Gender Mainstreaming in the Management of the Marine and Coastal Ecosystems

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Citation

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List of Acronyms

ARMM: Autonomous Region in Muslim Mindanao
BFAR: The national Bureau of Fisheries and Aquatic Resources
CBO: Community Based Organisation
CCA: Climate Change Adaptation
CF: Community Facilitators
CONANP: National Commission for Natural Protected Areas
CRM: Coastal Resource Management
CRVA: Community Risk Vulnerability Assessment
DRR: Disaster Risk Reduction
EBM: Ecosystem-Based Management
FGD: Focus group discussions
FishCORAL: Fisheries, Coastal Resources and Livelihood
GAD: Gender and Development
GGEO: Global Gender and Environment Outlook
GWA: Gender and Water Alliance
ICZM: Integrated Coastal Zone/Fisheries Management
ICZMP: Integrated Coastal Zone Management Project
IFAD: International Fund for Agricultural Development
IGO: Institution and Gender Officers
IWRM: Integrated Water Resources Management
KAP: Knowledge-Attitude-Practices
NGO: Non-Governmental Organisation
PCW: Philippine Commission on Women
RCDC: Regional Centre for Development Cooperation
SDG: Sustainable Development Goal
SEDESOL: Secretary of Social Development
TF: Task Force

UNEP: United Nations Environment Programme

UNFCCC: United Nations Framework Convention on Climate Change
Executive Summary

Women and men use and manage marine and coastal ecosystems differently, have specific knowledge, capabilities and needs related to this and are differently impacted by changes in their environment due to climate change, pollution, and globalization. 

Historically, the contributions of women in onshore fisheries, aquaculture, processing and trading of marine products, in managing plastic and other waste from urban and tourist growth, and their important role in conservation and disaster-risk reduction initiatives in marine and coastal areas have been routinely ignored or underestimated in research, management and policy. There is now increasing recognition that sustainable and integrated marine and coastal ecosystem management requires gender sensitive and gender responsive planning, implementation, monitoring and evaluation at project, policy and grassroots level. This recognition is evident in the Call for Action1 issued by Member states at the UN Conference to Support the Implementation of Sustainable Development Goal 14 (UN Ocean Conference) held in June 2017, which highlighted the crucial role of women in the implementation of Sustainable Development Goal 14, “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”.

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 5: Achieve gender equality and empower all women and girls

The sustainable development goal SDG 5, to achieve gender equality and to empower all women and girls, is to be linked to SDG 14, for two purposes: if women and vulnerable groups are involved in marine development, both the marine environment and the women are benefitting. An empowerment approach is suitable to analyse situations as well as to ensure SDG 5 and 14. Empowerment has four interacting elements, each of them are crucial for women, children, men to be able to empower themselves2: political, economic, socio-cultural and physical empowerment.

A critical challenge faced by policy makers, environmental managers and development practitioners in mainstreaming gender in the integrated management of marine and coastal ecosystems is the lack of practical examples to guide the implementation of gender-sensitive and gender-responsive actions from an empowerment approach. Consequently, this report aims to share practical experiences, key lessons and recommendations from a sample of projects and initiatives from across

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1 A/RES/71/312 - Our ocean, our future: call for action.
the world that have successfully integrated a gendered perspective in a variety of relevant contexts such as integrated fisheries and coastal zone management, marine and coastal plastic waste management, coastal disaster risk reduction and climate change adaptation, coastal development planning and advocacy for gender-inclusive ocean management and research. Where the information is available, elements of empowerment will be given focus. Very few examples are available on the internet, some about the marine environment, many about fisheries, but all together hardly any that describes the gender aspects.

The case studies in this report show that while there is no ‘standard formula’ for gender-equitable marine and coastal management, there are certainly some good practices to recommend:

- Designing an effective gender mainstreaming strategy for policies and projects needs context-specific preparation and valid gender-disaggregated data. This can be obtained from gender-sensitive baseline studies, stakeholder mapping and participatory grassroots-level consultation that include the four elements of empowerment of women, youth and marginalized groups.

- Apply an empowerment approach for situational analysis, which is easy for technical staff to do.

- Multi-stakeholder consultations during formulation and inception phase of projects can make shared interests and priorities clear, link the CBOs with NGOs and local authorities and encourage collaboration between them. This is crucial for sustaining coastal ecosystem management practices after project phase-out, and it makes efficient use of local action, knowledge and resources.

