violence. Specific forms of discrimination and violence affect girls and women in the course of their lives, from harmful traditional practices related to initiation of adolescents to land grabbing from widows.[52]

At community level, most leaders are men, and even where greater participation of women has been encouraged, they often lack influence. Women's work burdens are far in excess of men's, as a result of both their almost exclusive burden of unpaid care work, and farming tasks that are typically seen as 'women's work'.

Profitable crops tend to be dominated by men, and women receive less agricultural advice from agricultural extension workers than men, tend to farm smaller plots of land, and tend to have lower yields. As people age, they tend to lose status and privileges, and people living with disabilities

Figure 9: Targeted groups key

HANGING IN

Households with little or no potential for market engagement or an ability to 'step up' or 'step out' will 'hang in', using agriculture as a safely net rather than a driver to move up the livelihood ladder.

STEPPING UP

Households with land, labour, assets and capacity for food surplus and/or commercial activity that can 'step up' the livelihood ladder into more diverse and higher value agricultural activities.

STEPPING OUT

Rural households that can productively 'step out' of agriculture, into more productive sectors of the economy. This could be a local 'step out', finding better-paid employment in local non-farm activities, combined with existing agricultural activities, or investing in a small or medium enterprise. It can also be a 'migration step out' to take advantage of opportunities in peri-urban and urban areas.

Source: In alignment with the national resilience strategy (2018-30) (NRS, pg 3), BRACC programme (2021)[54]

tend to be treated as 'charity' cases rather than included in projects and collective endeavours in ways that enhance and build on their talents.[53]

These differing forms of discrimination, which can be combined and compounded for individuals, can undermine their ability to access resources and information, their ability to work productively and accumulate assets to protect themselves and their households from hardship and, hence, their ability to withstand weather-related stresses and shocks.

Setting gender-responsive targets

The various elements of the PROSPER team's work were inherently designed to target the capabilities and needs of various target groups in the communities where they worked. To promote greater economic empowerment of the households with the lowest incomes and assets, interventions included targeting them for cash transfers to spend on improved nutrition and productive activities. These households are referred to as 'hanging in' (in alignment with Malawi's National Resilience Strategy).[55] The programme recognised that the precariousness of the poorest people's lives required an extra measure of social protection (see Figure 9).

The households with somewhat more secure assets and income streams, known respectively as 'stepping up' and 'stepping out' households, in addition to those 'hanging in', were involved in the broader suite of PROSPER activities to improve the climate resilience and productivity of agricultural practices, watershed and natural resource management, access to finance, and the effectiveness and durability of market systems.

The PROSPER programme was guided by Malawi's National Resilience Strategy that "recognises the importance of gender and social inclusion, and the need to consider the vulnerabilities and capacities of disadvantaged groups when designing and implementing programmes" (Ibid.).

Early in PROSPER's history, the consortium engaged gender and social inclusion (GESI) specialists, C12 Consultants, to work with the programme to devise a GESI strategy.[56] The strategy was developed through several steps. It began with an analysis of the implementing partners' GESI strategies (because the partners had their own institutional strategies) to identify areas of overlap and coherence; followed by a desk review of gender-related

data from the four target Malawian districts. The GESI specialists also undertook further primary data collection, involving:

- Stakeholder consultations with 13 central-level partner staff members and other relevant stakeholders (six male and seven female).
- Focus group discussions with 62 programme participants (27 male and 35 female) in two districts.
- An attitudinal survey, based on the Concern Gender Equality Scale (see box), with 118 programme participants and target community members (48 male and 70 female) in two districts.
- Key informant interviews with 11 district-level partner staff members (five female and six male).

Following completion of the analysis, a PROSPER GESI strategy was developed by the specialists, which included the following additional steps:

- Two workshops with a total of 16 partner staff members (seven male and nine female) from the project team to identify current gender-sensitive practices, issues to consider, and opportunities for transformative approaches.
- A feedback session (held online due to Covid-19 restrictions) with 12 programme partner staff members (two male and 10 female) representing six consortium partner organisations.
- Written feedback and input was also received from all partner organisations and incorporated into the final strategy.[57]

The Concern Gender Equality Scale

In 2013, Concern Worldwide developed an easy-to-use quantitative monitoring tool to measure attitudes relating to gender equality, suitable for programmes that address economic, political and socio-cultural inequalities.

The purpose of developing the tool was to enable project managers to:

- Identify changes in attitudes over a short period of time (for instance after training).
- Incorporate within baseline and endline studies in order to monitor progress in changing attitudes and practices to gender equality.
- Utilise the scale in a number of different contexts in a manner that was easy to administer and interpret.

The Concern scale was developed based on existing scales, in particular the 'Gender Equitable Men Scale' and 'Women's Empowerment Scale.'[58]

The Concern scale was used to survey community members about their attitudes to women's and men's status in society and their forms of paid and unpaid, productive and caring work.

The GESI strategy:

- Presented a framework for the programme to be, at minimum, fully gender-responsive in the delivery of its work, but also to strive further towards transforming gender relations.
- Led to modifications in the programme's results indicators to make them more gender-responsive.
- Set high standards of gender and social inclusion for programme operation, which guided the implementation of activities at a practical level.
- Provided a series of nine pathways for implementing partners to select from, including three mandatory pathways.

These GESI-related goals, standards and guidelines were rolled out across the PROSPER programme. They are presented in the following section.

Although the GESI strategy was developed part-way through the inception phase, rather than at the very beginning, it was nonetheless a guiding light and inspiration for staff, as they rolled out PROSPER's activities:

> *'Just by means of having the gender analysis and strategy done, the partners looked internally at their own programmes and were prompted to make some changes and adapt some thinking to gender and inclusion. It gave them the ability to carry out more…gender and inclusion [activities].'*
> **- PROSPER implementing partner**

The GESI strategy, which was ambitious and forthright in stressing the potential of PROSPER's programme to challenge and transform unequal gender relations, even encouraged consortium partners to apply these goals to further projects and programmes (a positive, spillover effect):[59]

> *'For the gender practice, there is that sort of inclusion whereby women and adolescent mothers are prioritised in the programmes: that is also lesson learnt as well as something that we at Youth Net and Counselling (YONECO) can adopt as far as gender concept is concerned, so we are learning a lot on gender issues and we are really implementing what we are learning from our partners.'*
> **- PROSPER implementing partner, Balaka**

