



Pacific handbook for gender equity and social inclusion in coastal fisheries and aquaculture



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MODULE 7

Coastal fisheries management

Pacific handbook for
**gender equity and
social inclusion**
in coastal fisheries and aquaculture

Module 7:
Coastal fisheries
management

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Key points

- Multi-species coastal fisheries in the Pacific Islands region are managed by different levels of governance (from international to local), often with collaboration across these levels through co-management arrangements. There are gender and social inclusion (GSI) considerations within each level, in the interaction between levels, and throughout the pre-harvest, harvest and post-harvest parts of coastal fisheries.
- Coastal fisheries management that considers and addresses context-specific gender roles and social dynamics, and whether a group is included in or excluded from decision-making, resources and benefits, will result in better fisheries and improved social and development outcomes.
- In the Pacific, women, men and other groups access and use coastal and marine spaces and resources differently, and at different times and for different purposes. Mapping and understanding use patterns and the marine environments where various resources are found can give a more holistic and equal representation of knowledge for consideration in management strategies.
- When teams of data collectors, compliance officers and extension providers include both men and women, they are better equipped to capture diversity, resolve conflict situations and communicate effectively with different members of the public.

Scope of coastal fisheries management module

Pacific Island coastal fisheries are made up of a diverse range of finfish, invertebrates and algae that are caught or harvested using different types of gear and equipment. It is common for fishing patterns to vary in response to seasonality, catchability, opportunity and need.

Globally, small-scale coastal fisheries are known to be undervalued in economic estimates¹ and marginalised from governance processes. Yet there is increasing recognition of the important role of these fisheries in providing employment, a social security safety net, and affordable and nutritious food.^{2,3} These values are extremely high in Pacific Island settings where small-scale coastal fisheries are of fundamental importance to much of the region's nutrition, welfare, culture, employment, recreation and way of life. The continuation of current lifestyles, opportunities for future development and food security are all highly dependent on sustainable, resilient and inclusive coastal fisheries.

In the Pacific Islands region, coastal fisheries management is influenced by international and regional instruments, national and subnational policies and legislation, and community-level⁴ institutions and measures. Fisheries focused on high-value products, such as sea cucumber, trochus and live reef food fish, are frequently managed by international and national arrangements (e.g. licences, permits, export tariffs, quotas, or seasonal or temporary bans on harvest or export) that are administered by government departments. In contrast, multi-species coastal fisheries, which are used in many different ways, lend themselves more to collaborative or co-management arrangements, with community-based approaches playing a central role.

1 Gillett R. D. 2016. Fisheries in the economies of Pacific Island countries and territories. Noumea, New Caledonia: Pacific Community. 664 pp.

2 Food and Agriculture Organization of the United Nations. 2015. Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication. Rome: FAO. 18 pp.

3 SPC. 2015. A new song for coastal fisheries – pathways to change: The Noumea Strategy. Noumea, New Caledonia: SPC. 15 pp.

4 See Definition of key terms, and also Module 6, Community engagement.

Box 1: Arrangements for community-based approaches to fisheries management

There are a number of terms used in the Pacific Islands region to describe community-based approaches to fisheries management.⁵ This module uses the term community-based ecosystem approach to fisheries management (CEAFM),⁶ which recognises that marine species – which are the primary target for management – depend on healthy marine ecosystems. Some fishing and harvesting techniques catch unwanted species, cause physical damage to habitats, disrupt food chains and result in declines in biodiversity. Other human activities unrelated to fishing, such as agriculture, forestry and development in the coastal zone, can impact on management efforts. Addressing human impacts on ecosystems is not a new concept for communities involved in managing coastal fisheries and actions are often taken to protect key ecosystems such as coral reefs and mangrove and seagrass areas.

Arrangements for CEAFM can take many forms along a spectrum, with different degrees of interaction between the broader community, resource owners, resource users, and other institutions (e.g. national or provincial agencies) with responsibility for fisheries governance. In the Pacific Islands region, many communities have developed their own coastal fisheries management regimes, while others work together with government authorities and other agencies.⁷ National fisheries agencies complement community-level actions through a suite of other management tools including policies, national fisheries management plans, licensing, data collection, monitoring and surveillance.

This module focuses on the community-level fisheries management end of the spectrum (Fig.7.1) and highlights the areas and ways in which interaction with another agency or external facilitator can support GSI (Fig.7.2). Regardless of where on the spectrum the coastal fisheries management arrangement lies, CEAFM that considers and addresses context-specific gender roles and social dynamics, which determine whether a group is included in or excluded from resource access, management decisions and fisheries benefits, will result in better fisheries and improved social and development outcomes.

5 WorldFish. 2013. Community-based marine resource management in Solomon Islands: A facilitators guide. CGIAR Research Program on Aquatic Agricultural Systems. Penang, Malaysia. Manual: AAS-2013-17.

6 SPC. 2010. A community-based ecosystem approach to fisheries management: Guidelines for Pacific Island countries. Noumea, New Caledonia: SPC.



