



Guideline for a Participatory, Gender-responsive Climate Cost-benefit Analysis

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Section I: Why integrate gender in climate change policy and investments?

Introduction

Links between gender and climate change are gaining greater recognition globally, and international policy makers are demanding more inclusive and gender responsive approaches to demonstrate greater effectiveness of climate finance. Making investments on climate change, that have a positive impact on gender equality requires addressing gender and equity issues within financial instruments and processes, thereby recognizing the different needs and interests of women and men, girls and boys, marginalized groups and regions/locations, as well as understanding the links between climate change and conflict. An understanding of differentiated needs and impacts, and a focus on inclusion, voice and participation are critical to ensuring the responsiveness of climate finance to gender and human rights issues, rather than a separate budgeting process for women and marginalized groups.

Climate change impacts men and women differently mainly due to the differential roles and responsibilities at the household and community levels. Women are still primarily responsible for securing water, food, and fuel for cooking and heating and these roles are highly dependent on natural resources that are threatened by climate change. At the same time, widespread gender norms hinder women's access to income, land rights, and political participation, thereby limiting their adaptive capacity. Just as importantly, women have a unique potential to contribute to climate change mitigation and adaptation. Women make decisions every day that affect the livelihood of their families and communities, shape their environment, and influence the level of greenhouse gas emissions. Whether managing organic waste, replanting trees, or using and retailing clean cook stoves, women are often at the frontlines of fighting climate change.

The global climate frameworks such as the Lima Work Programme on Gender have recognized the need to advance gender balance and promote gender sensitivity in developing and implementing climate policies, declaring that the role of women is key to the response to climate change, and needs to be strengthened. At the COP25, governments adopted a revised 5-year Gender Action Plan (GAP) that progressively builds upon the first GAP which included calls for greater focus on implementation and scaling up gender-just climate solutions. The COP25 gender decision also invited relevant public and private entities to increase the gender-responsiveness of climate finance with a view to strengthening the

capacities of women.

The rationale for gender-responsive approaches

There are three reasons why gender-responsive approaches are necessary in climate initiatives:

1. **Gender equality is a human right**, enshrined in the United Nations Sustainable Development Goals (SDGs). Specifically, the goal of SDG # 5 is to “achieve gender equality and empowerment for all women and girls”. Achieving this goal is considered to be a necessary pre-condition to achieving all of the other 16 SDG goals and crosscuts SDG #13 for Climate Action:

Promote mechanisms for raising capacity for effective climate change-related planning and management in the least developed countries and small-island developing states, including focusing on women, youth and local and marginalized communities.

Attention to women’s rights is considered critical to assure that they have access to knowledge and economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

1. **Increased efficiency** refers to the idea that paying attention to gender issues in climate action will result in improved productivity and increased efficiency. Given the urgency of the climate crisis, it is clear that we need all persons, regardless of their sex, or other social identifiers, to effectively mitigate and adapt to climate changes.
2. **Women’s empowerment** aims to close gaps that obstruct women from achieving gender equality and increasing their efficiency. Empowerment, though variously applied in many domains, is most appropriately defined as “ the expansion of people’s ability to make strategic life choices, particularly in contexts where this ability has been denied to them.”

Section II: Why integrate gender into cost-benefit analysis?

There is a great demand to address the need for providing policy planners with information on costs and benefits of proposed actions on climate change. What is also critical is to provide equal priority to social impact assessment, rather than viewing these impacts as “intangibles”, that are outside the parameters of a cost-benefit analysis. Cost benefit analysis (CBA) needs to go beyond measuring financial aspects in order to capture critical benefits and costs, that may not be monetizable, to provide a realistic picture of how women and men perceive climate impacts.

In order to enable planners to obtain such an understanding, the UNDP Regional Office for Asia/Pacific commissioned WOCAN to develop a gender-responsive Climate Change Benefits Analysis tool and provide training on its use to key government officials within ministries responsible for climate finance. UNDP’s *Strengthening the Governance of Climate Change Finance to Enhance Gender Equality programme (2017-2022)* deepens and broadens the reforms around national planning and budgeting process in Asia-Pacific countries. WOCAN developed and field-tested a methodology based on consultations with community members, officials and other stakeholders in Nepal in late 2019 to produce this tool.