- Making a country or region-specific inventory of past gender interventions and resources, tools and knowledge networks of the donor and national agencies can add value to the gender results achieved by previous projects, while creating awareness of the main obstacles to overcome.

- Building inclusive processes and demonstrated results for those who may be strongly affected by measures but have limited means to engage in participatory processes is crucial for boosting local ownership in community-based integrated coastal management projects.

- Finally, grassroots women’s groups can be an important channel for introducing the concepts of integrated coastal management and sustainable development in a way that is meaningful to all members of their community. International and national development agencies can help boost their capacities through building their leadership and networking skills and recognizing their contributions in dissemination and advocacy events.

Crime

At the interface of land and sea, various criminal activities are to be expected, such as drug trade, trafficking of women, girls, boys and men, illegal travel of refugees, piracy, shipbreaking, dumping of toxic waste, slave-trade, prostitution, etc. All are not documented, difficult to find quantitative and qualitative information about, and people’s lips are of course sealed about their function in these. In all these sectors, women and men have different functions and power positions. In this report we do not include them, apart from the fact that such crimes are part of the context in which development work is taking place.
SECTION 1: Introduction

Gender Mainstreaming, Oceans and Seas

For centuries oceans, seas and marine and coastal resources have sustained our world and life on it. Forming the largest ecosystem on the planet, they play a major role in providing food, livelihoods, income and recreation for people, as well as transport, telecommunication and energy.

Oceans generate approximately 16% of animal protein for the human diet worldwide, and in many countries the figure is 50%. Over 3 billion people across the world depend on coastal and marine resources for income and livelihood. Increasingly, they are being valued for the essential ecosystem functions they fulfill by regulating temperatures, producing oxygen, acting as natural sinks for carbon dioxide from the atmosphere and protecting coastal areas from flooding and erosion. Oceans and seas absorb about 30 per cent of the carbon dioxide produced by humans and contribute an estimated $24 trillion to the global economy each year through ecosystem services.

Marine and coastal resources are scarce and deteriorating at an alarming rate under increasing pressure from population growth, overfishing, industrial and urban expansion, tourism and climate change - causing irreversible damage to marine and coastal biodiversity and ecosystems. Thirty per cent of the world’s fish stock is being overexploited and there has been a 26 per cent rise in ocean acidification since the beginning of the industrial revolution. Marine pollution is reaching alarming levels, with 4.8 to 12.7 million tonnes of plastic waste entering the ocean in 2010, numbers that are predicted to double by 2025.

Mainstreaming gender in coastal and marine ecosystem management has two major components to it:

1. Firstly, the recognition that women and men have common but also different needs, interests, knowledge, skills, and responsibilities in relation to the use and management of coastal and marine resources. Unequal valuation of women’s work and skills and lack of consideration of their needs and interests, at macro and micro-levels, has historically undermined women’s power, income, decision-making and enjoyment of benefits and status in marine and coastal development.

2. The second component involves working with this recognition to devise practical strategies that makes women’s as well as men’s concerns and experiences an integral part of coastal and marine policy and project formulation, implementation, monitoring and evaluation. This

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5 CO2 absorbed by oceans leads to an increase in the acidity of seawater, which weakens the shells and skeletons of many marine species, such as corals, resulting in decline of biodiversity and ecosystem health.

is so that women and men benefit from and contribute to sustainable coastal and marine ecosystem management equally, that women are supported in their empowerment, and gender and social inequality is not perpetuated.

On the one hand women and marginal groups will benefit from improved marine development if taken the two mentioned components into account, and on the other hand oceans and seas will deteriorate less or even recover if women and vulnerable groups are more involved in marine development.

**Gender and Oceans in the 2030 Agenda for Sustainable Development**

Both, the sustainable management of oceans, seas and marine resources as well as gender equality and women’s empowerment are central to the five pillars that underpin the 2030 Agenda for Sustainable Development:

- people
- planet
- prosperity
- peace
- partnership

However, while this is explicitly recognized through a dedicated goal for gender equality and empowerment of women and girls – SDG 5, and another one for the conservation and sustainable management of oceans, seas and marine resources – SDG 14, the two goals are distinct even though their synergetic implementation is needed to holistically achieve sustainable development. The need for this was signaled at the [UN Ocean Conference](#), where Member states underlined the “crucial role of women in the conservation and sustainable use of oceans, seas and marine resource for sustainable development” in the Call for Action.