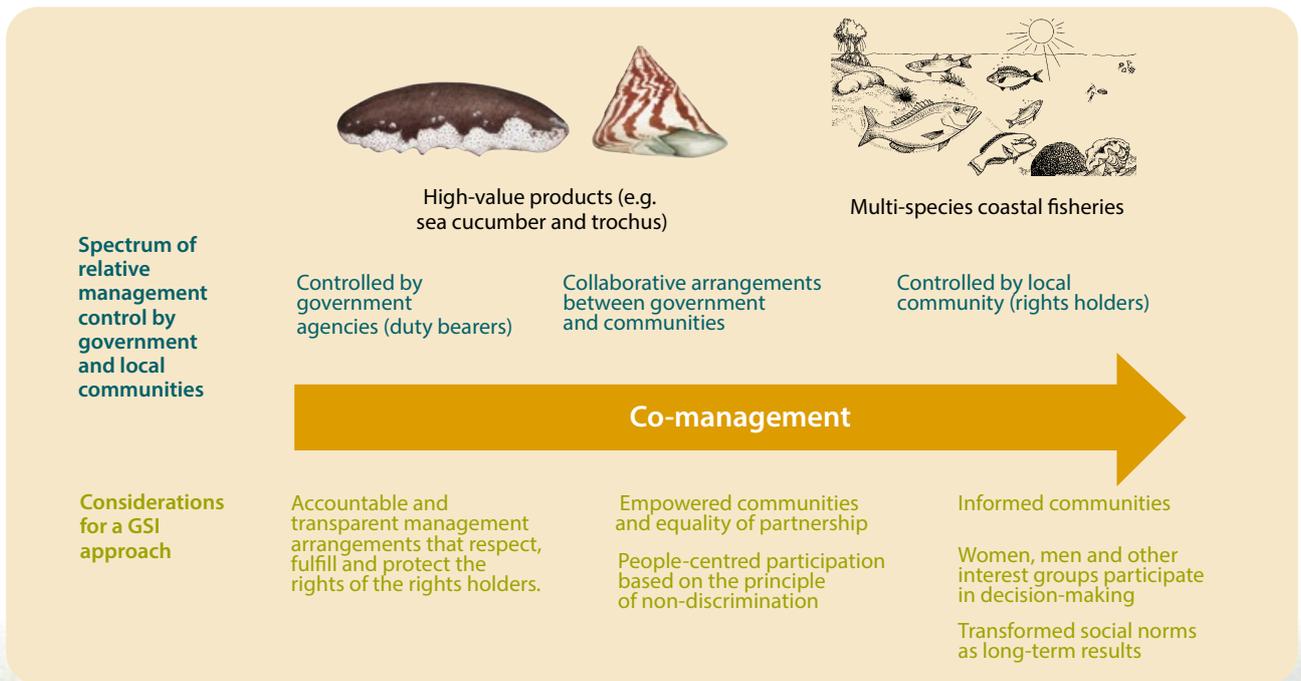


Figure 7.1. Example of a spectrum of co-management arrangements for coastal fisheries, illustrating core considerations for GSI by and for duty bearers and rights holders.



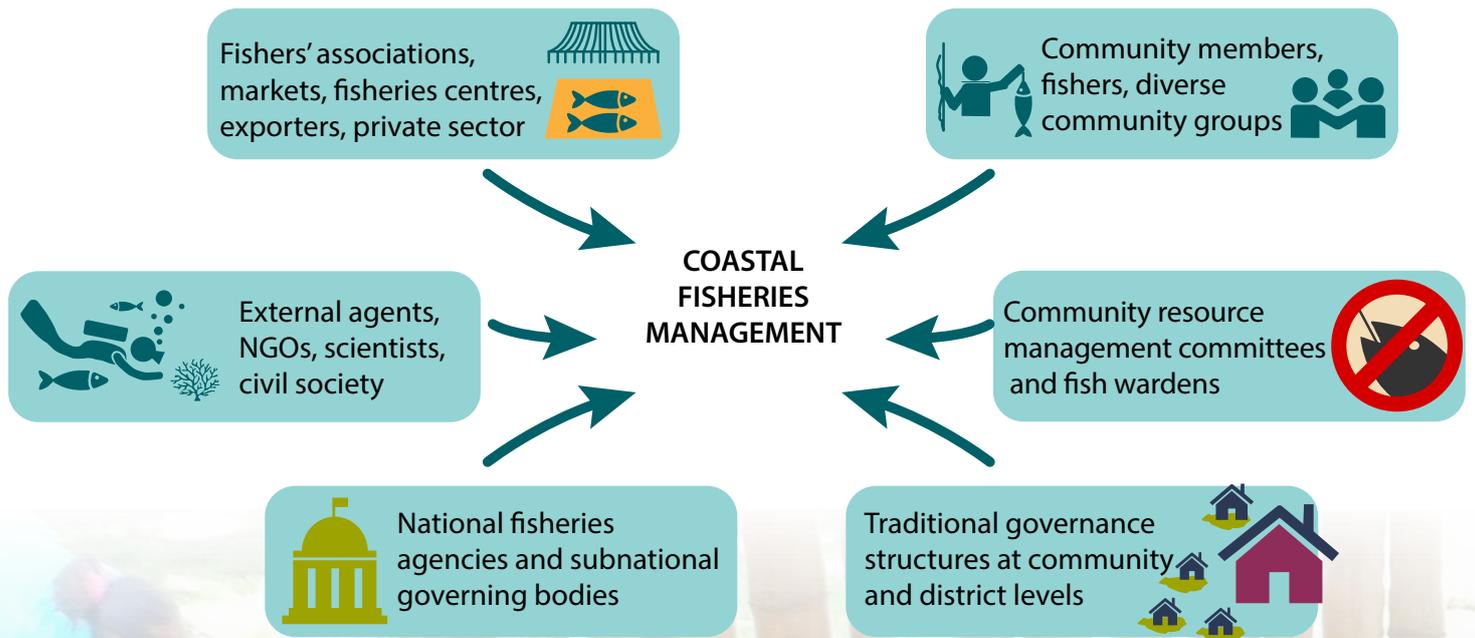


Figure 7.2. Participants in a co-management approach that integrates coastal resource management arrangements, drawing on the strengths and traditions of community, national and subnational levels of governance.



Box 2: Coastal fisheries are diverse and interconnected with multiple uses and users. They are central to the livelihoods of Pacific Island people, where they are often managed through collaborative or co-management arrangements based on an ecosystem approach.

All the modules in this handbook have relevance to coastal fisheries management. In particular, mainstreaming GSI at the level of national government agencies is addressed in detail in Module 4: Government processes. Mainstreaming GSI in the policies developed by those agencies is addressed in Module 5: The policy cycle. Community engagement with inclusive facilitation is central to collaborative CEA FM (see Module 6: Community engagement). Effective management of coastal fisheries underpins sustainable livelihoods, including pre-harvest, harvest and post-harvest activities along the value chains based on these resources (see Module 8: Livelihoods). This module aims to provide options for the design of co-management approaches that enhance GSI norms while avoiding further inequalities that may be perpetuated if not taken into consideration.