Methodology Development: The methodology tested consists of a two-part approach: the first part was the collection of data from a diverse group of women and men community members, using a cost benefit analysis matrix, on financial and non-financial (social) impacts, with qualitative as well as quantified information. The second part engaged sub-national level government and non-government staff, with the participation of diverse groups and individuals affected by planning and implementation of climate-related policies and actions in a Multi-Stakeholder Dialogue.

The results of this exercise demonstrated a high level of interest and curiosity by the participants evidenced by lively discussions about costs and benefits in the context of gender and climate change. The step-by-step explanation and discussions to introduce CBA and its framework was useful in bringing all the participants onboard. Conducting CBA with provincial level planners proved also to be useful, as they were able to identify and cost activities well due to their understanding of field level realities.

The results of consultations with community members indicated that due to the changing weather patterns, financial costs and non-financial costs combined were very high as compared to the financial and non-financial benefits. The different steps used to conduct the CBA helped them realize and analyze the situation, and

generated ideas on options for more cost-effective alternatives and solutions. Community members said the CBA exercise helped them see the bigger picture and gave them confidence to make decisions to explore and choose alternatives with reduced risk.

What are the limitations of traditional cost-benefit analysis?

Cost-benefit analysis refers to a comparison of costs and benefits of a given activity to assess its feasibility. The activity is considered feasible if the benefits are greater than the costs over a given period of time.

Generally, in the context of project or policy analysis, the definition of CBA can become more restricted:

- 1) It compares the monetary value of costs and benefits;
- 2) It aggregates all stakeholders into one category, and
- 3) It relies on tools and principles of welfare economics to arrive at social value of resources consumed and service provided¹.

Focusing on a financial ‘bottom line’, traditional cost-benefit models rarely give a priority to social impacts while developing policy or project designs. Social benefits that are non-monetized are unlikely, therefore, to make any impact on the decision-making process. Social impacts are frequently viewed as ‘intangibles’ that are outside the parameters of a cost-benefit analysis, and are underscored by a circular logic to social impact identification:

- Without the investment in social impact assessment research and costing, the financial bottom line hurdle cannot be overcome; and
- While low cost social impact assessments continue to produce generalized statements, they do not challenge the primacy of the financial bottom line criterion.

When assessing social impacts, a key limitation associated with the traditional CBA model is the inherent incommensurability between the economic rationality of the CBA and social change rationality underpinning the human rights’ goals of gender equality and women’s empowerment. The traditional CBA is based on economic rationality that compares alternatives and makes choices based on monetary valuation. But there are no natural prices or monetary value for ‘goods’ like an improvement in women’s social status or *position*² and monetary valuations undermine justice and fairness.

¹ See Watt, Jenny, Kamin Perow, Stephanie Schmidt, Bahmin Kashi. 2017. Integrating Gender in cost-benefit and cost-effective analysis. USAID. Final Report. April.

² For broader critiques of CBA see Hwang Kwangseon, 2016. Journal of Public Affairs. Vol 16 No. 1 pp 75-80; Ackerman F, Heinzerling L. 2002. Pricing the Priceless: Cost-Benefit Analysis of

Who should use this framework?

This framework is useful to those aiming to achieve the goals of the following approaches : human rights, increased efficiency and women’s empowerment.

This includes climate and financial planners from government departments and non-governmental organizations; climate project designers, implementers, evaluators/ reviewers, funders and private sector investors. This tool can be used to aid planners make decisions about the allocation of funds for climate mitigation, adaptation and disaster risk reduction, in ways that are gender-responsive and based on local perceptions.

When to Use this Framework?

The gender-sensitive cost-benefit analysis for climate change interventions can be used in different capacities across the life of a project:

- i) To assess the feasibility of the project when identifying, designing, and securing financing for the project (*ex-ante*) and
- ii) To evaluate its impact after the completion (*ex-post*)

Environmental Protection. University of Pennsylvania Law Review 150, 1553; Aldred, J. 2006. Incommensurability and Monetary Valuation. Land Economics, 82(2), 141-161; Aldred J. 2012. Climate Change Uncertainty, Irreversibility and the Precautionary Principle. Cambridge Journal of Economics; Driesen DM. 1997. The Societal Cost of Environmental Regulation: Beyond Administrative Cost- Benefit Analysis. Ecology LQ 24: 545–887.)