**Gender and Collaborative Approaches for Sustainable Marine and Coastal Management**

Aiming for development that is socially equitable, economically efficient and environmentally sustainable, approaches such as

- **Ecosystem-Based Management (EBM)**
- **Integrated Water Resources Management (IWRM)**
- **Integrated Coastal Zone/Fisheries Management (ICZM)**

are gaining ground. These approaches involve integrated planning across different sectors such as:

- Agriculture
- Fisheries
- Tourism
- Waste management and
- Urban development

with participation of multiple stakeholders such as farmers, fishers, hoteliers, and public and private institutions and coastal populations.

Gender mainstreaming is a critical and integral component in all the above approaches, as it is important to know how different groups of women and men use, manage, and conserve the marine

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7 A/RES/71/312.
8 More details on marine and coastal EBM and its core elements can be found in: UNEP (2011): Taking Steps toward Marine and Coastal Ecosystem-Based Management - An Introductory Guide.
10 ICZM is also a means to reach EBM.
and coastal environment, so that policy and projects can engage them equitably and effectively in sustainable management practices.

**Empowerment approach**
It is found that the empowerment approach for analysing a situation, and for monitoring progress, is not difficult to use for technical professionals. The four elements are interrelated, which means that just one element is not really empowerment.

**Political empowerment:** all persons involved, including women, are participating in decision-making by organizing themselves in groups, such as fishers’ groups, water management groups, waste management groups, etc.

**Economic empowerment:** both women and men have right to paid employment, equal wages, and the right to decide about the spending of one’s income. Women’s work needs to be recognized like men’s work is. Unpaid work is also important. All people should have equal access to means of production, to training, credits, etc. without giving bribes.

**Socio-Cultural empowerment:** It is an important aspect of empowerment that women see themselves as important and not as inferior to all others. Development work in the marine environment can boost women’s leadership and make them see themselves as crucial links in the chain, whilst also the society changes the attitude towards more respect for them.

**Physical empowerment:** to have a say over one’s body, and to be freed from drudgery work. This aspect of empowerment is also to be able to resist violence, inside and outside the home. Further to have access to safe water and food, and to healthcare. If women are involved in waste management, they need to have protective clothing. Within the criminal sectors that flourish in coastal areas, women are usually physically very disempowered.

**Bridging the Gender gap in Marine and Coastal development through Documentation**
Historically, a variety of inter-related factors have led to women’s work and contributions in fisheries, marine and coastal conservation and resources management being grossly undermined and undocumented. These include top-down and linear planning, lack of gender-disaggregated data, focus on formal and paid activities where men dominate and the production and technoenvironmental bias of marine and coastal development policies and projects.

This gender gap is gradually being bridged by increasing documentation in the past two decades highlighting women’s important contributions in onshore aquaculture and fisheries, in processing and trading of fish and marine products, in coastal and marine solid waste management, and their important role in marine and coastal conservation and disaster-risk reduction initiatives. Recent reports such as the *Global Gender and Environment Outlook* (G GEO, 2016) also throw light on the various gendered challenges and injustices women experience in their work as fishers, sea food processors and traders; and how women and men living in coastal areas and small island states experience pressure from climate change, pollution, and globalization differently.

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11 See Resources section of this report for more details.
Studies have shown how coastal policy that does not engage with poor women and men can be totally ineffectual and even have serious negative consequences for the marine environment and coastal population. For example, in Bangladesh, a government ban imposed in 2000, on post larvae shrimp (seed) collection to protect coastal ecosystem biodiversity, was largely ineffective as it did not consult with the local population about their concerns and needs. A large proportion of the coastal poor, a majority of whom were women, depended on shrimp seed collection for their livelihood, and had no alternative. In fact, figures show that the number of people involved in shrimp seed collection more than doubled from 2000 to 2006, most of them women and school-going children. This was due to climate change resulting in increasing salinity of land and groundwater, the consequential loss of livelihood from farming and increasing out-migration of men to look for work elsewhere.

Practically mainstreaming Gender in Marine and Coastal Policy and Projects

One of the major challenges faced by policy makers, environmental managers and development practitioners is that even though they are increasingly aware of why gender mainstreaming is important in the integrated management of marine and coastal ecosystems, they still lack practical actions and strategies on how to do it. Not only is there a critical lack of such practically-oriented documentation, but also the varied socio-economic, cultural, geographical and political contexts of gendered relations and access and control of resources, means that there is no ‘standard formula’ for successfully gender mainstreaming in marine and coastal interventions. This makes it even more important to document and disseminate different regional, local, and national experiences in this area, for shared learning and learning by doing.