GSI matters when it comes to coastal fisheries management

Rights in coastal fisheries management

In the Pacific Islands region, CEAFM is often based on local tenure arrangements. These arrangements may be constitutionally protected rights, or in other cases (e.g. Tonga)⁷ they may be contemporary legal provisions specifically made for resource management. For many indigenous people, local tenure arrangements determine their level of rights to access and make decisions about the use of particular areas of the coast and adjacent coastal waters. These access and decision rights also have a human rights dimension.^{2,8} Not all fishing rights are automatically human rights (Table 7.1), but adopting a GSI approach will ensure fisheries agency staff, and community development and environmental actors, for example, engage with local tenure arrangements in a manner consistent with human rights.

HOW DO TENURE RIGHTS RELATE TO HUMAN RIGHTS?

Tenure rights are often discussed in the context of indigenous people's rights, that is, the collective human right of a native interest group of people in light of recognised historical fishing rights. "Small-scale fishing communities need to have secure tenure rights to the resources that form the basis for their social and cultural well-being, their livelihoods and their sustainable development".²

Human rights tied to coastal fisheries management through local tenure arrangements are:

1. the right to food in light of food security concerns;
2. the right to participation following free, prior and informed consent, and active exercise of political and economic rights;
3. the right to gender equality, which applies as a cross-cutting theme to ensure that women and men benefit equally from resources. The emphasis on gender equality implies that specific barriers, practices and attitudes hinder the full participation of women compared to men.

Table 7.1 Some of the different rights encountered in coastal fisheries management.

Different forms of fishing rights (below) are not automatically human rights. It depends on the context. However, human rights arguments can support fishers, including women fishers and interest groups, to improve their legal/customary/constitutional status and thus their access, user, tenure or related rights that enable them to 'fish with dignity', respecting their right to decent work, food, health, etc.		
Commercial fishing rights	Local fishing rights	Constitutionally protected rights to fishing
<p>Permissions granted by a licensing body – these may be renewable, revokable, transferable</p> <ul style="list-style-type: none"> • Limitations may be imposed on the catch of certain species or the location where fishing may occur • There may be restrictions on post-harvest use 	<p>Long-established and widely accepted routines through continuous practice in a particular community or region</p> <ul style="list-style-type: none"> • Long-established and widely accepted practices are often rooted in cultural and social norms that may disproportionately disadvantage certain groups based on gender, ethnicity or other characteristics 	<p>Historical fishing rights recognised in the constitutional framework for certain interest groups of people</p> <ul style="list-style-type: none"> • Human rights-based arguments may be used by the lobby to support their interests • These rights are not usually transferable

7 Govan H. et al. 2009. Status and potential of locally managed marine areas in the South Pacific: Meeting nature conservation and sustainable livelihood targets through widespread implementation of LMMAs. SPREP/WWF/WorldFish-Reefbase/CRISP. 95 pp + 5 annexes.

8 Song A. M. and Soliman A. 2019. Situating human rights in the context of fishing rights — Contributions and contradictions. *Marine Policy* 103: 19–26.

Diverse actors in coastal fisheries geographic spaces and along the value chain

Global fisheries research shows there is extensive bias in data collection and catch reports, with the result that women's contributions to coastal fisheries have been largely ignored.⁹ Using such data to make management decisions can result in socially exclusive decisions.¹⁰ Certain women and men, and people of different ages, tribes, clans, religions or abilities may be disadvantaged by management rules and norms if their resource access and use are not recognised. This can disproportionately affect livelihoods based on marine resources.

9 Kleiber D., Harris L.M., Vincent A.C.J. 2015. Gender and small-scale fisheries: a case for counting women and beyond. *Fish and Fisheries*. 16: 547–562.

10 See Definition of key terms (Table 1).



GSI considerations for implementing CEAFM

There are a number of resources available to guide the implementation of CEAFM processes.^{4,5} In this module we suggest how to ensure inclusive coastal fisheries and people-centred CEAFM (see also Module 6: Community engagement, for facilitating an inclusive process).

Accessibility of information

Community-level management can happen with or without the creation of formal arrangements or a management plan. As pressures on coastal fisheries change and increase, communities are more frequently requesting additional information (e.g. species-specific life history information) from central agencies to inform their management decisions. It is important that women, men, youth, migrant groups and people with disabilities all have access to information so that everyone has the opportunity to be informed and to contribute to decisions. Extension services and information exchange mechanisms frequently reinforce existing inequalities by only engaging with groups of men or presenting information in forums or in ways that are not open to all members of the community; for example, the focal point for information dissemination may be fishers' associations, which are often exclusively male.

Consequently, there is a need to consider the content of the information, how information is shared and exchanged, and who has access to it. Sometimes it is easier for men to get relevant information than it is for women and other groups in the community. If women are able to travel to national or subnational government centres to seek information, it is important they feel safe in those centres and comfortable about approaching relevant agencies. Creating a conducive environment within an agency might include providing a place for women with young children to sit, or enabling them to speak with a women officer if that is culturally appropriate. Using Pacific methods of having conversations (e.g. talanoa, tok stori or storian) may be a culturally appropriate way to share information as they reinforce active interaction and participation and allow sufficient time for in-depth exchange of information. Ensuring that both men's and women's roles are understood and recognised, and that all have access to appropriate information, gives all members of a community an opportunity to be part of the solution.

MISCONCEPTION: Information that is delivered to leaders will be distributed to, and accessible by all men and women in the community

In Solomon Islands, information about programmes and activities run by external organisations in communities is commonly addressed first to leaders, chiefs or committee chairs, who are usually men. As a result, access to support and information has been found to be gender insensitive; "...men had more exposure to information and training than women. Women reported that access to new information was restricted by their lack of physical mobility [to travel outside their community] and education".¹¹ Women and youth often rely on men to pass on information through communication channels such as announcements in community meetings or in church. This reliance, combined with the relatively low literacy of both rural women and men, means that in some situations, information does not reach marginalised members of communities, including many women. Lack of access to information exacerbates existing barriers to influencing decision-making. In one Solomon Islands study,¹² all men interviewed reported they were 'always' or 'sometimes' involved in decision-making relating to management of marine resources, while 72% of women reported they were 'never' involved.

