Tool 1: Weather and climate hazard assessment – integrating gender

Objective: To identify how weather and climate hazards affect a particular sector (e.g. agriculture, education), geographical location (country, district, community) or policy issue.

Gender considerations: As climate hazards and risks and their impacts are being identified we need to understand and document how these hazards, risks and impacts might affect men and women differently depending on their roles and responsibilities.

Why do it?

Many initial assessments of the impacts of climate risk stop at the assessment of risks on biophysical and physical systems and do not consider how these risks might affect different social groups differently. Understanding these differences can provide useful information to ensure that responses are well targeted. This baseline information can also feed into monitoring and evaluation frameworks to track changes in assessment of risk.

When to do it?

This tool should form a key part of the initial situation analysis. Initial research could be desk based but should be developed in a participatory way during initial stakeholders workshops and validated by experts.

This approach can also be used to incorporate considerations facing particular social groups (such as children, people with disabilities).

Steps

- 1. Determine the area of interest to consider the table below uses an agriculture example.
- Review existing information on climate risks and how they might affect physical and biophysical systems. Major sources of information could include national statistics, scientific research papers, assessments by sector specialists, expert interviews, and loss and damage data from past extreme events.
- 3. Review existing information on gender roles within the particular area of interest. Prime sources of information include, again, national statistics, social research, previous gender analysis conducted in a similar context, and interviews with gender and sectoral experts.
- 4. Based on Step 3, consider how climate risks will affect social systems and how risks might affect men and women differently. Think about all stakeholders in this context not only those that are directly affected (e.g. farmers, consumers) but also those involved in providing support (e.g. extension officers, private enterprises, NGOs).
- 5. Document any evidence and/or discussion about how these risks are changing over time.
- 6. Use this information to check that the adaptation responses proposed in subsequent phases are addressing the risks and impacts men and women face.

The example below presents the information in tabular form but can be applied in many formats (for example on a resource map).

SITUATION AND PROBLEM ANALYSIS

Tool 1: Weather and climate hazard assessment – integrating gender

Assessment of climate risks and impacts on the agriculture sector

Climate risk	Impacts on physical and biophysical systems	Impact on social systems		
		Men	Women	
Increased intensity of flooding events	Direct crop losses	Involved in commercial taro production – loss of income	Involved in managing vegetable gardens near the home – loss of food sources	
		Increased workload to rehabilitate and replant gardens	Increased pressure to stretch household food sources and income to meet family needs – increased workload to find additional food sources	
		Expected to seek assistance from official sources – may require travel away from family	Reduced capacity to contribute to social obligations	
	Damage to agricultural equipment and inputs	Loss of specific tools increases workload	Damage to home gardens nursery – increased workload to rehabilitate. May be less able to access external support as required	

For those working at the community level, many resources are available that can assess how climate change will affect community development priorities. These include the use of hazard mapping, seasonal calendars, historic timelines etc.

Further reading

SPC. 2013. Toolkit to mainstream gender into energy and climate change community based adaptation projects in the Pacific. Forthcoming

WWF. n.d. Climate Witness, Community Toolkit (WWF South Pacific Programme) at http://d2ouvy59p0dg6k. cloudfront.net/downloads/climate_witness_tool_kit_1.pdf

Tool 2: Vulnerability and adaptation assessment – integrating gender

Objective: To assess the vulnerability and adaptive capacity of a particular ecosystem (e.g. agriculture, fisheries), sector (e.g. tourism, infrastructure), area (e.g. country, region) or social system (e.g. a community). Vulnerability and adaptation assessments are used as the basis for planning adaptation responses.

Gender considerations: Different groups within society have different concerns, priority needs, resources and capacities. They therefore have different vulnerabilities and may need different resources, skills, information and approaches to support adaptation.

Many participatory tools are available for use at the community level to support these processes, many of which provide gender entry points for ensuring that men's and women's different concerns and priorities are identified and addressed. These include resource maps to identify differences in the resources that men and women highlight as important, focus group discussions with different groups to ensure that women are given space to voice their particular concerns and priorities, risk and hazard ranking tools that identify differences in how men and women perceive risks they face.

Specific gender analysis tools such as time use surveys, division of labour and activity matrixes can be incorporated into vulnerability assessments but are not always prioritised.

Why do it?

Vulnerability and adaptation assessments provide an ideal opportunity to gather the necessary data and information to inform gender-responsive adaptation projects. There are several factors that influence whether this happens beyond the types of tools used.

Those involved in planning vulnerability and adaptation assessments must ensure they are well prepared and that the proposed approach (including the facilitation team, logistics, tools, data and reporting) maximises the opportunities for the participation of women and documents their specific needs, priorities, skills and knowledge as part of the process.