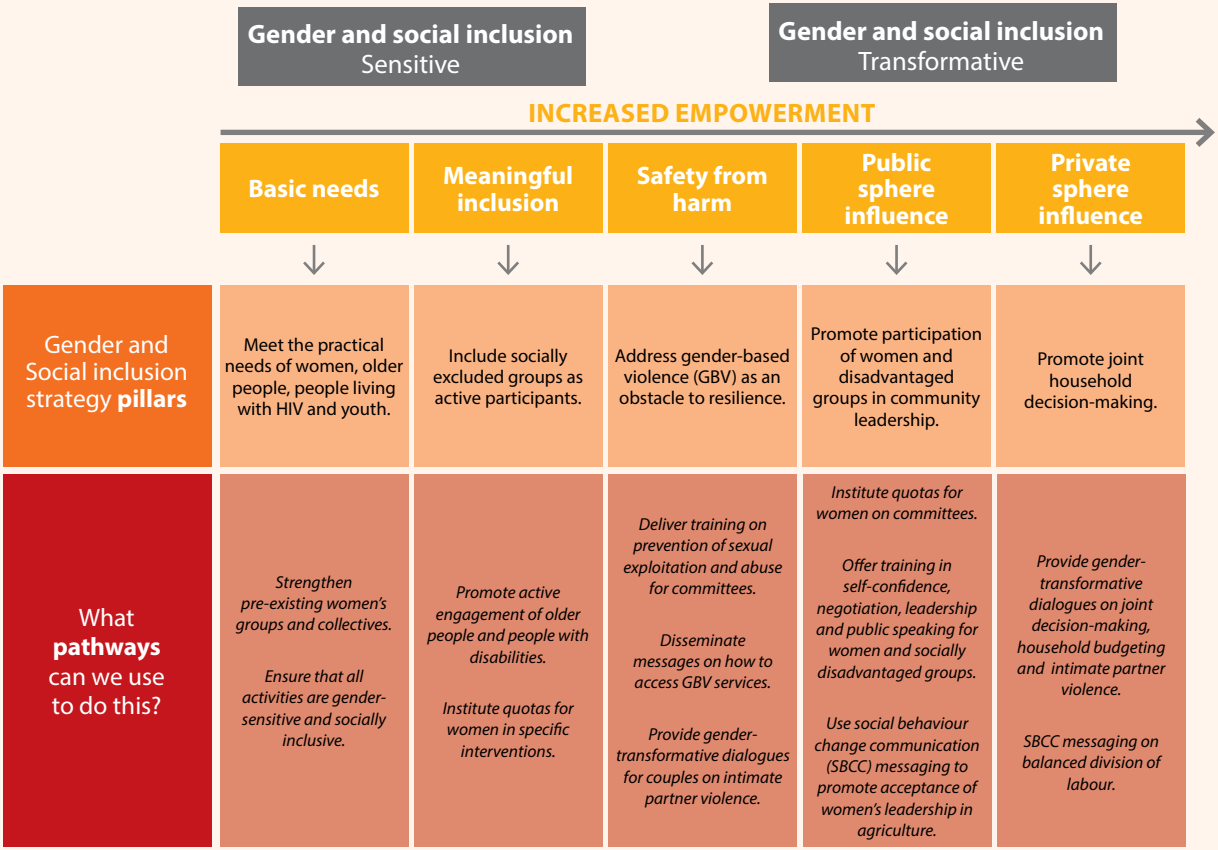
Photo: World Food Programme, Malawi

Monitoring, evaluating and learning: sample indicators

The GESI strategy established gender inequality as a significant barrier to resilience building, and that if the PROSPER programme was "blind to the inequalities in access to resources and opportunities that further drive people's vulnerability, its ultimate aim of reduction in extreme poverty and putting an end to the recurrent cycle of hunger and humanitarian assistance in Malawi cannot be fully met."[60]

The PROSPER GESI strategy developed five strategic pillars to enable the PROSPER programme to meet its resilience goals and nine pathways (specific activity streams) to underpin these (see Figure 10).

Figure 10: Gender and social inclusion strategy



The GESI strategy further set targets for how the project team could operationalise each of these pathways through the PROSPER intervention areas (climate-smart agriculture, increased crop productivity, livestock, irrigation, watersheds, disaster risk reduction/early warning systems, micro-credit, micro-insurance, markets and nutrition). As an illustration, Table 7 presents the targets for operationalising 'strengthening pre-existing women's groups and collectives' and 'ensuring all activities are gender-sensitive and socially inclusive'; they were recommended to be 'neither prescriptive nor exhaustive'.

PROSPER district teams each selected pilot approaches to roll out across two to three intervention areas. They monitored success and consolidated gains over the second year of the project, with the intention to expand and trial additional GESI approaches as the PROSPER programme continued.

Unfortunately, this scale of ambition was not able to be fully realised, due to unforeseen funding cuts and programme termination. In mid-2021, PROSPER's principal donor ended funding, citing pandemic-related budget cuts. PROSPER ended two years earlier than first planned. The early termination of PROSPER is the main reason for the lack of broader, deeper results achievement and analysis under the GESI strategy.

Nonetheless, PROSPER managed to undertake a process evaluation of the programme implementation more broadly until that date, involving household surveys, focus group discussions and key informant interviews with programme participants as well as the implementing organisations (delivery team). Data was disaggregated, not just by sex (female/male) but by female-headed households, male-headed households, households with members living with a disability, etc. A programme evaluation of the results achieved will be conducted later in 2021.

Using the right indicators

Logframe indicators were adjusted specifically so that they would measure advances in wellbeing for women and men. The rationale for doing this was that it "a) commits the programming to collecting gender-disaggregated data, and b) encourages the programme to target a balance of women and of men."[61]

Sample PROSPER indicators

Output indicator: Number of low-income women and men with increased access to productivity or income-enhancing inputs or services/markets

Indicator for shock absorption: Number of women and men with a minimum savings amount of US$19 per village savings and loan cycle.

Table 7: Key pathway strategy: Ensuring that all activities are gender-sensitive and socially inclusive	
Climate-smart agriculture	Ensuring that all meetings/trainings activities follow the GESI guidelines.
Increased crop productivity	Promoting the use of productivity-raising and labour-saving technologies such as: inoculant, irrigation equipment, spray services and agro-chemicals, improved seed varieties, post-harvest handling equipment and solar products.
Livestock	Ensuring that all meetings/trainings activities follow the GESI guidelines.
Irrigation	Ensuring that all meetings/trainings activities follow GESI guidelines. Promotion of drip irrigation technologies and other devices that reduce labour burden.
Watersheds	Including less physically able people (pregnant women, older people, people living with disabilities), addressing needs for childcare.
Disaster risk reduction, early warning systems	Taking into account the needs of women, children and people with disabilities in community action plans.
Micro-credit	Establishing and expanding Village Savings and Loans groups for older people and people with disabilities.
Micro-insurance	Exploring channels for ensuring that women and disadvantaged groups can access information about micro-insurance products as well as use them.
Markets	Exploring opportunities for older people, young people and people with disabilities to access markets.
Nutrition	Engaging fathers in Fathers' Care Groups to ensure that men are engaged in their children's nutrition without reducing women's access to a safe forum for accessing nutrition and health information and support. Providing cash for better nutrition outcomes to pregnant and lactacting women.

Key pathway strategy: Identifying and strengthening pre-existing women's groups/collectives	
Climate-smart agriculture	Creating and strengthening women's marketing groups.
Increased crop productivity	Creating and strengthening women's marketing groups. Facilitating access to input fairs for female agrodealers.
Livestock	Creating and strengthening women's marketing groups.
Irrigation	Creating and strengthening women's marketing groups.
Micro-credit	Identifying women makority VSLs that are functioning well to target for development of aggregation or marketing groups.
Micro-insurance	Providing micro-insurance through VSLs, targeting women and vulnerable groups.
Markets	Creating and strengthening women's marketing groups.
Nutrition	Leveraging care groups.

Insights from using this approach

PROSPER's staff and members of the related Knowledge and Policy Hub[62] reflected on the GESI strategy, its targets, monitoring, evaluation and learning, and compiled key lessons learned. These follow below, alongside data from the annual survey collected at the start of year 2 of the programme. The analysis found that disaggregated data collection is vital, especially when it goes beyond 'just' gender/sex, and investigates intersectional vulnerabilities, such as those related to age, disability, etc..

The annual survey data revealed, for instance, that female-headed households, elder-headed households and households with a member with a disability were more likely to be in the lowest socioeconomic category, 'hanging in', than 'stepping up' or 'stepping out'. However, households with a person with a disability were only more likely to be in the 'hanging in' category if the household head is female, and large households are only more likely to be 'stepping out' if the household head is male. The understanding of nuance in intersectional vulnerabilities and strengths is useful for informing programme targeting in the future.

A further finding was that traditionally vulnerable groups often had similar or better resilience outcomes than other PROSPER participants following programmatic interventions to improve their situation. One measure of resilience was a household's ability to finance a Malawi Kwacha 10,000 (US$ 10-12) shock (such as an emergency medical expense). Female-headed households were found to have similar access to finance as male-headed households, including equal access to bank accounts, microfinance and insurance. Female-headed households were more likely to have at least US$10 in savings. Male-headed households were more likely to report that if they needed US$10 in an emergency, they would have no way of getting the money.[63]

The disaggregation of data collection and analysis in the MEL system that revealed these differences was found to be highly effective and useful. Even though PROSPER is winding down, the key findings from the annual survey data raise issues and questions about societal relations and programme design that could inform the design of future resilience programmes in Malawi.

Where the monitoring and evaluation was less effective to date was in surfacing intra-household dynamics.[64] At the time of writing, further research is underway to better understand the impacts of the programme at an individual or intra-household level as part of a final programme evaluation. One aim of this additional evaluation is to understand how much individual women may have benefited, compared to men, and which attributes, such as their age, marital status, disability status, as well as socioeconomic status, may have influenced economic empowerment and climate resilience outcomes. It is hoped that the research may also illuminate how different programme interventions have affected the power relations between the sexes and women's confidence and ability to stand up to gender-based violence.