11 Cohen P.J., Lawless S., Dyer M. et al. 2016. Understanding adaptive capacity and capacity to innovate in social-ecological systems: Applying a gender lens. *Ambio* 45 (3). 309–321.

12 Pacific Community. 2018. Gender analysis of the fisheries sector — Solomon Islands. Noumea, New Caledonia: Pacific Community.

Case study: Information can improve compliance with rules

Engaging all members of the community in developing management plans and in decision-making is crucial as all play a role in implementing management measures, such as size limits. Size limits are linked to when fish and invertebrates reach sexual maturity, i.e. breeding size. These limits are a critical tool for fisheries management.

Women often refer to their roles as preparing food or household production. Ulusapeti Teleasau Tiitii from Samoa observes that these duties mean women are well placed to see changes over time in marine resources that are used for food.¹³ For instance, if they see undersize fish and invertebrates brought to their house, or their husbands and children are catching small individuals, they can bring their experience to the table where decisions are made about sustainable management of resources.

Similarly, women who sell fish and invertebrates in the market are involved in weighing, cleaning, pricing and displaying. Their intimate knowledge of the product means that they are well placed to have a good understanding of species-specific regulations, such as size limits and restrictions during breeding seasons.

In Fiji, recognising that food is very much a part of Pacific culture and life, bringing families and friends together, the Wildlife Conservation Society partnered with chef Jason Allport to put together Fiji's first sustainable seafood cookbook, 'Kusima Mada'. It presents delicious, easy-to-make recipes and vibrant photographs that recognise women fishers and their role in providing food security and livelihoods to support their families. The aim of the cookbook is to inspire all readers to make sustainable seafood choices as consumers. It has a simple message: get to know the different size limits for fish species, and any management regulations that are in place to protect a particular species and promote its recovery, and most importantly, follow them.¹⁴

13 Ulusapeti Teleasau Tiitii. 2019. Women in fisheries profiles. Women in Fisheries Information Bulletin #30, September 2019. Noumea, New Caledonia: Pacific Community.

14 Mangubhai S. and Allport J. 2019. Kusima mada: Fiji's first sustainable seafood cookbook showcases women in fisheries. Women in Fisheries Information Bulletin #30, September 2019. Noumea, New Caledonia: Pacific Community.





Case study: Information dissemination that targets all

In Vanuatu, the theatre group Wan Smolbag and the Vanuatu Fisheries Department collaborated to create and tour a theatre production that communicates the importance of sustainable management of coastal fisheries to rural people in Vanuatu.¹⁵ The storyline highlights social, economic and political aspects of life in remote coastal and island communities, rather than rushing straight to technical fisheries management. Key themes of the play include:

- social stereotyping - for example, entrenched gender roles affect who has access to particular fisheries and the kind of benefits that are derived from them;
- life and conditions in remote coastal and island communities - family life and social relations within a community form a fundamental basis for living;
- importance of seafood - people depend on seafood in their day-to-day lives for food (nutrition) and income (livelihoods), but the unpredictable nature of markets can change their perceptions of its value and use (for commercial vs subsistence needs);
- challenges of collective action - people are faced with managing private (family) interests and communal problems; for example, contesting claims in a community over the cause of reef damage require open discussion and decision-making.

15 Neihapi P, Sokach A., Koran D., Devine J., Dorras J., Andrew N. and Steenberg D. 2019. 'Twisting and spinning' theatre into coastal fisheries management: Informing and engaging communities to address challenges. Women in Fisheries Information Bulletin #30, September 2019. Noumea, New Caledonia: Pacific Community.



Local knowledge and local solutions

Many fishers have specialist knowledge about particular locations, habitats, resource distribution and seasonality of species that are important for food and income. Women, men and youth may have different knowledge associated with fishing patterns, gear use and resource access.¹⁶ For example, men in different age groups and with different skill sets may have access to habitats that range from the shore to the deep sea. Women are more likely to have an intimate knowledge of lagoonal habitats, mangroves or nearshore areas because fishing and gleaning in these areas enable them to work close to home and to combine this effort with their responsibilities for household duties and childcare (Fig. 7.3).