When to do it?

A vulnerability and adaptation assessment is a vital part of the situation, problem and solution analyses and provides a good opportunity to develop a better understanding of the gender dimensions of a particular context. It should be planned early in the process but time should be taken to ensure that it is well planned. If this stage is rushed it is easy to miss vital information needed to plan appropriate adaptation responses.

Tool 2.1: Problem Tree Analysis – digging deeper

Objective: To develop a clear understanding of the problem to be addressed and determine the root causes of vulnerability to climate change impacts.

Gender considerations: During the identification of problems and root causes it is important to understand how and in what ways existing social structures, in particular current gender inequalities, affect women's vulnerability and capacity to adapt to climate change.

Why do it?

A problem tree can help tease out some of the underlying causes of vulnerability to climate change impacts. In the example below water shortages are exacerbated by longer drought periods but also by poor management of water resources, and infrastructure that is not maintained appropriately. If we dig deeper beneath each of these problems we find a second layer of causes and constraints that women may face. For example, if both women and men lack skills to be able to maintain household water infrastructure (tanks, plumbing systems etc.) one cause could be local unavailability of training courses to enhance these skills. This is a challenge for both women and men. An additional constraint facing women could be that although training courses are available elsewhere, the fact that attendance at them would entail spending time away from home conflicts with social norms that limit the opportunities for women to leave their families and their children for extended periods of time.

Adaptation strategies do not often dig deep enough to uncover and understand the real root causes of vulnerability and put in place measures that could help address these issues. Understanding how social structures affect vulnerability is crucial to ensuring that adaptation responses address both men's and women's needs.

When to do it?

This tool should form part of the problem analysis phase to ensure the root causes of the identified problems are captured.

By using the identified problems and turning them into solutions this tool also informs subsequent phases of the programme cycle (Solution Analysis and Design).

This tool can be used with all stakeholders – during policy workshops, stakeholder consultations and at the community level.

Steps

- Together with all relevant stakeholders (ensuring appropriate representation from agencies that have gender expertise) generate a list of problems within the particular context (country, sector, community). The situation analysis should provide information to validate the identified problems.
- 2. Using one of the problems, explain the difference between a "problem", a "cause" and an "effect".
- 3. For each of the causes identified continue to ask the question "Why?" in order to drill down to the underlying root causes.
- 4. Identify root causes that may be different for men and women and relate to unequal access to resources, decision-making processes and existing social structures.
- 5. Use the identified root causes to inform responses during subsequent phases.

Tool 2.1: Problem Tree Analysis – digging deeper



Further reading

SOPAC, 2009. Guide to Developing National Action Plans: A Tool for Mainstreaming Disaster Risk Management, Based on experiences from selected Pacific Island Countries

Additional resources for use at the community level

SPC, 2013. Toolkit to mainstream gender into energy and climate change community based adaptation projects in the Pacific

Climate Witness, Community Toolkit (WWF South Pacific Programme)

SPREP, 2006. CV&A: A Guide to Community Vulnerability and Adaptation Assessment and Action

at http://www.sprep.org/att/publication/000437_cvaguidee.pdf

Tool 2.2: Division of labour and activity matrix

Objective: To identify the roles of women and men in contributing to livelihoods and household well-being and their roles in managing climate change impacts.

Gender considerations: A division of labour matrix can provide information on the respective roles of men and women in livelihood strategies. It should provide information about the level of involvement of women and men in:

- Food production: agriculture (cash crops, livestock production, subsistence crops), fisheries (coastal and offshore), other activities related to food security (collection of wild nuts)
- Natural resource management: water, forests, agricultural land, marine resources
- Disaster preparedness: the operation and management of early warning systems, preparation and storage
 of food and water, safeguarding infrastructure What are the respective roles of women and men in each
 of these activities?
- Household work: cooking, cleaning, collection of water or fuel, maintenance of water tanks, taking care of children, elders or persons with disabilities, etc.
- Employment and income generating activities: handicraft production, services, and small-scale businesses
- Community work: involvement in customary institutions, church groups, traditional celebrations, NGOs, collective work, etc.

Why do it?

This information can be used to examine the extent to which climate change impacts will affect each of these activities and therefore any differences in the way in which these impacts will be felt by women and men. Understanding who does what, who uses and controls which resources, is vital to being able to manage any changes in the availability of those resources that may arise as a result of climate change impacts. Similarly, adaptation responses directed toward changes in the way resources are currently managed must understand who actually manages the resources; attempts to improve resource management may otherwise fail.

When to do it?