Section III: A Two-Part Participatory Gender-responsive Climate Cost-Benefit Analysis Methodology

Part 1: The Matrix³

The first part of the methodology includes a cost-benefit matrix that does not privilege any particular component, but rather provides equal consideration of social impacts with other variables. The matrix attempts to treat the unquantifiable non- financial costs and benefits equally with the quantifiable, financial costs and benefits.

The matrix requires addressing impacts on both individuals and groups/communities. This is important from a gender analysis perspective, because women (or men) are not a monolithic group. The intersections of class, ethnicity, disability, age and sexuality are all important considerations because the costs and benefits will not necessarily be distributed equally across different social statuses.

Finally, two key concepts from gender analysis are employed to further characterize the costs and benefits to individuals and groups. These can be changes in the *Practical Needs* (or material situations of women and men) and/or the changes in the *Strategic Interests* (or social status of women in relation to men).

Matrix 1: Gender-responsive CBA (with examples)

Stakeholders	Non-financial Benefits	Financial Benefits	Non-financial Costs	Financial Costs
<i>Individual</i> <ul style="list-style-type: none"> • <i>Practical Needs</i> 	Access to services and climate resources	Increased income (+ \$)	Unremunerated time of participation	Opportunity loss from participation (- \$)
<ul style="list-style-type: none"> • <i>Strategic Needs</i> 	Increased decision making for women	Access to markets (+ \$)	Limitations for participation emerging from values, norms, attitudes of household and community members towards women's roles in society	Responsibilities of <i>Unpaid Care</i> work in addition to participation in development interventions (- \$)

³ Adapted from Alison Ziller & Peter Phibbs (2003) *Integrating social impacts into cost benefit analysis: a participative method: case study: the NSW area assistance scheme*, **Impact Assessment and Project Appraisal**, 21:2, 141-146.

Groups <ul style="list-style-type: none"> <i>Practical Needs</i> 	Training and other services	Income from participation / employment in projects (+ \$)	Unremunerated time of participation	Opportunity loss from participation (- \$)
<ul style="list-style-type: none"> <i>Strategic Interests</i> 	Organizing capacity and skills	Ability to draw down on funds (+ \$)	Women excluded from leadership positions in community groups	Responsibilities of <i>Unpaid Care</i> work in addition to participation in development interventions (- \$)

Part 2: Participatory assessment

The second part involves stakeholder participation. This involves the participation of a diverse groups and individuals engaged with or affected by planning and implementation of climate-related policies and actions. As part of these workshops, participants are invited to help fill in the matrix, beginning with non-financial benefits to individuals, and working column by column from left to right. It also involves an explanation of the concepts of *Practical Needs* and *Strategic Interests*.

Definitions

What are Practical Needs?

- This refers to meeting those needs that will lead to an improvement in the material condition of women

What are Strategic interests?

- This refers meeting those needs that will lead to an improvement in the social status of women.

What are Inter-sectionality?

- People have multiple, layered identities derived from social relations, history and the operation of structures of power
- People are members of more than one community at the same time and can simultaneously experience oppression and privilege
- Sometime, a combination of identities expose individuals or groups to different types of disadvantage

The results from the assessment can be inserted as per the matrix provided below (see Annex 1 for an example):

Benefits

	Non-financial <i>benefits</i> to individuals	Financial <i>benefits</i> to individuals
<i>Practical needs</i>		
<i>Strategic interests</i>		
	Non-financial <i>benefits</i> to groups	Financial <i>benefits</i> to groups
<i>Practical needs</i>		
<i>Strategic interests</i>		

Costs

	Non-financial <i>costs</i> to individuals	Financial <i>costs</i> to individuals
<i>Practical needs</i>		
<i>Strategic interests</i>		
	Non-financial <i>costs</i> to groups	Financial <i>costs</i> to groups
<i>Practical needs</i>		
<i>Strategic interests</i>		

Section IV: Steps

Step 1: Initial consultations are to be conducted with government officials, planners and project developers to identify the social groups that are relevant to the proposed climate change project or activity.