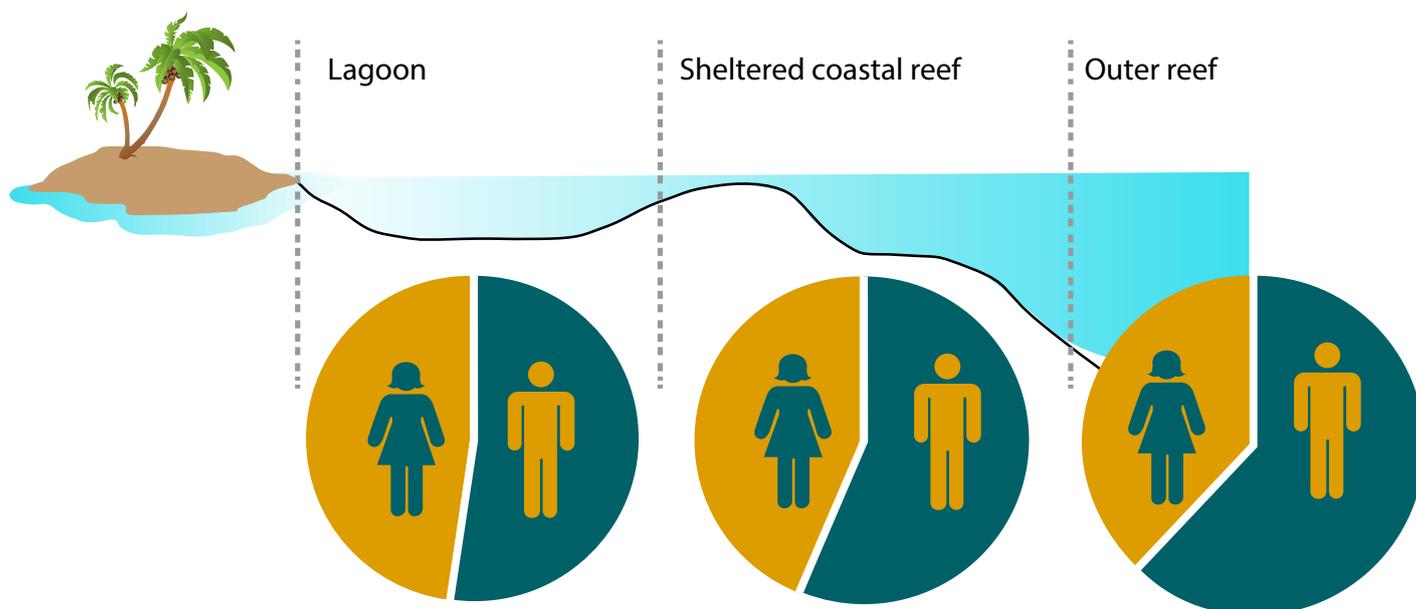


Figure 7.3. Gendered differences in annual average finfish catches for Micronesia by habitat fished. Adapted from Kronen and Vunisea (2009).

When discussing local knowledge for management planning purposes, ensure that you use appropriate techniques to get perspectives from both women and men and ask the right questions at the right time (see Module 6: Community engagement).

Tools that can be used for facilitating CEAFM have been described in at least three Pacific handbooks.^{5,6,11} The 'Division of labour and activity matrix' described in Module 2 of this handbook can be used with a more specific focus on fisheries to help identify the roles of women, men, youth, people living with disabilities and migrant groups in the fishery. In addition, or alternatively, the tools shown in Box 3 below are particularly suited to promoting discussion of local ecological knowledge and to identifying the roles that different groups in society play in the fishery and where. This is an important aspect of CEAFM.

Equal representation of knowledge

Mapping both the social and ecological environment ensures that a more equal representation of knowledge will be considered in management strategies and can stimulate discussion of management rules and norms that do not have disproportionate impacts for certain groups. For example, there are many cases reported in the Pacific and beyond where gear limits affect men more than women (e.g. bans on night spear fishing may affect male youth in particular). In other cases, area closures may disproportionately affect women. Strategies that severely reduce the ability of certain groups of people to access and benefit from a fishery may also affect their ability to generate a livelihood and lessen compliance with, and the sustainability of management measures in the short and medium term.

¹⁶ Kronen M. and Vunisea A. 2009. Fishing impact and food security – Gender differences in finfisheries across Pacific Island countries and cultural groups. SPC Women in Fisheries Information Bulletin #19. Noumea, New Caledonia: SPC. 3-10.



TIP: Whether or not there is to be a formal written management plan, the following issues require attention

- **Recognising local ecological knowledge, which is likely to differ between women and men because they use resources and engage with coastal fisheries in different ways.**
- **Acknowledging and accounting for the roles that different groups in society play in the fishery - especially along all parts of the fishery value chain, which includes pre-harvest activities, all types of harvesting, and post-harvesting processing and marketing.**
- **Understanding and minimising any negative impacts of management rules and norms on certain groups.**
- **Ensuring there is a fair platform for community members, resource users and resource owners to have a political voice in making sure that development and pro-economic growth projects do not hinder communities in realising their goals for local food security and associated resource management.**

Local processes for decision-making

In many Pacific Island cultures, decision-making often does not occur in a public meeting attended by co-management partners (i.e. facilitators and other managers from outside the community). Nonetheless, a well-facilitated meeting on management planning and options does provide an opportunity to share local ecological knowledge and other forms of scientific information. It provides a place to discuss a range of options for management rules and norms, and to raise concerns in a bid to strive for a management approach that will not unduly disadvantage certain groups in the community. A well-facilitated process can empower women, men and youth to understand each other's viewpoint before management planning outcomes, which are perceived as being legitimate, are taken to the next level of community governance. Discussing the knowledge of all groups, and acknowledging any concerns they may have, can help community decision-makers strike a balance between considering the individual or collective rights of certain groups to access and use resources and the rights of the wider community.



TIP: Selection of a community representative

A key person may have been given responsibility by the community for reporting back to community decision-makers on the outcomes of a management planning meeting/workshop.

Recognising this person means the facilitator can target the individual(s) for specific mentoring on inclusive approaches throughout the workshop. While this may be one person, they may be the link to another legitimate and inclusive process that is less visible to outsiders.

As rules are being agreed, and implementation of management begins, there is a need to encourage broad participation in the process; for example, through community involvement, with clearly defined roles for both women and men. This could involve training women to act as advocates for ensuring the sustainability of marine resources. Activities could include monitoring fisheries, enforcing size limits within their households and communities, and supporting existing or developing committees to assist in management.¹⁷

¹⁷ Makhoul N. and Kinch J. 2019. Mainstreaming gender, social inclusion and human rights-based approaches – A key to integrated programming. Women in Fisheries Information Bulletin #30, September 2019. Noumea, New Caledonia: Pacific Community.

External challenges

Inclusive CEAFM may also require consideration of people who do not belong to the particular community that is seeking to manage its resources. These people should also be involved in planning for managed areas if the proposed rules and norms are likely to affect them. This may mean inviting women, men and youth from neighbouring communities to participate in management planning discussions.

Activities such as logging and mining can have negative impacts on management goals; for example, they may have harmful effects on streams and rivers feeding into the management area and affect rights that enable people to 'fish with dignity' (Table 7.1). Similarly, offshore commercial fishing may need to be managed if it is seen to affect coastal resources.

The impacts from such activities are often beyond the reach or mandate of communities to resolve and are likely to fall under the jurisdiction of different agencies, so called *duty bearers*, who have the responsibility to respect, protect and fulfil the human rights-related aspects of a community's interests, such as the rights to food, culture, equality, property and health. In such instances, national and provincial governments have different levels of accountability. This is where the power of co-management, which spans multiple levels of governance, can be realised.