This is an important part of an initial situation and problem analysis, to ensure that proposed solutions are correctly targeted. It can be integrated into a vulnerability and adaptation assessment.

Steps

The following steps illustrate this process with respect to water security and drought issues.

Step 1: Identify activities that men and women perform in relation to food production, natural resource management, livelihoods, disaster risk reduction, household and community work. How are these activities affected by water shortages and droughts?

Step 2: How do the activities performed by women and men themselves affect underlying resource management? Do these activities put pressure on existing water resources? Do any of these activities contribute to conservation of water resources?

Step 3: Combine these activities with information about how climate change will affect water resources and the incidence of drought.

Step 4: Using the information generated in steps 1–3, identify and discuss how men and women may be differently affected by climate change impacts. In particular, do some activities use water resources more than others, and if so, will they be more affected by changes in water availability?

Tool 2.2: Division of labour and activity matrix

Example: The following table represents a division of labour and activity profile (Step 1 and 2 above) used to determine how and by whom water shortages and droughts are currently being felt and how current activities may exacerbate these problems. The impacts described below are examples for illustration only. In reality the impacts are likely to be very context specific.

A gender analysis of activities and water resources management

The Activity Profile	Type of	Level of involvement ¹		
Activities	Impact of water shortages or drought on people's activities	Impacts of those activities on water resources	Men	Women
Cash Crops Sweet potatoes Planting Weeding Harvesting Processing Selling to market	Reduced yields and constrained processing opportunities - reduced cash income available to the household	Water used for processing crops (e.g. cleaning, making chips) limits water available for other uses	xx xxx x x xxx	XXX XXX XXX
Subsistence Crops Vegetables Planting Weeding Harvesting Processing	Reduction in yields – reduced cash income and nutritional quality of food	Vegetables require significant water – households will need to decide how to trade-off between water used for vegetables and other uses	x x	XX XXX XX XX XX
Raising Pigs Collecting/buying food Feeding Cleaning the shed Selling	Increased mortality of pigs due to limited freshwater availability	Households will need to trade-off water available for piggeries and other uses	xxx xxx xx xx xx	x
Other Livelihood Small enterprises Handicraft production Employment in the government	Activities that use water directly will be constrained. It is likely that production activities at home (e.g. handicraft production) are more heavily affected than salaried income	Livelihoods arising from opportunities outside of the primary production sector can contribute to improving water availability.	XXX	XXX XXX X
Household Cooking Cleaning Taking care of children Taking care of elderly or sick persons Collecting fuel wood Collecting water Others	Water is required for most of these activities and women will be forced to prioritise among them during water shortages. Women and men may need to travel further to collect water during drought periods	XXX XXXXX	XX	XXX XXX XXX XXX XXX XXX XXX XXX XXX

¹ The number of x's in these columns indicates the level of control or access: x signifies some sort of control or access, xx – medium amount of control or access, xxx – high level of control or access.

Tool 2.3: Adaptive capacity assessment matrix

Objective: To identify the resources available to support adaptation to climate change and who has access to and control over those resources. This will provide information about who is at greater risk and what resources are necessary to strengthen people's resilience.

Gender considerations: This tool helps to identify which resources are critical for people's adaptation and resilience and assesses the extent to which women and men differentially have access to and control of those resources: men and women often do not have equal access to vital resources necessary to manage risks.

Why do it?

Coping with environmental stresses, climate and disaster risks requires resources (information, skills, physical and financial resources etc.). We often identify resources necessary for managing risks but do not necessarily consider who has access to and control of those resources. This can undermine approaches to strengthening adaptive capacity as the existence of resources does not necessarily mean that they are available to everyone. For example, early cyclone alerts are disseminated by radio. If the men in the household take the radio with them to the garden when they are farming, the rest of the household members will not have access to important information. This may influence our strategies for ensuring that everyone gets the information they need. In this case the problem is not the lack of technology or systems but of access to them.

When to do it?

This tool provides insights into the following questions: How does access and control of different resources affect our ability to adapt to climate change? How should this inform strategies to strengthen adaptive capacity? The tool should be used as part of the situation and problem analysis in order to inform solution and design options.

Definitions

- ACCESS: means the right or the opportunity to make use of something (e.g. a body of information or knowledge, person(s) who can guide or help you, necessary equipment or resources etc.).
- CONTROL: means the ability to define how something will be used, who may use it and how much use they can make of it.

At the household level, resources can include knowledge and skills, financial resources, means of transportation (e.g. truck, boat) and communication (phone, television, radio), property (e.g. a house), land and other assets (equipment and tools).