PROSPER fact sheet: https://malawi.un.org/en/46835-fact-sheet-promoting-sustainable-partnerships-empowered-resilience-prosper.org/project/endev-results-based-financing-rbf-rural-market-development-pico-solar-tanzania

Concern Worldwide work in Malawi: https://www.concern.net/where-we-work/malawi

CASE STUDY

Photo: Global Fund for Children | Flickr

Educating Nigerian Girls in New Enterprises (ENGINE)

Entrepreneurship and professional services work across sectors

Project location: Kano, Kaduna, Lagos and the Federal Capital Territory, Nigeria

Authors: Vaidehi Krishnan and Beza Tesfaye, Mercy Corps[65]

Climate and development goals

ENGINE had two main goals:

1. To support in-school girls successfully transition to the next phase of education, or complete their current education cycle and enter the workforce, through enhanced learning experiences and an improved enabling environment. This includes moving from junior classes to senior classes with improved literacy and numeracy skills, or girls in senior classes completing secondary education and entering further education or work (paid job/vocational skills/ entrepreneurship).

2. To give girls whose schooling had been interrupted the opportunity to build their functional literacy and numeracy, while building assets and diversifying income sources. In doing so, enabling girls to place themselves on a path to greater success and transition to employment and demand-driven entrepreneurship opportunities. This could include being linked to business and economic opportunities, expanding their existing business, pursuing vocational training, or returning to formal education.

Although not explicitly a climate project, the rural communities of northern Nigeria where ENGINE was situated are highly climate-vulnerable. Here, most of the workforce depends on rain-fed agriculture. Crop and livestock productivity is at risk from increasingly frequent droughts and high temperatures, and more than two-thirds of people live below the poverty line. In this context, a climate-resilient strategy for households and individuals is to diversify into less climate-vulnerable livelihoods.

Career pathways supported by the programme and driven by girls' interests included diverse crop production (e.g. yam, millet, ginger) and livestock-keeping work in the rural areas (e.g. poultry) as well as work in service industries (e.g. medicine, beauty).[66]

The approaches taken in ENGINE strengthen social resilience, which is vital to people's ability to withstand the shocks and stresses of climate change. Social resilience is defined as: "(1) the assets that people can draw upon, (2) the flexibility to change strategies, (3) the ability [to mobilise] for social organisation and collective action, (4) learning to recognise and respond

Project dates: 2013-2020

Partners: Mercy Corps led the implementation of ENGINE in Nigeria, along with four civil society organisations, including the Society for Women Development and Empowerment of Nigeria (SWODEN) in Kano, Action Health Incorporated (AHI) in Lagos, Kindling Hope across Nations Initiative (KHAN) in Kaduna, and Tabitha Cumi Foundation (TCF) in the Federal Capital Territory.

MERCY CORPS

to change, (5) the socio-cognitive constructs that enable or constrain human behaviour, and (6) people's agency to determine whether or not to change."[67]

ENGINE's multi-faceted approaches to gender equality and girls' empowerment can also be seen as a way of building individuals' and communities' adaptive capacities. This concept goes beyond just the assets and income at people's disposal and is also about "recognising the importance of various intangible processes: decision-making and governance; the fostering of innovation, experimentation and opportunity exploitation; and the structure of institutions and entitlements."[68]

The ENGINE case study is included in this guide because it adopted an innovative and successful 'all-of-community' approach to preparing adolescent girls and young women to enter secure, sustainable employment. Specifically, it involved engaging not just the girls, but also boys, parents and guardians, and other community 'gatekeepers', such as education committee leaders, in dialogues around girls' education and training. The way the programme targeted these groups in differentiated and complementary ways, and the logframe indicators it adopted to track progress, are readily transferable to climate-compatible development projects in other contexts.

Gender, economy and society: the baseline

Women's economic empowerment, which contributes to their everyday wellbeing and also their resilience to shocks and stresses (including weather and climate extremes), is hampered by their lack of education and access to information and finance. On all development indices, Nigerian women and girls fare worse than their male counterparts.

- Nigeria has a very low gender equality score of only 0.372 on the composite Africa Gender Index,[69] where 1 represents gender parity across a range of social, economic and empowerment and representation indicators. In this index, Nigeria scores 0.627 on economic and business variables (female labour force participation, work in vulnerable employment, access to finance, time spent in unpaid work, etc) and 0.952 on social variables (primary, secondary and tertiary education completion and school dropout rates); while on the empowerment and representation indicators (reflecting women's roles in political and business leadership), Nigeria scores particularly low, at 0.086.
- Nigeria ranks 139 out of 156 countries on the Global Gender Gap index.[70] This index measures women's economic participation and opportunity, educational attainment, health and survival, and political empowerment.
- There are regional differences in girls' access to education and vocational guidance and training. In all southern regions, there is gender parity in school enrolment, while in the northern states, including Kano and Kaduna states where ENGINE

Share of young Nigerians **not** in education, employment or training:

Women who believe a husband is justified in beating his wife when she goes out without telling him (%) **21.4% of women** (2018) **down from 32.3% of women** (2008)

Source: https://data.worldbank.org/country/nigeria

was implemented, girls make up a little more than two-thirds of the total number of boys in school.[71]

Poverty and economic issues, early marriage and teenage pregnancy, inadequate school infrastructure, and misinterpretation of religious creeds are the main issues that prevent girls from going to school. With 40% of Nigerians (83 million people) living below the national poverty line (with this proportion set to swell, due to the Covid-19 pandemic),[72] girls are often sent to work in the markets or hawk wares on the streets. Many of these factors combine to prevent girls from going to school.

Setting gender-responsive targets

The first phase of ENGINE created 'safe space' learning centres and employment mentoring and matching services for girls and young women (focusing on adolescents). Delivery partners and funders who evaluated that the first phase of the project determined that more attention should have been focused on girls' pathways from one level of education to another, or from being out of school to starting training or stable paid work. In the second phase, therefore, ENGINE aimed to support young women to undertake these years-long transitions.

Programme managers also realised that the specific needs of boys had to be addressed, in order to foster development and harmony for a whole generation. At the same time, to tackle existing deficits in education and promote decent work for girls and young women, different interventions needed to be developed for girls and boys separately.

The programme devised activities for boys, which included educating them on girls' menstrual cycles and hygiene and reproductive health. The goal was to banish ignorance and make boys more understanding and supportive of their female peers. Engaging parents and community leaders on gender equality was built into project design, as well as learning and community engagement (see right).

Main focus group

Core interventions

1. Informal savings and loan groups; Bank accounts; Links with ministries to access government loans.
2. Vocational and business skills; Apprenticeships; cash/ in-kind grants.
3. Alternate education in English, Math, Science, Life Skills. Peer connections through girls clubs.

ENGINE's primary goals

For girls in school: keep them in school

For girls out of school: support pathways towards meaningful employment

Age groups: young adolescent girls (10-15). Older adolescents (16-19) and female youth (17-23)

Locations: Kano, Kaduna, Lagos, Federal Capital Territory

Enabling environments

1. **PARENTS**: The project worked to address gender norms and shift parent's attitudes towards girls' employment and non-traditional gender jobs.
2. **MENTORS**: The community identified suitable and reputable business mentors for girls, to provide ongoing mentorship and support.
3. **PEERS:** The project supported adolescent boys and male youth to address their specific needs and provided opportunities to address gender norms and create a supportive environment for girls.
4. **POLICIES:** ENGINE advocated with state governments to ratify Nigeria's national policies for women and girls; and allocate resources for policy implementation.

Monitoring, evaluating and learning: sample indicators

ENGINE recognised the 'intersectional' aspects of girls' and young women's capacities, vulnerabilities and barriers to education and secure, sustainable work. The programme targeted 'marginalised' girls, which it defined as in Figure 11 (courtesy Mercy Corps).

Figure 11: ENGINE's targeted approach

Programme reach: 18,000 girls across four states of Federal Capital Territory Abuja, Kano, Kaduna and Lagos and 19 local government areas.

Targeted girls: Marginalised in and out of school girls aged between 16 and 24 years who meet ENGINE marginalisation critera.