An example of how this process can work in practice at the national level is the requirement for an Environmental Impact Assessment for logging, mining or other development. In Fiji, for instance, a Fisheries Impact Assessment (FIA), which involves a community consultation step, is required for foreshore development. In an FIA it is important to consider customary rights and to recognise that both women and men need to make the final decision on development. The FIA is an opportunity to ask who will be impacted by what actions? What questions need to be asked of which groups? Will impacts be short term or long term and for whom?

Box 3: Applying a GSI lens to tools for CEAFM planning and consultation

Commonly used tools for CEAFM planning and consultation are social-ecological resource mapping and historical timelines.¹⁸

These tools can be developed in one big group, or separately, and then combined. Module 6 provides strategies and tools to ensure inclusive community engagement. Whether the groups are separate or combined, it is important to record the perspectives of all sections of the community.

18 See Module 3, page 11, Additional MEL tools, guides and resources, for more information on resource mapping and timelines.



Social-ecological resource mapping

Social-ecological resource mapping builds on habitat mapping tools commonly used in management planning for CEAFM. It can be used to identify key habitats, fishing areas and species distribution, and which community members use these areas, for what purpose and when. Traditional areas that require particular consideration can be identified as well as areas of importance and areas where there may be issues or concerns. External threats to the proposed managed area, such as logging, mining or offshore commercial fishing, can also be identified during the exercise.

To start, ask participants to draw a rough map of their marine resources area and the surrounding environment that they will manage. Then ask them to:

- think about and list all the main marine resources they catch or harvest;
- draw in the key habitats and areas they use to catch or harvest these resources;
- draw diagrams on the map where the key marine resources are found;
- identify on the map which groups or individuals from the community use each area; and
- identify any areas marked for land-based activities that might affect a proposed managed area.

The social-ecological resource map provides points for discussions that can focus on different themes for each of the marine resources targeted by particular groups. For example, where do these groups consider there are issues, such as shortages of marine resources; where are the breeding grounds; where do different marine resources migrate or shift to at various times of the year?

The results of social-ecological resource mapping can identify the types of fishing-related activities done by women and men that may be associated with traditional roles. For example, women who have responsibility for household duties and childcare may prioritise working in fishing areas close to home due to ease of access, and subsistence activities that put food on the table.

When management actions are being determined, the discussions and outcomes from social-ecological resource mapping activities can (a) stimulate consideration of whether rules and norms might have disproportionate impacts for certain groups, and (b) be used by co-management partners who are planning biological survey work to ensure that the species being surveyed are those most relevant to all groups in the community.

Applying a GSI lens to the resource mapping exercise provides (a) a way of adopting a people-centred approach to management planning; (b) an opportunity to identify imbalances and inequalities among those who are often already marginalised; and (c) information for decision-makers at all levels about how to consider factors more likely to alleviate poverty in coastal communities.



GSI considerations for national coastal fisheries management measures

Incorporating GSI principles when designing national coastal fisheries management instruments can reduce social inequalities in the sharing of benefits obtained from exploiting marine resources among community members whose livelihoods depend on them.

It is the role of the responsible agency to identify who will benefit and who will be impacted by national coastal fisheries management instruments and to identify if action is required to balance that (i.e. to manage trade-offs). For example, periodic bans on fishing for a high-value marine species will stop fishers accessing a key livelihood opportunity in the short term; on the other hand, failing to manage the resource adequately may cause irreversible social and economic harm in the long term. Extensive and effective consultation is required to enable a balance to be struck between considering the individual or collective rights of certain groups to access and use marine resources and the rights of the wider society.

Developing a national coastal fisheries management plan with related controls and measures (i.e. licensing requirements, quotas, etc.) can follow the same cycle (Fig. 7.4) and the same guidance on GSI considerations as used to guide policy development (Module 5). Particular GSI considerations for the preparation, drafting and stakeholder consultation phases of national coastal fisheries management plans are discussed below.

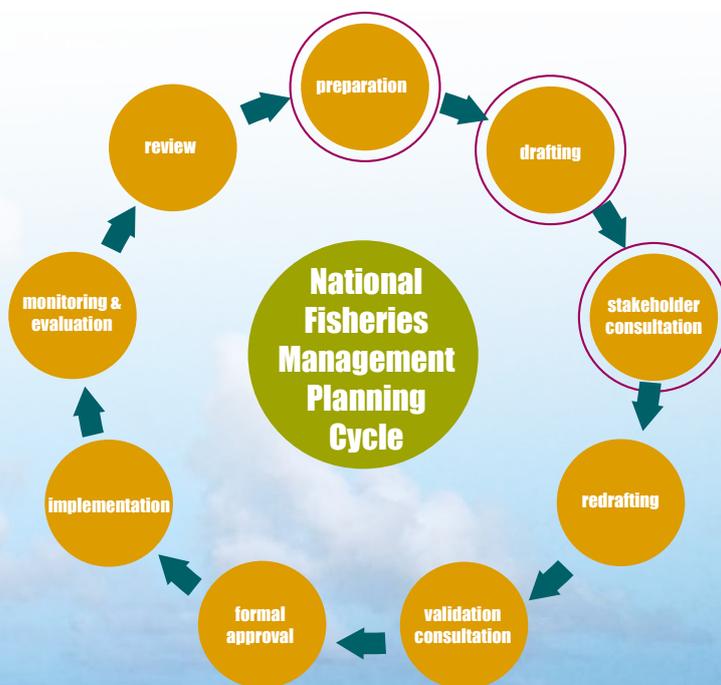


Figure 7.4. Phases of a national fisheries management planning cycle. Adopt strategies to ensure that diverse views are heard and considered during stakeholder consultation phases.

In the preparation and drafting phases, seeking advice from GSI experts is one way to address the social aspects of coastal fisheries and to help identify target groups to include in consultations. This can be done by including staff from agencies whose core business is GSI (e.g. ministries of women's affairs) on steering committees, senior management committees or national advisory bodies, such as a task force (see Module 4: Government processes).