At the community level, resources means all the things needed to enable something to be accomplished. They can include traditional knowledge, natural resources (communal land, forests, the foreshore and ocean, rivers), physical structures (market places, healthcare centres, schools, institutional bodies (a local governance body, a financial institution, local NGOs) and everything that is used, managed or owned by a community.

At the society level, resources can include employment, public infrastructure (schools, hospitals, roads, markets, parks) and services (education and training, the justice system), banking systems, political and decision making structures.

Tool 2.3: Adaptive capacity assessment matrix

Example - resources available at household and national level for drought management

Required resources for supporting drought management – household level	Existing resources at the household level	Access		Control Who decides how it will be used?	
Household level		Men	Women	Men	Women
Physical resources					
Private well	х	Х	ХХ	XX	Х
Water tanks	ХХ	Х	XXX	XX	ХХ
Information					
Information about risks	XXX	XXX	х	XXX	
Information about storage measures	ХХ	ХХ	ХХ	XX	Х
Financial resources					
Savings	х	XXX	ХХ	XXX	Х
Remittances	XXX	XXX	ХХХ	XXX	ХХ
Alternative income sources	ХХ	XXX	ХХ	XXX	ХХ
Social Cohesion					
Good relationship with community	XXX	ХХХ	ххх	XXX	XXX
Member of church group	ХХ	Х	ххх	XX	ХХ
Member of island council	ХХ	ххх	х	XXX	
National level		Men	Women	Men	Women
Physical resources					
Underground water (on two islands)	Cover 35% of the requirements	ХХХ	ХХХ	XXX (only men in management positions in the ministry)	
Public cisterns	30 – Water Master Plan has a target of 80	ХХ	XXX	XXX	
Reticulated water system	Covers 55% of requirements	ХХХ	XXX	ххх	
Information and communication – quality ra	ting (5 – well funct	ioning,	0 – not in e	existence)	
Information	4	ХХХ	XX	XXX	Х
Warning system	3	XXX	х	XXX	Х
Institutional structures – quality rating (5 –	well functioning, 0	- not in	existence)	·	
Drought management plan	5	ххх	Х	ХХХ	Х
Skilled committees	3	XXX	XXX	XXX	XX
Outer Islands coordination	4	XXX	Х	XXX	Х
Financial resources	1	XXX		XXX	

Brief insights

At the household level women use water wells and tanks for household chores but men take most of the decisions relating to investment, maintenance and finance. If women are consulted about household resources their needs may be addressed but when one household member controls the use of certain resources, other members' needs may not be prioritised.

Women are more involved with the church group, which can be an important resource to draw on in times of crisis. However, the main decision-making bodies at the community level are more accessible to men.

At the national level both women and men have access to public infrastructure. However, in the ministry responsible for the planning and management of services and budget allocation, the decision-making is mostly the men's preserve as there are no women at the senior management level. This could mean that women's specific needs are not currently being met and that opportunities to draw on women's capacity to inform the design of warning systems and drought management plans and contribute to enhancing their effectiveness are being missed.

Tool 2.4: Adaptation planning – needs assessment matrix

Objective: To determine existing and future needs related to the priority adaptation actions identified.

Gender considerations: When defining priority adaptation actions, men and women may have different needs (information, training, financial resources, infrastructure) depending on their roles and responsibilities.

Why do it?

It is usually straightforward to identify the practical needs (those that make life easier) of men and women and address this as part of the programme or project. However, women have strategic needs that stem from their gender roles within society. This may include, for example, enhancing women's involvement in governance mechanisms (such as national climate change or disaster risk management committees) or ensuring that training opportunities in male-dominated areas (such as water engineering) are available to women.

When to do it?

Assessment of differences in adaptation needs should be done as part of the solution analysis in order to take these differences into account in the way the project is designed.

Steps

- 1. Using the information from earlier stages (situation, problem and solution analysis):
- summarise the most significant climate change impacts and effects of those impacts on the particular ecosystem, sector, area or community of interest.
- summarise the top priority actions for reducing vulnerability and strengthening resilience to these risks.
- 2. Based on these top priority actions, identify different needs that men and women have in managing risks.

Ensure that any information related to differences in the effects that men and women will face or their priorities is not lost in the process.

- 3. Assess whether women's identified needs are practical or strategic needs. If only practical needs have been identified, reflect on the results of the earlier analysis to determine whether any strategic needs have been overlooked.
- 4. Integrate the priority needs into the programme or project design.

Example: The following table can be completed separately for men and women and the results consolidated later, or completed as a single table. The climate change impacts, effects and priority actions should have been identified during earlier assessments (situation, problem and solution analysis).