Marginalised girl

Marginalisation criteria

- Identified by school heads
- Orphans or single-headed household
- Disabilities
- Divorced or widowed
- Pregnant, with child or children
- Married by or before 18
- Girls who never attended primary school
- Girls from household with sick parent

Table 8: Programme targets and disaggregated data collection in ENGINE				
Output indicators	**Level of measurement**	**Tool and mode of data collection**	**Disaggregated by**	**Frequency of data collection**
OUTPUT LEVEL TARGET: ENHANCED LEARNING EXPERIENCES FOR MARGINALISED ENGINE II GIRLS IN TARGET AREAS				
1.1 Number of learning space facilitators trained and mentored on ENGINE curriculum to improve learning outcomes	Training venues, school	- Pre and post-test records - Training attendance register - Key informant interviews with teachers	Sex, age, type of schools, state, local government authority	During the training and regular intervals (three months) after the training
1.2 Percentage of eligible out-of-school girls supported by the project to re-enter formal education	School and girl level	- School register - Enrolment records - Project monitoring data - Key informant interviews with girls	Age, ENGINE marginalisation criteria (see note, below)**, state, local government authority, grades, disability*	Three times during the project period at the beginning of the enrolment session
1.3 Number of in-school girls registered for Senior School Certificate Examination	School and girl level	- Project monitoring data - Examination register cards - Key informant interviews with girls - Case studies	Age, ENGINE marginalisation criteria, state, local government authority, grades, disability*	Three times during the project period at the beginning and after examination
OUTPUT LEVEL TARGET: INCREASED ASSET BUILDING SKILLS AND INCOME-GENERATION FOR MARGINALISED ENGINE GIRLS IN TARGET AREAS				
2.1 Number of out-of-school girls with "level 2" vocational training on business and entrepreneurship skills	Vocational training institutes and safe space learning centres	- Training enrolment and completion records - Project monitoring data - Key informant interviews and focus group discussions with girls	Age, ENGINE marginalisation criteria, state, local government authority, grades, disability*	Four times during the project period
2.2 Percentage of out-of-school girls enrolled in safe spaces reporting access to financial services	Safe space level, financial institutions	- Project monitoring data - ATM (cash machine) cards/ cooperative registration cards - Key informant interviews with girls, parents and gatekeepers - Focus group discussions with girls	Age, ENGINE marginalisation criteria, state, local government authority, grades, disability*, types of financial services	Weekly
2.3 Number of income-generating opportunities created for ENGINE girls in partnership with community-based value chains	Community level	- Project monitoring data	Age, religion, in- or out-of-school status, ENGINE marginalisation criteria	Yearly
2.4 Number of partnerships signed with the private sector for the business diversification and expansion of ENGINE out-of-school girls	State level	- Project monitoring data - Memoranda of Understanding copies	State, type of private sectors, type of partnership	Upon signing of agreements with the private sector

**Where disability is monitored, it is always disaggregated further by severity and type.*
***'Marginalised girls' are defined in the figure opposite (page 62).*

Output indicators	Level of measurement	Tool and mode of data collection	Disaggregated by	Frequency of data collection
OUTPUT LEVEL TARGET: ENHANCED LIFE SKILLS TRAINING OPPORTUNITIES FOR MARGINALISED ENGINE GIRLS IN TARGET AREAS				
3.1 Number of girl ambassadors trained to provide peer-to-peer monitoring to non-ENGINE girls	Community, school and girl level	- Project monitoring data - Training records - Key informant interviews with girl ambassadors - Observations	Age, religion, ENGINE marginalisation criteria, state, urban or rural settings, grades, disability*	Four times during the project
3.2 Number of meetings where participants/ community members take decisions to promote girl education	Community level	- Project monitoring data - Meeting notes - Focus group discussions with the community members		Quarterly
3.3 Number of guidance counsellors trained to provide counselling to girls in ENGINE schools	School level	- Project monitoring data - Training register - Focus group discussions with guidance counsellors	State, type of school, age, sex, urban/rural setting	Two times during the project period
OUTPUT LEVEL TARGET: IMPROVED GATEKEEPER COMMITMENT TOWARDS GIRLS' EDUCATION AND EMPOWERMENT IN TARGET AREAS				
4.1 Number of 'SHEro' (gender equality) advocates raising awareness on issues faced by marginalised girls in project communities	Community level	- Project monitoring data - Documents on advocacy event - Key informant interviews with the advocates - Focus group discussions with the community members	State, urban/rural setting, sex, age, types of issues advocated for	Monthly
4.2 Number of action plans developed by School-Based Management Committees (SBMCs)/Parent-Teacher Meetings (PTAs) and other stakeholders to make gender-friendly schools	School level	- SBMCs/PTAs meeting minutes - Action plan documentation - Focus group discussions with SBMCs and PTAs	Type of school stakeholders, age, sex, type and number of action plans developed, type of school, urban/rural setting, state	Three times during the period (baseline, midline and endline); however, project collected periodic data during the SBMCs and PTA meetings
OUTPUT LEVEL TARGET: EXPANDED PROTECTION POLICIES AND PRACTICES BENEFITTING ADOLESCENT GIRLS AND YOUNG WOMEN IN TARGET AREAS AND NATIONALLY				
5.1 Number of girls trained on gender and protection issues	Safe space/ community and girl level	- Training attendance records - Project monitoring data - Observation - Focus group discussions with the participants	Age, religion, ENGINE marginalisation criteria, state, urban or rural settings, grades, disability*	Two times during implementation
5.2 Number of campaigns initiated to address key barriers to girls' education and empowerment	Community level	- Project monitoring data - Key informant interviews with key government stakeholders to understand the campaign effectiveness	Type of campaigns, state	Monthly
5.3 Number of schools developing/re-enforcing/ updating school policies and codes of conduct on bullying, harassment, exploitation and abuse	School level	- Project monitoring data - Copies of policies and code of conduct - Observation - Key informant interviews with head teachers, SBMCs and PTAs	State, types of school, urban/ rural settings, types of initiative carried out	Three times (baseline, midline and endline); however, project collected periodic data during school policies development

Insights from using this approach

Routine monitoring and evaluation activities were carried out to track the indicators developed in the logframe (see Table 9). The ENGINE MEL team used a strategic blend of both qualitative and quantitative tools to enhance the broader project team's learning and feed in to adaptive decision-making and management. This purpose was as critical as the transparency and accountability purposes of the MEL system.

Qualitative methods, such as key informant interviews and focus group discussions, were particularly useful in documenting and analysing the perceptions of girls, their parents, and members of the communities on the impact of different activities. Qualitative data could triangulate quantitative data and help to explain why things did or didn't happen (e.g. unpacking the barriers to gender equitable action as well as the enablers).[73]

A finding from the first phase of the ENGINE programme, which influenced the design of MEL systems in the second phase of ENGINE, was that the surveys administered to respondents were extensive and resulted in respondents' fatigue and rushed completion of the assessments. There were also challenges with the general administration of the tests and the compilation of aggregated scores. In cases where a girl had difficulty understanding the questions in English, the question was asked in the girl's language, making answers reliant on the interviewer's ability to accurately translate the text, hence allowing for subjective interpretation and scoring. These challenges were addressed in ENGINE by ensuring that the entire evaluation team was more fully and consistently trained, and received refresher trainings. Questionnaires were carefully checked and amended to ensure they would not be too tiring or arduous for respondents.

The experience of working with girls with disabilities in the first phase of ENGINE also led to a slight redesign, both of the programme to be more disability-inclusive and of the MEL methods in the second phase, to better accommodate girls living with disability. Field staff were given a disability briefing and trained on how to administer evaluation tools in a way that made sampled girls comfortable, including any that may be living with disability, and without putting them at any further risks, or making them a focus of stigmatisation at their schools or communities. Assessments were conducted in places that are comfortable for participants and researchers and which could be accessed by girls with mobility impairments, free of distraction and safe.

> "Joint peer analysis between the external evaluator and local researchers in the field [was undertaken] to discuss and reduce raw data using a relevant analysis framework.
>
> To ensure structural coherence and consistency between data and interpretations in the storyline and to ensure that there are no unexplained inconsistencies between the data and their interpretations, a code book will be used to show how data was interpreted and how the main themes/ claims emerged as a result."[74]

ENGINE documented and shared results and learning from the project in the communities in a way that was "deliberately structured to … underline gaps created by social exclusion practices and behaviour". For example, the project was able to demonstrate the range of harms incurred when girls drop out of school and do not have pathways to resilient jobs and livelihoods, compared to the benefits when girls are supported on educational, vocational training or entrepreneurship pathways. They documented this broader learning through:

- learning videos and short films
- participatory communication
- advocacy and community action planning activities.