Step 2: Stakeholder and gender-sensitive intersectional analyses

- a) Conduct Stakeholder Analysis. This process is to identify the range of stakeholders who are impacted by, or will influence the intervention. In the case of a climate change intervention, stakeholders could range from those impacted by climate risks, or those engaged in policies and programs for climate mitigation, adaptation and disaster risk reduction.

- b) An important component of the stakeholder analysis is to further disaggregate stakeholders through a gender-sensitive intersectional analysis that identifies them according to other considerations beyond gender, such as ethnicity, class, caste, disabilities and so on, Simply disaggregating stakeholders by gender considerations alone is insufficient. Women or Men are not a monolithic group: women and men represent multiple intersections of social identity beyond gender alone. It is therefore important to ask the question: which women? which men? based on ethnicity, class, caste and other forms of social exclusion/inclusion. Multiple intersections of social identity in individuals or groups can represent both advantages or further compound existing disadvantages. Hence, it is important to conduct analyses that identify the different social categories of targeted communities.

Example: Stakeholders in climate-smart agriculture

Stakeholders	Impacts (costs and benefits)
<ul style="list-style-type: none"> • Project developer 	Inputs (-): investment in project Outcome (+): sustainable agriculture production
<ul style="list-style-type: none"> • Old Seed suppliers 	Loss of market opportunity (-)
<ul style="list-style-type: none"> • New Seed suppliers 	New market opportunity (+)
<ul style="list-style-type: none"> • Service providers 	Inputs (-): investment in training Outcome (+): skills of framers in CSA
<ul style="list-style-type: none"> • Community 	Inputs (-): investment of time Outcomes (+): new skills for CSA; increased yields; etc.

Example: Intersections of social identity in community groups

	FEMALE	MALE
SOCIAL IDENTITY		
• Ethnicity		
• Class		
• Economicstatus		
• Age		
• Geographic isolation		
• PLWD (People Living with Disability)		

Step3: Consultations with community groups: Use Focus Group Discussions and interviews with community groups that have been disaggregated by gender and other locally relevant social indicators based on intersectional analysis. Ideally, each group should contain not more than 25 – 30 representatives. The following matrix can be used as a guiding framework:

Gender-sensitive CBA

Stakeholders	Non-financial Benefits	Financial Benefits	Non-financial Costs	Financial Costs
<i>Individual</i>				
• <i>Practical Needs</i>				
• <i>Strategic Interests</i>				
<i>Groups</i>				
• <i>Practical Needs</i>				
• <i>Strategic Interests</i>				

Step 4: Data Analysis. The financial and non-financial costs and benefits can be categorized according to the elements provided in the matrix below:

Benefits

	Non-financial <i>benefits</i> to individuals	Financial <i>benefits</i> to individuals
<i>Practical needs</i>	+ -	+ -
<i>Strategic interests</i>	+ -	+ -
	Non-financial <i>benefits</i> to groups	Financial <i>benefits</i> to groups
<i>Practical needs</i>	+ -	+ -
<i>Strategic interests</i>	+ -	+ -

Costs

	Non-financial <i>costs</i> to individuals	Financial <i>costs</i> to individuals
<i>Practical needs</i>	+ -	+ -
<i>Strategic interests</i>	+ -	+ -
	Non-financial <i>costs</i> to groups	Financial <i>costs</i> to groups
<i>Practical needs</i>	+ -	+ -
<i>Strategic interests</i>	+ -	+ -

Step 5: Multi-stakeholder dialogue. Conduct a multi-stakeholder dialogue with government officials, project staff, NGOs, CSOs, funders, and others at the sub-national level (district/province, etc.) to share the community data and collect new data, using the matrix. Bring selected community members who were engaged with the consultations to this event to share their perspectives directly with planners and to identify obstacles and opportunities.