Tool 2.4: Adaptation planning – needs assessment matrix

Climate change impact: Increased rainfall variability leading to more severe droughts						
Effect: Regular water shortages leading to increasing health risks						
Priority action	Adaptation needs		Practical or			
			strategic			
	Men	Women	(P or S)			
Enhance integrated water resource management governance structures at national and local levels	Leadership training to the current membership of the committee (largely men)	Improve gender balance of water resource management steering committee (currently only one of seven members is a woman) Expand IWRM committee to include the government ministry responsible for women and non-governmental organisations responsible for human rights, women's rights	S			
Repair existing water infrastructure	Training for repairing downpipes and water tanks to public works department employees (largely men) Train-the-trainer workshops for organisations working at the community level to be able to deliver water resource management training	Target women within the public works department to attend training for repairing infrastructure Ensure access to training opportunities for organisations working in women's and human rights	P, S P, S			
Improve community awareness of the importance of good water and sanitation practices during drought periods	Information disseminated through various media channels (radio, TV, newspapers) to provide the public with up to date information on droughts and key water, sanitation and health messages		Ρ			
	Targeted information about reducing kava consumption during drought periods to minimise health risks	Targeted information and training about prioritising water for children's hygiene and sanitation (e.g. for hand washing) despite water shortages.	Ρ			

Tool 2.5: Time Use Survey

Time use survey

Objective: To identify the daily tasks carried out by men and women and identify the differences or similarities in activities, workload and roles.

Why do it?

This tool facilitates the capturing of daily activities by men and women. Information obtained from this tool may be useful for identifying target groups for specific project activities and also planning of project activities to ensure that they do not add excessive burden to men's and women's workloads. It is also a useful method of making everyone more aware of the different workloads borne by men and women.

When to do it?

This tool provides useful insights into the following questions: Who does what (roles)? When are different activities carried out? How much time is consumed by activities (household, community, individual)? It should be used as part of the situation and problem analysis in order to inform solution and design options.

Steps

- 1. Together with relevant stakeholders, distribute the time matrix to each participant or group.
- 2. Ask participants to think of a typical family they are familiar with or to think of their own families.
- Ask them to think about the typical activities that the husband and wife in the family would do in a typical day. Using the time matrix indicate activities that each would carry out for each of the hours of a 24-hour day. Activities would include things like preparing children for school, washing, leisure time, sleeping etc.
- 4. Following this, have participants compare the two timetables and discuss the following questions:

Are there commonalities and differences between the two timetables?

- Are activities the same or different?
- Is the same amount of time spent on activities that are common to both?
- Why do think there is a division of labour?
- Is there a distinct division of labour between men and women? Why do you think so?
- Are the activities of the man and the woman inter-changeable?
- How can men and women assist each other with their respective workloads?

Tool 2.5: Time Use Survey

Time	Woman	Man
5.00 am	Wakes up and prepares children's school lunches and breakfast	
6.00 am	Wakes children up and gets them dressed for school	
7.00 am	Family breakfast	Family breakfast
8.00 am		Wakes up and goes to work in the nearby town
$\sim \sim \sim$	$\sim\sim\sim\sim$	$\sim \sim \sim$

Alternatively, participants may also illustrate activities, as in the following:



Tool 3: Feasibility assessment – integrating gender

Objective: Determine whether proposed solutions are feasible in a given context.

Gender considerations: When assessing proposed solutions for each identified option it is necessary to examine who is expected to do what, what skills they need to do it, and when they need to do it. Whenever we are thinking about who does what should disaggregate this into different groups (such as men, women, elders, youth, people with disabilities).

Why do it?

Many people are likely to be involved in contributing to the successful achievement of policy, programme and project objectives. When assessing proposed solutions it is important that everyone has actively defined their role, understands their part in the process, has all the necessary skills required and has the available time to contribute. If you are relying on a particular group to conduct particular activities, they need to have been involved in the decision-making processes that have defined their involvement. Women tend to have less access to decision-making processes and all too often it happens that they are expected to play a role but have no voice in determining what that role should be and identifying additional skills they may need to fulfil it. Care must also be taken that expected roles within the programme or project do not add unduly to existing workloads of a particular group.

When to do it?

This tool should be used during the solution, analysis and design phases. All those expected to play a role or be affected by a particular policy, programme or project, including women, must be involved in identifying possible options and designing the activities.

Ideally, proposed solutions screened here should have been identified by affected stakeholders themselves through participatory approaches and tools used as part of a vulnerability and adaptation assessment. It is important that this tool be applied in a participatory way with a balanced representation of all groups expected to play a role in the programme or project. This could be during a steering committee meeting if it is appropriately representative or at a specific planning workshop where attention is paid to ensuring the relevant stakeholders are able to participate fully.