These community-facing learning activities engaged 'gatekeepers', such as school management committees, the ENGINE State Advisory Group and other bodies. The activities were aimed at shifting their perceptions of girls' education and empowerment and building on the key partnerships cultivated during the programme. This included not only designing and implementing actions to promote girl's education, but also advocating for government, religious and education systems to incorporate the project's activities and methodologies to sustain gains. The programme and its independent evaluators felt that it was vital to bring learning from the project to these 'gatekeepers' to improve the enabling environment for achieving gender equality in the long-term.

A further, critical innovation developed by the programme, although not part of the formal logframe, was the development and use of safeguarding standards. ENGINE developed a Code of Conduct, School Charters and a Do No Harm pledge in partnership with the Government of Nigeria's National Commission for Mass Literacy, Adult and Non-Formal Education. These guidelines contain minimum behavioural standards to ensure schools' and girls' safety and freedom from abuse. These guiding documents have been officially adopted for use in formal and informal education settings across all the states where ENGINE operated.[75]

Video: Hassia's story: Lessons from ENGINE II project implementation in Kano state, Nigeria https://youtu.be/CSj42AscULg

Web page: ENGINE II Implementation Approaches and Success Stories https://nigeria.mercycorps.org/sites/default/files/2020-12/ENGINE-II-Implementation-approaches-and-success-stories.pdf

Photo: USAID

CASE STUDY

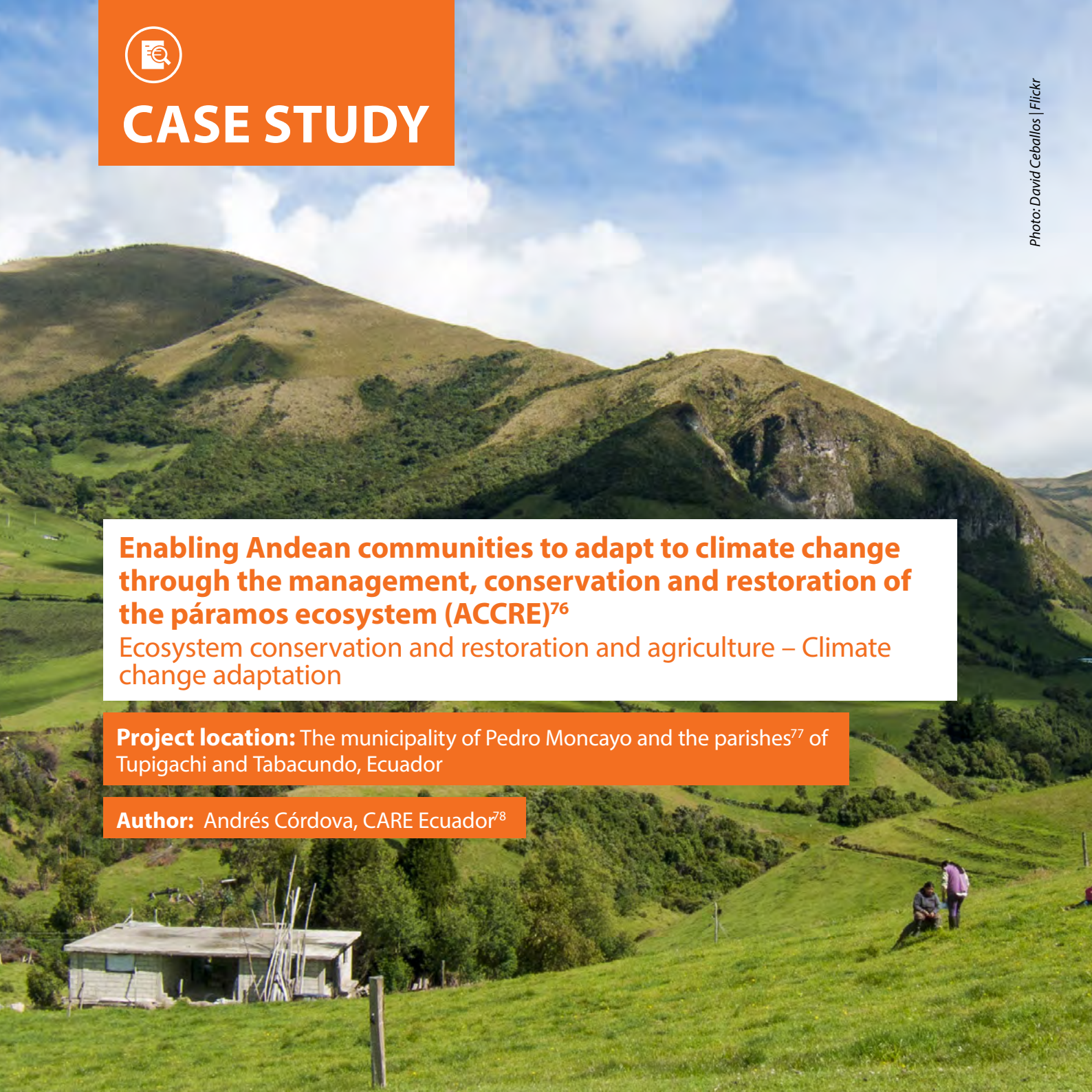


Photo: David Ceballos | Flickr

Enabling Andean communities to adapt to climate change through the management, conservation and restoration of the páramos ecosystem (ACCRE)[76]

Ecosystem conservation and restoration and agriculture – Climate change adaptation

Project location: The municipality of Pedro Moncayo and the parishes[77] of Tupigachi and Tabacundo, Ecuador

Author: Andrés Córdova, CARE Ecuador[78]

Climate and development goals

The main objective of the project was to reduce the vulnerability to climate change by establishing a resilient model of family production while contributing to the conservation of the Andean páramos, which provide water for human consumption and irrigation. The páramos is a unique ecosystem in the high Andean mountains of South America (see https://www.iucn.org/content/paramos). It is a grassland ecosystem rich in carbon and biodiversity, stretching from the upper tree line to the bottom of the snow-covered glaciers. This high-altitude neotropical biotope is of great scientific and ecological significance because of its endemic flora and its capacity to absorb, retain and release water. It is a main source of drinking water for most of the population living in the northern part of the Andes.

The project pursued its climate change adaptation objectives through three main activity streams:

- implementation of ecosystem restoration techniques
- technical assistance to communities in climate-resilient agriculture
- improved livelihoods and formalised land use planning systems.

Pedro Moncayo is a municipality in the north of Ecuador with a páramos ecosystem within its boundaries. The páramos in the Pedro Moncayo region is under threat, not only from climate change but also from the use of non-sustainable agricultural techniques. This is causing rapid soil damage. In addition, there is consolidation in the floricultural, agro-export sector, which concentrates production in a single product. This makes the sectors excessively dependent on this product and vulnerable to external price shocks or decreases in demand for this product. Floriculture is one of the area's main economic activities and is highly water-intensive. Pedro Moncayo produces 25% of the nation's total floricultural output.

As in the entire Ecuadorian territory, the province of Pichincha and its municipalities, such as Pedro Moncayo, have experienced various climate change impacts. Temperature and precipitation have increased in the last three decades. Mean temperatures are projected

Project dates: May 2016-April 2019

Partners: Implemented by CARE Ecuador (with funds from Foundation Ensemble), municipal government of Pedro Moncayo, and women producers' association "Buen Vivir" with the collaboration of the Pichincha provincial government, Ministry of Agriculture and Livestock, and the NGOs SEDAL (Fundación Servicios para el Desarrollo Alternativo), HEIFER-FAO, COAGRO (Cooperación para la Capacitación y Asistencia Técnica en Agricultura Orgánica y Micro Finanzas Rurales), SIPAE (Sistema de Investigación sobre la Problemática Agraria en el Ecuador).

to rise further this century, between 0.7 and 1.0°C under a medium emissions and global warming scenario and by 0.9 to 1.2°C under a high emissions and global warming scenario, by 2040.[79]

The main threat to the productive areas in Pedro Moncayo is climate change. The livelihoods of the population are affected by drought, hailstorms and frost. The impacts associated with these climate threats on the main crops (maize, beans, potatoes, vegetables) threaten to deepen malnutrition in households that are already socioeconomically disadvantaged. In addition, this implies that prices could rise drastically, if/when the supply of essential foodstuffs to local markets is constrained.