Step 6: National advocacy. Countries vary on how they are responding to the challenge of tracking climate finance in their national budgets. Some countries have already developed the Climate Change Financing Framework (CCFF) and added climate change activities in their budget coding, while others are developing climate relevance criteria and typology. In some countries, line ministries have to implement CBA for the Climate Public Expenditure and Institutional Review. Therefore, an overview of the CCFF of the country needs to be conducted, followed by a multi-stakeholder dialogue with concerned ministries

and departments to develop a strategy for the CCFF to include the gender-responsive CBA.

Annex 1. Example of gender-responsive CBA conducted in Nepal

Background: Climate change impacts in Nepal

The effects of climate change have had high impacts in both the plains and mountainous areas of Nepal, which has high intensity rainfall during the rainy season. Both severe winter drought and excessive monsoon rains have affected rural communities, resulting in landslides and soil erosion and affecting forests, water resources, agriculture, and human health. Subsistence farmers make up about 38% of Nepal's population, making them heavily dependent on climate-sensitive agriculture, and vulnerable to climate change-induced hazards and extreme events. In recent years, long drought spells during the monsoon season and increased temperatures and unseasonal heavy rains during winter have caused serious distress to agriculture-dependent communities in many locations.

Barriers to Investments

To enhance climate resilience and safeguard communities and their social and economic assets in the hills and plains, the government of Nepal (GoN) requires the knowledge, skills and capacity to understand, assess and manage the risk from climate related events and disasters.

One of the key barriers is the lack of investment in, and investment planning for, long-term climate risk reduction to address drought and flood risks, largely due to a lack of comprehensive climate risk and vulnerability data, and cost-benefit analysis of undertaking such intervention measures. This limits the GoN's ability to systematically identify and program financial requirements for implementing risk reduction measures.

Example of Gender-sensitive climate CBA: Mixed Focus Groups from Rupendehi, Nepal

Stakeholders	Non-financial Benefits	Financial Benefits in NRs	Non-financial Costs	Financial Costs in NRs. ⁴
Individual <i>Practical Needs</i>	New skills developed in DRR (how to train rivers; bio-engineering etc.)	Received some relief from CSOs/NGOs (food, sanitary materials – soaps, buckets etc.) worth Rs.1000	<ul style="list-style-type: none"> • Husband had to migrate for work • Children missed school for 2 months • Could not attend community meetings and trainings. • Loss of nutritious food (organic farm food) • Increased workload - Time to take care of children and elderly 	<ul style="list-style-type: none"> • Loss of land = 5,00,000 • Destruction of houses = 50,000 • Loss of farm trees (fruits, fodder and fuel- wood) = 70,000 • Reconstruction/repair of houses = 100,000 • Loss of chicken, cattle, livestock = 15,000 • Loss of income for 2 months = 200,000 • Rise in medical expenses = 30,000 • Volunteer labor (3 months) = 18,000
Individual <i>Strategic Needs</i>	More confident in mobilizing funds and resources.	Mobilized local relief funds NRs. 2000	<ul style="list-style-type: none"> • Missed opportunities to participate in community forums and practice leadership due to increased household work and disaster. 	-
Groups <i>Practical Needs</i>	Increased networks with CSOs and government service providers.	<ul style="list-style-type: none"> • Installation of water pump =2500 • Irrigation = 2000 	<ul style="list-style-type: none"> • Tension • Deterioration of health and poor nutrition • Disturbance in children's school/education • Security – household goods, women and children 	<ul style="list-style-type: none"> • 1 kattha ⁵land loss = 75,000 • Rice production = 2000 • Maize production = 1000 • Mustard = 500 • Lentil = 800 • Vegetables = 900

⁴ 1 US\$=NRs.114

⁵ 1 hectare = 30 kattha

				<ul style="list-style-type: none"> • Cash crops = 3000 • Loan and interest fro 40 households =30,000 • House rehabilitation and maintenance for 40 households = 100,000 • Livestock and cattle shed = 60,000 Loss of Labour = 30,000
Groups <i>Strategic Interests</i>	More confident in mobilizing funds and resources.	Mobilized Government and NGO relief funds NRs. 10,000	Lost opportunity – to attend community meetings, trainings awareness camps etc.	-