If there are opportunities (for example through institutional structures involved and capacity building) to promote gender equality, they should be considered at this stage.

Steps

- 1. Document proposed solutions identified during previous phases.
- 2. For each proposed solution and based on a good understanding of the situation (existing roles and responsibilities, knowledge and skills) and the problem assess:
- i. the impact of each proposed solution on men and women
- ii. the expected roles of men and women and any implications on their workloads
- iii. skills and capacity needs of men and women to undertake these roles
- 3. Consider what the results tell us about the feasibility of each proposed solution.
- 4. Adjust recommended approaches if necessary to take account of factors that may impede the achievement of programme or project objectives.

Tool 3: Feasibility assessment – integrating gender

Example: Shoreline protection

Proposed solution: Mangrove conservation and rehabilitation							
Expected Impact		Expected roles		Additional skills or		Recommended	
				resources needed		approach	
Men	Women	Men	Women	Men	Women		
Increased Increased protection protection for juveniles for crabs of the fish that species that women men rely are on as their involved in main source collecting of income Will offer increased protection for bousehold		Jointly involved in replanting Take care not to Reduce the use of		Training about how to rehabilitate mangroves must be equally accessible to men and womenAwareness of theAlternative sources of		Include specific targets (50% participation) for men and women during training Ensure specific training needs	
assets close to the shore		damage young plants when launching their fishing boats	mangrove wood for fuel	damage that young plants can sustain	reliable and affordable fuel must be identified to ensure that women are not disadvantaged	are addressed Specific activities to identify reliable and affordable alternative fuel sources must be built into the design	
Proposed Sol	ution: Const	ruction of a sea	awall				
Expected Impact		Expected roles		Additional skills or resources needed		Recommended approach	
Men Women		Men	Women	Men	Women		

Tool 4: Cost–benefit analysis (CBA) Framework – integrating gender

Objective: To identify and compare the costs and benefits (including social and environmental costs and benefits) of different proposed options; and to determine whether the benefits of an activity or decision outweigh its costs and by how much relative to other alternatives.

Gender considerations: A cost-benefit analysis (CBA) can also disaggregate costs and benefits according to different groups (including men, women, youth, people with disabilities) to understand better who incurs the costs and who enjoys the benefits from specific measures. A good gender analysis that identifies expected costs and benefits to men and women is a pre-requisite for being able to value them on a disaggregated basis.

Why do it?

A CBA can help inform decisions about whether to proceed with an activity, decision, project or not and/ or choose which option to implement. It can be particularly valuable for advocacy and communication to involve decision-makers in finance and planning to demonstrate the expected social and economic returns associated with a particular project (i.e. for every \$1 invested, how much society will benefit).

A good cost-benefit analysis can expose the real (and sometimes hidden) costs facing women (for example in terms of time spent working), and by demonstrating the economic return on these initiatives to society as a whole, support arguments for investing in capacity building and support to women. Consideration of distributional issues within a CBA framework is also vital in terms of assessing the feasibility of options. If one particular group is disadvantaged by a proposed option they are unlikely to support the initiative, which will undermine the achievement of results. Consideration of distributional issues therefore provides invaluable information about how project design should be adjusted to account for these factors.

When to do it?

A cost-benefit analysis can be used at various stages during the programme or project cycle.

- During the solution analysis and design phases it can help inform the design of the project proposal and appraise the worth and feasibility (or otherwise) of the proposal(s).
- During implementation it can check that the project is on track and inform any project design refinements and adjustments for the remainder of the project period.
- As part of an evaluation at the end of the project period it can evaluate its performance or success. This can support transparency and accountability in reporting on how well funds have been spent and learning about whether a particular project (or that type of project) is worthwhile and should be replicated.

Entry points for gender analysis

At the heart of the consideration of gender within a CBA framework is the treatment of equity and distributional impacts. The basic measure of overall benefits in a CBA reflects economic efficiency: \$10 of benefits accruing to a poor farmer are treated the same as \$10 of benefits to a wealthy hotel owner. In reality societies commonly give greater weight to gains to disadvantaged groups. Consideration of how gains and losses are distributed is vital to ensuring that social equity is considered alongside economic efficiency.

In a CBA, the value of costs and benefits is determined by people's willingness to pay for (or how much they would pay to avoid) a good or service. In reality, our willingness to pay is affected by our ability to pay.

SOLUTION ANALYSIS AND DESIGN

Tool 4: Cost–benefit analysis (CBA) Framework – integrating gender

This means that our valuation of costs and benefits is based on the current ability of society to pay, or in other words, the current distribution of wealth in society, including existing inequalities in that wealth distribution.¹

A CBA is one tool that can feed into the decision-making process. Its results should be considered alongside other tools that examine equity and distributional issues in more detail.