The agricultural sector constitutes a dynamic and vital part of the economy and employs a large proportion of the labour force. Agriculture provides income for almost 40% of the population and contributes almost 50% of foreign exchange to the country. However, households reliant on labour in the agricultural sector are characterised as having high levels of unemployment, worker illiteracy, both child and chronic malnutrition, migration, low levels of labour productivity, land tenure insecurity and ill health.[80]

Gender and climate change: the baseline

The population of Pedro Moncayo is 33,172 inhabitants and they are roughly split, female-male. Some three quarters of the population identify as mestizo (mixed race), 19% are indigenous, 5% white and 2% are Afro-Ecuadorian.[81] Population density is high, with high deficits in basic services and education. Seventy percent of inhabitants reside in rural areas; here, the main economic activity is agriculture and women play a pivotal role.

Women not only produce agricultural goods, breed small livestock and contribute to the conservation of agro-biodiversity, they also contribute unpaid labour to productive processes, in addition to their unpaid domestic work and care. Sixty one percent of rural women carry out agro-productive activities in the area and suffer inequalities in working time and remuneration.[82] These roles are largely unrecognised or disregarded and marked gender inequality is a persistent problem. Therefore, developing climate actions with a gender focus in the agricultural sector is of vital importance.

The project did not include gender indicators from the beginning, mainly because it was principally a conservation project. However, CARE has tools such as the "Climate Vulnerability and Capacity Analysis-CVCA",[83] which is used to gather and analyse information on community-level vulnerabilities to and capacities for climate change; the CARE gender and inclusion toolbox,[84] and the CARE gender marker.[85]

These tools were applied, in a project assessment. This exercise confirmed that women take on the major share of productive activities: they oversee farm plot management, as well as their domestic work and care duties. However, they do not participate in public or private decision-making and sometimes they are victims of domestic violence.

In general, women work alone in the fields and men do not support this activity, because they go out every day to work on other tasks.

Men, when they return from work, 'supervise' what their wives have done. In rare cases, the husband also works in agriculture: not necessarily in the agro-ecological garden, where the women are engaged, but in the cultivation of wheat, barley and maize. Men and women are not considered equal, nor is the relationship between husband and wife equal in all households.

The project analysis found that women have been more active in conserving the water sources of the páramo and minimising the advance of the agricultural frontier (i.e. preventing the conversion of the páramo grassland ecosystem to agricultural fields). Women were generally more responsible for conservation improvements and their environmental, social and economic benefits. In some

cases, men were uninterested in initiatives to conserve the páramo, until they saw benefits from the women's work, and then changed their minds.

The project leaders saw that women could be change agents, considering that the communities were also undergoing generational changes and the involvement of young people could be an opportunity to alter ways of living and working.

Setting gender-responsive targets

CARE promotes community participation in projects, as an institutional principle. An example of community participation emerged through the Women's Association "Buen Vivir", which formed a savings and credit "bank" (*caja de ahorro*) as a mechanism for facilitating women's involvement in sustainable agro-ecological management, and economic self-sufficiency.

In response to sociocultural realities, the project established a differentiated methodology to work with men and women, in some cases separately. Interventions were designed to empower women, work on their self esteem and build solidarity – and subsequently monitor these. As the project developed, women became more involved in the activities. The project's intentional strategies to strengthen women's leadership and role in decision-making had noteworthy results.

In the context of this project, the team collaborated with actors on the agricultural frontier and sought to make decisions together, through local assemblies. An important example of the project's impact is that currently, the Union of Communities of Pedro Moncayo (UCOPEM), has a young woman as vice president; she was appointed as the delegate to participate in the project's water-related affairs. At the events of this organisation, usually women constitute 60% of attendees. On the UCOPEM board there are 70% women, almost all of them young; also, in the grassroots communities of the organisation, there are some women who are presidents. As the project has evolved, so recognition for women's work has also improved.

The ACCRE project's achievements include:

1. **The Municipal School of Agro-ecology.** The school attained a certification through the Participatory Guarantee System and 224 people (86 of whom were women) were trained in agroecological techniques. Sixty producers (men and women) have implemented at least three soil conservation techniques in their integrated farms. Also, for marketing purposes, an agroecological producer network has been set up and two enterprises centred on socioeconomic initiatives are also operational, to develop a form of commerce based on the direct sale of fresh or seasonal products without an intermediary between producers and consumers. This approach has improved the participation of women.

2. **The Declaration of the region/land Area of Conservation and Sustainable Use (ACUS) Mojanda.** 6,094,38 hectares of land have been designated as ACUS, in recognition of the community's conservation and restoration of the páramos. It involved the identification of priority areas with water sources and silvopastoral systems, setting the limits of the agricultural frontier and reforestation.

3. **A land use planning model.** Sustainable agriculture, climate change resilience, sustainable long-term use of ecosystem goods and services, and the economic and social autonomy of women farmers are the principles behind a new land use planning model for the area. As a complement, an emergency plan has been developed that aims to manage climate risks over 200 hectares.

Community brigades were trained in natural resources and climate risk management; and an early warning system has been developed. Four municipal technicians strengthened their capacities in setting up climate change adaptation plans and six in agroecological production.

4. **Local public policy to guarantee a Water Fund.** A new public policy establishes a financial mechanism, which ring-fences 5% of the proceeds of the municipal water company for the conservation of the Mojanda Lagoon. A further extension of 6,000 hectares of land has been protected, to act as the main source of water recharge for the municipal water services.

Monitoring, evaluation and learning: sample indicators

The project was born from the needs of local actors – the communities as well as the municipal government – and, therefore, the project's logical framework and indicators were developed in a participatory way. Importantly, the donor permitted the project to make changes to the indicators after three months of implementation, which allowed necessary adjustments to be made, after the diagnostic phase. This also meant that most of the indicators and targets were set at realistic levels and, therefore, were achieved by the end of the project.

The project targeted 1,000 people (200 families from the parishes of Tabacundo and Tupigachi, 20% with female heads-of-household). It contributed to the following CARE International indicators:

> "We have learned to manage money; we can decide how to use our resources. All women have benefited from this process. We have more autonomy; we can commercialise our products. Now you can invest in the farm andtake out credit to support greater production. Before everything was spent, now it is saved, even if it is a small percentage. This money saved, which is not much, motivates savers to consider investing in education and small improvements in housing."
>
> **ACCRE project participant**

Table 9: Indicators monitored by the ACCRE project	
Indicator	**Outcomes measured**
Number or percentage of women who are active users of financial services	Twenty-three women accessed a savings and credit "bank" (*caja de ahorro*) that was implemented.
Number of new or modified policies, public programmes and/or budgets that respond to the rights, needs and demands of people of all genders.	The Ordinance of Development, Administration, Regulation and Control of Fairs and Bioplazas was updated, and its regulations were approved. Ordinance 022-2019 was approved, which declares the sector called the Mojanda Lake Zone as an area of conservation and municipal sustainable use, aimed at protecting, conserving, and restoring fragile and threatened ecosystems and prioritises those spaces of ecological importance associated with water resources. The Water Fund Ordinance was approved in the second instance.
Percent of women farmers, with access to control or ownership of productive resources, assets and services.	In this context, 95% of women producers have access to and control of their productive resources, assets and services; thanks to technical training and approved ordinances.
Increase adaptive capacity among households and communities dependent on small-scale food production.	Capacities were increased thanks to: • Recovery and management of land plots for agroecological production. • Capacity building in adaptation techniques that increase production and prevent the impact of climate change. • Implementation of sustainable marketing lines. • Increasing technical sophistication of production through delivery of inputs for the efficient use of resources.

Insights from using this approach

The team monitored the project according to the logical framework every three months, and each year a more thorough evaluation was done. The fact that the municipality was also investing its own funds in the project was an important fact to ensure their participation and compliance with the activities.

Some of the tools used in the final evaluation were:

- **Face-to-face meetings** in the parishes of Tabacundo and Tupigachi.
- **Analysis of documentation**, such as the project document, progress reports, studies, mid-term evaluation report, written products, disbursement reports, etc.
- **Interviews, focus groups and workshops**, with around 25 people in the parishes concerned and in the capital city of Quito. These included interviews with key actors from the municipal government, water utility and water protection fund of Pedro Moncayo; the Pichincha provincial government, implementers (including technicians) of the ACCRE project and its various beneficiaries in different communities.