There are ways to learn about and to account for both women's and men's roles in specific coastal fisheries, including reviewing relevant gender and fisheries literature from the region and examining any sex-disaggregated data sets that are available (e.g. household income and expenditure surveys, census or market survey data).

Creating opportunities for broad participation

Stakeholder consultation for national coastal fisheries management measures may only be able to be carried out at selected locations depending on personnel, time, geography and cost. This may restrict participation by certain groups in communities. While both women and men have livelihood responsibilities to work around, women may face additional difficulties in attending a meeting because of household duties and childcare responsibilities, which are less likely to be a constraint for men.

If meetings cannot be held within communities, efforts should be made to make sure that there is adequate representation at meetings held in subnational centres to hear the perspectives of all affected social groups. Women's groups, youth groups or other special interest groups can represent sections of society that use particular marine resources and that may benefit from, or be affected by, management measures.

During a consultation, refer to Module 2 for tips on generating a GSI analysis and/or adapt tools such as social-ecological resource mapping (Box 3) to provide opportunities for diverse views to be aired. Consider a suite of options to ensure that people who cannot travel to meetings have access to the necessary information and also have an avenue to express their views. Options could include public radio or social media platforms.

Engage other accountable agencies

The following institutions and subnational governing bodies may be in charge of licensing, extension services and data collection: provincial and district governments; island councils and town councils; fishers' associations and other civil society organisations; and the private sector. When working through such an extended provider system, there are risks that GSI may not be integrated throughout all processes and services. These institutions need to be made aware of GSI issues so they can develop their capabilities and capacity to address them within their mandates.



GSI considerations for monitoring, control and surveillance

Monitoring fishing effort and catch, and collecting data on other aspects of fisheries exploitation are essential to improved coastal fisheries management. Monitoring data contributes to improving the co-management arrangements that determine how coastal resources can be exploited. Markets, fisheries centres and export control points are all places for information dissemination, monitoring and data collection, and surveillance operations.

GSI considerations for developing controls on exploiting marine resources are addressed in the sections above. There are also GSI considerations for monitoring, control and surveillance (MCS) of coastal fisheries.

Depending on the country, MCS of coastal fisheries is the responsibility of compliance officers in national fisheries agencies, authorised officers at provincial or district level, and fish wardens or rangers (for example) at the community level. Historically, these roles have been dominated by men, but now an increasing number of women are becoming authorised officers in some Pacific Island countries. One reason for the low number of female officers in compliance roles on fishing vessels or patrol boats is lack of adequate facilities. This is changing, and many vessels now have separate ablution facilities and private quarters to cater for women compliance officers and observers.

For coastal fisheries, it is important that methods for collection of data to support the development of management controls include the inputs of labour, knowledge and skill across all pre-harvest, harvest and post-harvest parts of the fishery. When these are included and 'counted', the role of women becomes more visible, and more gender dynamics come into play. To enable collection of data that is disaggregated by characteristics including sex, disability, age and migrant status, it is necessary to have a diversity of data collectors who are trained to gather data from all the groups involved across all parts of the fishery.



TIP: Train both women and men as data collectors to obtain a representative picture of the fishery

There are a number of initiatives underway to collect better data on Pacific Island coastal fisheries, and new technology is making data collection from remote landing sites more accessible (see Module 3 – Case study: Including women as community-based fisheries monitors in Vanuatu and Fiji). Whether using electronic or paper-based methods, collecting suitable disaggregated data (i.e. by sex, disability, age, etc.) requires careful consideration of who is collecting the data. If only men are used as data collectors, they may not recognise women's catches or target commodities sufficiently to record them as frequently as those of male fishers. Women may not feel as comfortable reporting catches to a male data collector. In addition, remote data collection sites offer formal employment opportunities in rural areas where there are few such jobs. Women and men should be able to access these opportunities equally.

Where fishers and/or market vendors are required to engage in license or permit processes, providing both women and men with a conducive environment for approaching the responsible agencies can alleviate non-compliance with obligatory procedures. This may include having both male and female fisheries officers on hand to address queries.

Information is central to a successful MCS programme to ensure that all participants in the coastal fisheries value chain are aware of national regulations (see Case study: Information can improve compliance with rules). If information does not reach everyone, certain groups in society may be unfairly penalised. For example, if fishers are unaware of a regulation, buyers and exporters may manipulate the information and the fishers can find themselves being penalised.

At surveillance focal points such as markets and points of export, both female and male compliance officers can find themselves in difficult situations when faced with having to give a breach notice to a relative, to an older person who should culturally be accorded respect, or to any member of the public in a way that could be viewed as discriminatory.

How women and men perform as compliance officers depends on personality, professionalism and level of experience. Gender roles may influence these characteristics to a certain extent. For example, a fisheries officer from the Fiji Ministry of Fisheries shared her experience of mixed-gender teams during an International Women's Day event in 2020, saying that ...*“an only male officer team might be more likely to overlook or underestimate breaches, while a gender-mixed team may be more thorough in applying rules strictly while addressing issues more diplomatically”*. She also highlighted some challenges: ...*“however, female officers face strong male attitudes [among the community], which expose them to discriminatory comments, less respect, or men who are less likely to listen to a woman. On the other hand, female officers are more likely to deal sensitively with female market vendors and understand family concerns. Besides, MCS experience can open more chances for women climbing the career ladder to specialise further in MCS legislation, etc.”*

MCS is also part of CEAFM at the community level. The scope and responsibilities of an MCS role differ greatly from place to place depending on whether it is legislated for, or is a voluntary role mandated by a management committee. Similar to other areas of MCS, the roles of community-level monitors and wardens have tended to be filled by men. The fish warden system in Fiji, however, highlights how the benefits of appointing women to these roles are increasingly being recognised. Female wardens are able to more easily converse with women involved in the fishery, which increases the opportunity for women as well as men to participate in and take responsibility for their actions under a CEAFM regime.