Steps

1. Determine the objectives of the CBA

Ensure that all relevant stakeholders (including men, women, elders, youth, children, people with disabilities) have fed into the decision-making process about which options to assess. Whose priorities are represented?

2. Identify costs and benefits - with and without analysis

When identifying the different costs and benefits, and based on a good understanding of the underlying situation and problems, ensure that information on the distribution of those costs and benefits is captured and documented.

3. Measure and value costs and benefits and 4. Aggregate costs and benefits

When measuring, valuing and aggregating costs and benefits ensure that no detail relating to the distribution of costs and benefits is lost.

5. Conduct sensitivity analysis

A sensitivity analysis tests the results of a CBA for changes in key parameters we are uncertain about (e.g. rainfall). If a sensitivity analysis alters the distribution of costs and benefits significantly, ensure that this information is captured.

6. Consider equity and distributional implications

This section should expose any equity or distributional issues related to the costs and benefits of different options and how they might affect the feasibility of the project. Possible approaches for maximising benefits accruing to particular groups, including women, and measures for addressing any groups that are disadvantaged by the proposed options should be discussed.²

CBAs often provide recommendations as to how the estimated benefits can be realised in reality. For example, as part of the Tuvalu PACC project, a critical recommendation of the CBA was the development of a strong monitoring and community management plan to ensure that during dry periods, vulnerable members of the community can access water from the communal cistern (installed as part of the project). This involves consideration of who has access to and control over communal water resources, and presents an opportunity to strengthen women's involvement in water resource management.

¹ Adapted from SPREP &SPC, 2013.Cost-benefit analysis for natural resource management in the Pacific: A guide" at http://www.undpalm.org/sites/default/files/downloads/costbenefit_analysis_for_natural_resource_management_ in_the_pacific-a_guide.pdf

² Refer to Appendix 2 in the above document

Tool 5: Policy, programme and project screening matrix

Objective: To identify recommendations for gender-sensitive approaches and indicators that should be incorporated into the final project design.

Why do it?

Ensuring that gender considerations have been taken into account in proposed approaches and indicators is vital to the successful achievement of project outcomes. Failing to identify gender considerations correctly and take them into account can result in men's and women's different needs not being adequately accounted for. It can also mean that their different skills, capacities and knowledge relevant to the achievement of project results are under-utilised. These factors will limit the effectiveness of projects or make them fail completely.

This tool assesses the extent to which we understand the gender considerations of proposed problems and solutions and can help identify knowledge gaps.

Based on this assessment, gender-sensitive approaches and indicators are identified that can be incorporated into the overall project design.

When to do it?

This tool should be used to assess a draft project design document to ensure that gender considerations have been identified and proposed solutions, approaches and indicators take them into account. It requires detailed knowledge of the context of the project and relies on gender analysis conducted as part of the situation, problem and solution analysis.

It is often helpful to dedicate specific time to focusing explicitly on gender considerations as they are frequently not prioritised. The tool could be used during a steering committee or planning meeting with relevant stakeholders, including representatives from the project site, national ministries including those responsible for gender and/or women, non-governmental organisations, faith-based groups etc. A gender specialist could facilitate this process if the existing steering committee does not have sufficient expertise. Where this is the case it could be produced as part of a capacity building process with those involved in project implementation.

For the purposes of this toolkit this tool was used to summarise gender considerations in the case studies presented in Module 2.

Tool 5: Policy, programme and project screening matrix

An example is provided below.

			Gender-sensitive indicators		Number of men and women involved in village water management committee Number of men and women who express satisfaction with the solar pump and cistern Percentage change in the number of women and men accessing water from the cistern Number of men and women who have been trained in operating and maintaining the solar pump and monitoring water levels
	ing to increased water scarcity		Recommended gender-		Conduct gender analysis of water use and management patterns Ensure men and women are informed and receive training on the use and maintenance of solar pumps Facilitate open dialogue about water priorities and gender imbalances of water collection and water-related tasks Facilitate open dialogue about gender dimensions of participation and decision- making in water governing structures Encourage the inclusion of women in water management committees Provide technical training to women and men in community management structures and ensure that skills, and opportunities to increase them,
	fall variability contribut	er access through a solar pump	Women	to possible	Women will be able to collect water; this may give them more flexibility, but will also increase their workload Less likely to receive training to operate the solar pump Women may have a lower migration rate, therefore knowledge and skills are more likely to be retained in the community
2	rought periods and rain	Solution: Increased wate community cistern with	Men	Applying a gender lens adaptations options	May decrease men's workload as women can now collect water too More likely to receive pump Men may have a higher migration rate and are more likely to leave a skills gap in a household or community if only men are responsible for accessing water from the cistern
	Increased intensity of d	r availability for ing drought periods	Women	to the problem	Long periods waiting for delivery of water supplies adds to existing workloads Rising incidence of water-borne diseases will increase time spent caring for the sick Increased mental and physical stress will result, especially when caring for babies and the elderly when caring for babies and the elderly when caring for babies and the elderly will conflict may exacerbate domestic violence and result in a rise in its incidence
	Climate change impact:	Problem: Reduced wate household activities dur	Men	Applying a gender lens	Less water available for livestock and gardening activities will result in decreased yields and food availability Spending more of the household income on imported food and on desalinated water could lead to increased stress and conflict at the household level