The results of this evaluation were reported back to the local actors through an assembly, after which the project team came up with some reflections:

1. In projects such as ACCRE with a strong gender focus, it is important to involve men from the beginning of the project as well. The focus on women is valid; however, men are also an important part of the change. Towards the end of the project a small pilot of a "new masculinities" workshop was conducted with some technical experts from the municipality and some of the partners of the women leaders, and the significance of engaging men was recognised. Now the "new masculinities" is part of the second phase of the project.
2. Young people should be involved in the project to make the process more sustainable as the project demonstrated. Their participation can be grounded in the places they come from – this makes them particularly effective agents of change. Most of the young people from the community are already finishing their university careers. Some of them that participated in the project are now working in the municipality, so they do not feel the need to migrate away from their home district.
3. It is important to use tools and processes that allow the project to function without putting more pressure on or increasing the workload of women. Although their empowerment is necessary, they need to have support. For example, the project worked with research committees to assess and monitor the water sources. Some of the young people from the community were part of these committees; later they helped women to identify sustainable, climate-adaptive water management practices that the women were already using and to promote these more systematically.
4. Donors play a key role; and project teams can educate donors on the need for gender-responsive approaches in the local context. Some projects do not have a gender focus because donors do not appreciate the clear link with conservation, water and climate change outcomes.
5. It is a persistent challenge to recruit professionals to a project, who have expertise in both gender and climate change. Most people specialise in one or the other. The team saw this as an opportunity to start training people on the integrated theory and practice of gender and climate change in development.

A second phase of the project is currently underway, including two other municipalities. This phase is running from August 2020 until July 2023 and the preceding reflections were considered in its design.

Photo: Chris Ellinger | Flickr

Video: Testimony from Maria Johana Andrango Guezvo, farmer https://youtu.be/vnwaWwEQp5wge

Resource: Project information from the Municipality of Pedro Moncayo http://www.pedromoncayo.gob.ec/documentos/proyectos/89%20Agricultura%20familiar.pdf

Resource: CARE website https://www.care.org.ec/nuestras-acciones/programas-de-exito/proyecto-adaptacion-al-cambio-climatico-de-poblaciones-andinas-mediante-el-manejo-conservacion-y-restauracion-de-paramos-en-el-canton-pedro-moncayo/

Resource: Mid-term evaluation of CARE https://www.careevaluations.org/evaluation/adaptacion-al-cambio-climatico-de-poblaciones-andinas-mediante-el-manejo-conservacion-y-restauracion-de-paramos-intermedia/

Endnotes

1. UNDP. (2020). '*Human Development Report: The next frontier - human development and the Anthropocene*'. New York: United Nations. http://hdr.undp.org/en/2020-report

2. UNDP. (2019). *'Human Development Report: Beyond income, beyond averages, beyond today: Inequalities in human development in the 21st century*'. New York: United Nations. http://hdr.undp.org/en/content/human-development-report-2019

3. Le Masson, V. (2016). '*Gender and resilience: From theory to practice. Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) Working Paper'. London: ODI.* https://cdn.odi.org/media/documents/10224.pdf

4. UN Women. (n.d.). 'Closing the gender gap in humanitarian action'. https://interactive.unwomen.org/multimedia/infographic/humanitarianaction/en/index.html

5. UN Women. (n.d.). 'The shadow pandemic: Violence against women during Covid-19'. https://www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-covid-19-response/violence-against-women-during-covid-19

6. Camey, I. et al. (2021). *Gender-based violence and environment linkages.* Gland, Switzerland: IUCN. https://genderandenvironment.org/wp-content/uploads/2021/07/2021-IUCN-GBV-summary-policymakers-web-5.pdf

7. Cate Owren, quoted in 'The risk of gender-based violence grows after weather disasters.' *Yale Climate Connection*, September 2020. https://yaleclimateconnections.org/2020/09/the-risk-of-gender-based-violence-grows-after-weather-disasters/

8. LGBTQI+ here signifies Lesbian, Gay, Bisexual, Transgender, Queer and Intersex and other sexual and gender minorities who do not identify with those categories; please see the United Nations website for further information: https://www.un.org/en/fight-racism/vulnerable-groups/lgbtqi-plus. These terms, definitions and meanings may be quite different in local cultural contexts (see Edge Effect, n.d., https://www.edgeeffect.org/on-language-and-acronyms/)

9. Key Informant (interview, July 2021), cited anonymously to protect project sources.

10. Le Masson, V. and S. Kratzer. (2016). *Gender equality and achieving climate goals.* London: CDKN. https://cdkn.org/wp-content/uploads/2016/05/10-things-to-know_Gender-equality-and-achieving-climate-goals_WEBfinal.pdf

11. Ibid.

12. IPCC (2014). Summary for policymakers in *Climate Change 2014: Impacts, adaptation, and Vulnerability. Part A: Global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds). Cambridge

University Press, Cambridge, UK and New York, NY, USA.Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

13. For more information about GEAG's work in Uttar Pradesh, please read Mani, N., Wajih, S., and M. Dupar. (2020). *Empowering women as climate-smart agriculture leaders proves key to resilience.* Cape Town: CDKN.

14. UN Women. (2016). *Leveraging co-benefits between gender equality and climate action for sustainable development: Mainstreaming gender considerations in climate change projects.* New York: UN Women.

15. IPCC (2014). Summary for policymakers in *Climate Change 2014: Impacts, adaptation, and Vulnerability. Part A: Global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds). Cambridge University Press, Cambridge, UK and New York, NY, USA.

16. Ibid.

17. Mandal, A. et al. (2016). *Climate change and flood risk: Challenges for Jamaican towns and communities.* London: CDKN.

18. Bahadur, A., K. Peters, E. Wilkinson, F. Pichon, T. Tanner. (2015). *The 3As: tracking resilience across BRACED.* London: BRACED and ODI. https://odi.org/en/publications/the-3as-tracking-resilience-across-braced/

19. LeMasson, V. and E. Lovell. (2016). *Assessing people's resilience*. London: ODI and ActionAid. https://odi.org/en/publications/assessing-peoples-resilience/

20. IISD. (n.d.). CRiSTAL tool. https://www.iisd.org/cristaltool

21. GIZ and EURAC. (2017). Risk Supplement to the Vulnerability Sourcebook. Guidance on how to apply the Vulnerability Sourcebook's approach with the new IPCC AR5 concept of climate risk. Bonn: GIZ. https://www.adaptationcommunity.net/wp-content/uploads/2017/10/GIZ-2017_Risk-Supplement-to-the-Vulnerability-Sourcebook.pdf

22. Food and Agriculture Organization of The United Nations (FAO) and CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). (2011). *Gender and climate change training guide.* Rome: FAO.

23. FAO (n.d.). *Climate-smart Agriculture Sourcebook*. Rome: FAO. https://www.fao.org/climate-smart-agriculture-sourcebook/en/

24. IGWG. (2017). *The gender integration continuum training session user's guide.* Washington, DC: Population Reference Bureau. https://www.igwg.org/wp-content/uploads/2017/12/17-418-GenderContTraining-2017-12-12-1633_FINAL.pdf

25. Bhusal, A., Sherpa, L. and L. Khatri. (2020). *Climate-smart agriculture takes off, thanks to 'women-friendly' tools and a gender-smart approach*. Cape Town: CDKN.

26. Noltze, M., Köngeter, A., Römling, C. and D. Hoffmann. (2021). *Monitoring, evaluation and learning for climate risk management*. OECD Working Paper. https://www.deval.org/fileadmin/Redaktion/PDF/05-Publikationen/Externe_Publikationen/2021_Monitoring_Evaluation_and_Learning/Noltze_et_al_2021_WP_92_MEL_for_climate_risk_management.pdf

27. Espinosa, J. (2013). 'Linking human rights and gender equality in evaluations of gender equality outcomes in programmes' . Presented at the UN Women Expert Group meeting on gender mainstreaming.

28. UNDP. (2020). *Gender responsive indicators: Gender and NDC planning for implementation*. New York: UNDP.

29. The source for the information in this case study is programme leaders Sokundarun Lim and Rik Overmars of CHAIN (interview, July 2021) and internal project documents, unless otherwise specified; and written/edited by Patricia Velasco and Mairi Dupar.

30. The World Bank Group. *Agriculture, forestry, and fishing, value added (% of GDP)*. https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS

31. CEDRIG and COSUDE. *The climate, environment and disaster risk reduction integration guidance*. https://www.cedrig.org/es/printpdf/655

32. Ibid.

33. The source for the information in this case study is programme manager Inga Brill of EnDev III (interview, July 2021); Brill, I. (2020) 'Gender integration in EnDev III Tanzania'; Presentation. Dar Es Salaam: SNV Tanzania; and the EnDev III Tanzania proposal and work plan (internal/unpublished). Written/edited by Mairi Dupar and Patricia Velasco.