Case study: Fiji fish wardens

The fish warden system in Fiji was reviewed at a forum in 2018¹⁹ following recognition that the system needed to be revitalised to increase compliance with fisheries laws and regulations and prevent illegal fishing activities. The forum's recommendations included giving consideration to younger (18–45 years) candidates, and encouraging women to apply to be fish wardens, given their role in coastal fisheries. By 2018, very few female fish wardens had been appointed; however, there is slow but growing interest from women wanting to take on these roles in their communities.

19 Lalavanua W., Johnson D., Naivalu K., Veeran R., Mangubhai S., Tuinamata A., Tamanitoakula J., Loganimoce E., Rosabula M. and Lee S. 2018. Revitalizing the fish warden system in Fiji. SPC Fisheries Newsletter #156. May-August 2018. 34-37.

This module contributes to the outcomes of *A new song for coastal fisheries* and the *Small-scale fisheries guidelines (SSF)*

- SSF 5 – Governance of tenure in small-scale fisheries and resource management
- SSF 6 – Social development, employment and decent work
- SSF 7 – Value chains, post-harvest and trade
- SSF 8 – Gender equality
- SSF 9 – Disaster risks and climate change
- SSF 12 – Capacity development
- SSF 13 – Implementation support and monitoring
- *A new song* Outcome 1 – Informed, empowered communities with clearly defined user rights
- *A new song* Outcome 2 – Adequate and relevant information to inform management and policy
- *A new song* Outcome 3 – Recognition of, and strong political commitment and support for, coastal fisheries management at a national and subnational scale
- *A new song* Outcome 4 – Re-focused fisheries agencies that are transparent, accountable, and adequately resourced, supporting coastal fisheries management and sustainable development, underpinned by CEAFFM
- *A new song* Outcome 7 – More equitable access to benefits and decision-making within communities, including women, youth and marginalised groups

Additional tools, guides and resources

FAO. 2015. Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty reduction. Rome: FAO. 18 pp.

Govan H., Aalbersberg W., Tawake A. and Parks J.E. 2008. Locally Managed Marine Areas: A guide to supporting community-based adaptive management. Suva: Locally Managed Marine Area Network.

SPC. 2010. A community-based ecosystem approach to fisheries management: Guidelines for Pacific Island countries. Noumea, New Caledonia: Secretariat of the Pacific Community.

WorldFish. 2013. Community-based marine resource management in Solomon Islands: A facilitator's guide. CGIAR Research Program on Aquatic Agricultural Systems. Penang, Malaysia. Manual: AAS-2013-17.

Kleiber D. et al. 2019. Gender-inclusive facilitation for community-based marine resource management. An addendum to "Community-based marine resource management in Solomon Islands: A facilitators guide" and other guides for CBRM. Penang, Malaysia: CGIAR Research Program on Fish Agri-Food Systems. Program Brief: FISH-2019-08.

Checklist for inclusive coastal fisheries management

Modules 1 to 5, and Module 6: Community engagement, are all relevant to ensuring that coastal fisheries management is inclusive. This module provides more specific information on management planning, implementation, and monitoring, control and surveillance for coastal fisheries at the community, national and subnational level. The checklist below includes references to other modules where relevant.

GSI considerations for implementing CEAFM

- Plan the community engagement approach using Module 6: Community engagement.
- Gather information to develop a good understanding of how different groups — women, men and other groups — use, access and benefit from fisheries in different ways. See Module 2: GSI analysis.
- Ensure relevant information on CEAFM topics is readily available to all groups according to their different modes and styles of communication (potentially, each group may use a range of methods).
- Build a shared understanding of the different concerns that men, women and other community groups (e.g. youth, people living with disabilities) hold for the ecosystems, habitats and species they use, and their solutions.
- Consider whether suggested rules and norms for resource access and use might unfairly burden a certain group.
- Facilitate a discussion about ongoing management structures and processes that would enable representation and inclusion.
- Identify and mentor spokespeople who will convey management proposals to community decision-makers.

GSI considerations for national coastal fisheries management measures

- Plan and implement consultation on management plans such that a diversity of perspectives are heard and accounted for. See Module 5: The policy cycle.
- Ensure adequate representation at consultation events to account for specific use by different groups (e.g. women, men, or by age, disability or migrant status).
- Consider all aspects of coastal fisheries (from pre-harvest, harvest to post-harvest activities) to identify otherwise invisible labour and value in coastal fisheries.

- Distribute relevant information widely through different media and pathways to ensure everyone has an opportunity to access and understand it.
- Consider whether penalties for regulated resources targeted by different groups are fair (i.e. not disproportionately high for one group).
- Consider whether the potentially negative impacts of a management plan will be short term or long term and for whom.
- Share information with other organisations on GSI issues in coastal fisheries so they can develop their capabilities and capacity to address them within their mandates.

GSI considerations for coastal fisheries research, data collection and monitoring²⁰

- Collect information about both men and women, from both men and women. Ask questions about specific individuals or groups and identify them by sex.
- Adapt your data collection methods to the context of local gender roles and social dynamics.
- Ensure that the people who collect and analyse data understand local gender roles and social dynamics.

GSI considerations for monitoring, control and surveillance

- Provide a suitable physical space — with both male and female staff who can be called on — to create a comfortable environment for women and men visiting agencies to seek information, licences, permits, etc.
- Encourage women as well as men to hold positions of power and influence in community-level MCS (e.g. fish wardens).
- Develop a diverse team of women and men as compliance and extension officers at the national level.
- Lobby for adequate physical infrastructure on land and at sea to provide a conducive environment that enables both men and women officers to do their jobs effectively.

²⁰ Adapted from Doss C. and Kieran C. Standards for collecting sex-disaggregated data for gender analysis: a guide for CGIAR researchers. CGIAR Research Programme on Policies, Institutions and Markets. <https://ccafs.cgiar.org/standards-collecting-sex-disaggregated-data-gender-analysis-guide-cgiar-researchers#.Xqo8TWgqZGM> (accessed 30 April 2020).