Applying a gender lens to the Case Study 1: Tuvalu

Tool 6: Gender Action Plan

Objective: To ensure that specific gender considerations and targets that promote women's equal participation and benefits are clearly identified, monitored, reported and evaluated.

Example: The project-specific gender action plan (GAP) is a tool to ensure "gender mainstreaming" is tangible and explicitly visible in project design and implementation. The project GAP is not a separate component. It mirrors the project outputs and is an integral part of project design. GAPs include clear targets, quotas, gender design features and quantifiable performance indicators to ensure women's participation and benefits.

Source: Asian Development Bank http://www.adb.org/themes/gender/project-action-plans

Why do it?

When gender is considered from the beginning of the preparatory phase of a policy, programme or project, gender considerations should be incorporated into each step of the process. It might still be useful, however, to develop a specific gender action plan in order to track that issues identified and measures to address them are not forgotten. Developing specific targets for women's participation and benefits the project is expected to produce can provide useful indicators to track from a gender perspective.

Assigning responsibility to specific team members for the achievement of specific performance targets can also help to ensure that the identified measures are implemented.

When to do it?

Ideally a gender action plan should be undertaken as an integral part of the programme design, and measures and targets specified should be incorporated into the overall programme implementation plan, monitoring and reporting mechanisms etc. The gender action plan can also be used as the basis for a regular gender monitoring report, which can be incorporated into regular reporting processes (such as annual reports, steering committee meeting papers).

Care should be taken to ensure that the existence of a gender action plan does not result in confinement of gender considerations to the gender action plan only. Likewise, a gender focal point within a team can help to ensure that gender issues are identified and prioritised but it is the responsibility of all team members to ensure that gender is mainstreamed throughout.

Tool 6: Gender Action Plan

Example: Extract from Port Moresby Power Grid Development Project (ADB) – Gender Action Plan (GAP)

Components and Outputs	Performance targets and activities	Responsibility			
Output 1. Hydropower upgrade an	d rehabilitation				
(a) upgrade of Rouna 1 hydropower plant (6 MW), and (b) rehabilitation and upgrade of Sirinumu Toe-of-dam hydropower	During design and implementation, all community consultations will have a target of 40% female participation.	PMU, CDGS			
	Encourage the employment of women in labour-based work (at least 20%) and provide necessary institutional support for female labour-based workers, such as separate sanitation facilities. Contractors appointed for construction will be informed of the required facilities before bidding.	PMU			
	Contractors will be required to pay equal wages to men and women for work of equal value.	PMU			
	Women's wages will be paid directly to them.	PMU			
	Construction workers and community members of project sites will be provided training on HIV/AIDS issues.	PMU, CDGS			
Output 2. Upgraded distribution grid					
(a) extension of the grid to an estimated additional 3,000 households	Female headed households will be prioritised for connection in areas targeted for connection to the grid. Detailed design village surveys will identify female headed households and ensure they are included amongst the	PPL, PMU, CDGS PMU, CDGS			
	connections. Undertake training workshops in newly connected communities (at least 50% female participation) on electricity safety, operation of prepayment meters, energy efficiency, and household utility budgeting.	PMU, CDGS			
Implementation arrangements					
The Project's GAP will be implemented by the project management unit (PMU) which will hire an international community development/gender specialist in the Project team. PPL will allocate a national					

international community development/gender specialist in the Project team. PPL will allocate a national specialist to assist on community development and gender issues. The specialists will be responsible for incorporating the GAP into project planning, implementation, and monitoring frameworks, including community consultations, awareness training, and establishment of sex-disaggregated indicators for project performance and monitoring. The PMU will include reporting on progress of GAP activities in quarterly progress reports on overall project activities to the ADB and the Government.

CDGS = community development/gender specialist, DMF = design and monitoring framework, PMU = Project Management Unit. Source: Asian Development Bank (2013)