34. EnDev. (2020). *Energising Development Progress Report 2020*. Bonn: GIZZ.

35. The World Bank. (n.d.) *World Bank data report*, Tanzania. https://databank.worldbank.org

36. UNDP. (n.d.) *Tanzania country profile*. http://hdr.undp.org/en/countries/profiles/TZA

37. Energia. (n.d.) *Gender and energy country brief, Tanzania*.

38. African Development Bank Group and the United Nations Economic Commission for Africa (UNECA). (2020). *Africa Gender Index 2019: Methodological and statistical report and analytical report*. Abidjan: AfDB.

39. SE4ALL. (2015). *Tanzania's SE4ALL Action Agenda*. Dar Es Salaam and Vienna: SE4ALL.

40. United Republic of Tanzania. (2021). *Updated Nationally Determined Contribution*. Dar Es Salaam: Government of the United Republic of Tanzania.

41. IRENA. (2017). *Renewables readiness assessment of the United Republic of Tanzania*. Abu Dhabi: IRENA.

42. United Republic of Tanzania. (2021). *Updated Nationally Determined Contribution.* Dar Es Salaam: Government of the United Republic of Tanzania.

43. SE4ALL. (2015). *Tanzania's SE4ALL Action Agenda*. Dar Es Salaam and Vienna: SE4ALL.

44. IRENA. (2017). *Renewables readiness assessment of the United Republic of Tanzania.* Abu Dhabi: IRENA.

45. Energia. (n.d.) *Gender and energy country brief, Tanzania*.

46. The source for the information in this case study is the PROSPER team's presentations and internal project documents, unless otherwise specified; and written/edited by Mairi Dupar and Patricia Velasco.

47. PROSPER. (2018). Internal framework documents.

48. Lovell, E. (2021). *Gender equality, social inclusion and resilience in Malawi*. Blantyre and Edinburgh: Building Resilience and Adapting to Climate Change in Malawi (BRACC) Hub.

49. Ibid.

50. African Development Bank and UN Economic Commission for Africa. (2020). *Gender Index Report 2019 Analytical Report. Abidjan: African Development Bank*. https://www.afdb.org/en/documents/africa-gender-index-report-2019-analytical-report

51. Molloy, E. (May 2020). 'PROSPER Gender and social inclusion strategy.' C12 Consultants. (Internal, unpublished document.)

52. Ibid.

53. Ibid.

54. To view the whole BRACC infographic from which this is excerpted, please visit the BRACC programme website, www.resilience.mw

55. Government of Malawi (2018). *National Resilience Strategy 2018-2030: Breaking the Cycle of Food Insecurity in Malawi.* Lilongwe: Government of Malawi.

56. Molloy, E. (May 2020). 'PROSPER Gender and social inclusion strategy.' C12 Consultants. (Internal, unpublished document.)

57. Ibid.

58. See Concern Worldwide's materials facilitators' guides to gender equality (n.d.), https://www.concern.net/insights/engaging-men-and-women-promote-gender-equality and also ProMundo (n.d.), https://promundoglobal.org/resources/measuring-gender-attitude-using-gender-equitable-men-scale-gems-in-various-socio-cultural-settings/

Find background reading in Crawford, B. (2014) 'The Equality Scale' in Knowledge Matters. Dublin: Concern Worldwide. https://admin.concern.net/sites/default/files/media/migrated/knowledge_matters_-_gender_equality.pdf

59. BRACC Knowledge and Policy Hub. (July 2021). 'Process evaluation of the BRACC programme.' (Internal, unpublished document).

60. Molloy, E. (May 2020). 'PROSPER Gender and social inclusion strategy.' C12 Consultants. (Internal, unpublished document.)

61. Ibid.

62. For more details, visit https://www.resilience.mw/project/bracc-knowledge-and-policy-hub

63. BRACC Knowledge and Policy Hub. (July 2021). 'Process evaluation of the BRACC programme.' (Internal, unpublished document).

64. Key Informant (interview with MEL Lead, September 2021).

65. The source for the information in this case study is programme manager Beza Tesfaye and Vaidehi Krishnan, Mercy Corps policy experts (interviews, May-June 2021) and internal project documents, unless otherwise specified; and written/edited by Mairi Dupar and Patricia Velasco.

66. Mercy Corps (2021). *Transforming the lives of marginalised girls and young women: ENGINE II implementation approaches and success stories*. Edinburgh, UK: Mercy Corps.

67. CDKN, International Centre on Climate Change and Development – ICCCAD and Global Resilience Partnership. (2021). *Voices from the Frontline of Covid-19: What can we learn about achieving the SDGs at community level?* Cape Town: CDKN. www.voices.cdkn.org

68. Jones, L., Ludi, E. and S. Levine. (2010). *Towards a characterisation of adaptive capacity*. London: ODI. https://cdn.odi.org/media/documents/6353.pdf

69. African Development Bank and UN Economic Commission for Africa. (2020). *Gender Index Report 2019 Analytical Report*. Abidjan: African Development Bank. https://www.afdb.org/en/documents/africa-gender-index-report-2019-analytical-report

70. World Economic Forum. (2021). *Global Gender Gap Report 2021*. Nigeria profile. https://www.weforum.org/reports/ab6795a1-960c-42b2-b3d5-587eccda6023/in-full/economy-profiles

71. British Council. (2014). *Girls' education in Nigeria*. https://www.britishcouncil.org/sites/default/files/british-council-girls-education-nigeria-report.pdf

72. Onyeiwu, S. (2021). 'Nigeria's poverty profile is grim'. https://theconversation.com/nigerias-poverty-profile-is-grim-its-time-to-move-beyond-handouts-163302

73. ENGINE II MEL Framework. (2017), 4. (Internal, unpublished document.)

74. Ibid.

75. Mercy Corps. (2021). *Transforming the lives of marginalised girls and young women: ENGINE II implementation approaches and success stories*. Edinburgh, UK: Mercy Corps.

76. The project acronym in Spanish is ACCRE, for Adaptación al cambio climático de poblaciones andinas, mediante el manejo, conservación y restauración de páramos en el Cantón Pedro Moncayo.

77. Parishes are the smallest level of territorial division in Ecuador, usually parishes are rural land.

78. The source for the information in this case study is programme manager Andrés Córdova, CARE Ecuador (interview, August 2021) and internal project documents, unless otherwise specified; and written/edited by Patricia Velasco and Mairi Dupar.

79. Consorcio De Gobiernos Autónomos Provinciales Del Ecuador (2019). *Estrategia de cambio climático de la provincia de pichincha con enfoque de género*. Quito: Consultora Alternativa Consultoría & Innovación. The medium emissions scenario is RCP 4.5, and the high emissions scenario is RCP 8.5.

80. Ministerio de Agricultura y Ganadería. (2020). *Estrategia nacional agropecuaria para mujeres rurales*. Quito: Government of Ecuador.

81. Instituto Nacional de Estadística y Censos. (2010). *Memoria Técnica Pedro Moncayo*. Quito: Government of Ecuador

82. Ministerio de Agricultura y Ganadería. (2020). *Estrategia nacional agropecuaria para mujeres rurales*. Quito: Government of Ecuador.

83. CARE. (2019). *Climate Vulnerability and Capacity Analysis Handbook (CVCA) V2.0*. Climate Change and Resilience Platform (CCRP). https://careclimatechange.org/cvca/

84. The Participatory Guarantee System is a promotion and social control mechanism for agroecological production, led by the Government of the Province of Pichincha together with social and community organisations. This mechanism includes the development and participatory use of principles, standards, and technical instruments to guarantee quality, and the generation of credibility in economic and production processes based on solidarity and the responsible consumption of agro-ecological products.

Funded by:

IDRC | CRDI
International Development Research Centre
Centre de recherches pour le développement international

Canada

Ministry of Foreign Affairs of the Netherlands

This work was carried out with the aid of a grant from the Ministry of Foreign Affairs of the Netherlands and the International Development Research Centre (IDRC), Canada, as part of the Climate and Development Knowledge Network (CDKN) Programme. The views expressed herein do not necessarily represent those of the Ministry of Foreign Affairs of the Netherlands, or of the International Development Research Centre (IDRC) or its Board of Governors, or of the entities managing CDKN.