This report aims to make a small contribution to the above challenge by compiling practical cases of marine and coastal management from different regions that have integrated a gender perspective in their design, implementation and evaluation, at community, project and policy levels. The report aims to draw out practical lessons and recommendations from the case studies that can be useful for policy makers and project managers involved in integrated coastal and marine planning. The case studies in section 2 have been prepared by members of the Gender and Water Alliance (GWA), from their experience and insight as gender focal points, training experts, researchers and management staff working in coastal and marine development projects and programmes. They share their experiences in gender mainstreaming in different aspects of sustainable marine and coastal management including coastal habitat conservation as part of disaster risk management strategies, marine litter and solid waste management, and integrated fisheries and coastal zone management.

Section 3 of the report synthesizes key lessons from the cases, on the practical aspects of mainstreaming gender in coastal and marine ecosystem management and recommends areas that need more attention and follow-up action. Finally, as we have not been able to get as balanced a representation of different geographical areas and themes in our cases, as we would have liked, the report ends with section 4 on Further Resources, with a variety of case studies as well as key literature, toolkits, and web resources on the subject of gender issues in coastal and marine management.

14 For more information on GWA, and all gender and water subjects, please see their website www.genderandwater.org.
15 This report is intended to supplement UN Environment’s guidance document on marine and coastal EBM.
SECTION 2: Case studies

2.1. Coastal Women in Odisha, India, at the Forefront of Climate Action

Coastal districts in Odisha state of India are increasingly affected by the impacts of climate change, pushing rural households below the poverty line. Most of these households are dependent on natural resources for their livelihoods from fishing, forest foraging and paddy cultivation. Although this area has had high productivity for agriculture and fishery in the past, population pressure and extreme climate change events in the last two decades have inflicted serious damage to coastal ecosystem health and the well-being of the local population, especially women, children, the elderly and disabled. This case study looks at how the Regional Centre for Development Cooperation, a local NGO, works with the coastal population, targeting the most marginalised groups, to increase their resilience to climate change and natural hazards. Participatory consultation and implementation with local stakeholders, have led to gender responsive interventions that improve the coping capacity and health of the natural environment as well as empowering of the local population. Women, especially, have emerged as strong community leaders, with knowledge and skills that are valuable to their local community, and for which they are being widely recognized at local and national level adding to their empowerment.

Background
In 2011 the Regional Centre for Development Cooperation (RCDC), a not for profit organisation in Odisha, India, worked in three coastal districts - Jagatsinghpur, Kendrapara and Puri – to implement
two climate change adaptation and disaster risk reduction programmes using an Integrated Natural Resource Management approach, with active participation of local women, men, children and youth. **Paribartan** was a 5 year multi-country initiative facilitated by Concern Worldwide and supported by the European Union on increasing resilience and reducing risks of coastal communities to climate change and natural hazards in the Bay of Bengal. Implemented across coastal India and Bangladesh, the programme included both Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) components, and sought to make communities resilient to disasters and to reduce poverty by introducing climate smart livelihood options that regenerated the coastal habitat.

**Prayas**, a 3 year programme in CCA and DRR supported by the United Nations Development Programme (UNDP) and AusAid, was implemented in the flood and water-logging prone coastal district of Puri. This programme used an Integrated Water Resource Management (IWRM) approach for flood risk mitigation and climate change adaptation. The programme focused on improving local governance of natural resources, innovative and locally appropriate technology, and generating sustainable livelihood options for the poorest groups to cope with climate change related events.

A baseline study yielded useful gender-disaggregated data on livelihood base, access to resources and information, mobility and skills of the local population, and the implications this had for their vulnerability. The study showed how structural inequality between women and men, further deepened by wealth status, ethnicity, age and location means that poor women, children, the elderly and disabled are the worst impacted by climate change and natural disasters. Women experience this negative impact in three specific and inter-related areas:

**Loss in means of subsistence and income: economic and physical disempowerment**
Increasing salinity of land and water meant that both women and men lost income from subsistence farming and agricultural labour. However, men often left the village to find seasonal work elsewhere whereas women stayed behind, taking on additional production activities, along with their overfull packet of domestic and care-related tasks. This meant an additional burden to provide for the family in the absence of the adult male and a greater risk of sexual harassment.

**Increase in drudgery and hardship: physical disempowerment**
Waterlogging and loss of flora and mangrove forests meant that women had to travel further to find drinking water and to forage for fuel, fodder, and other forest products which earned them income. Their foray into forests exposed them to animal attacks besides incurring the wrath of forest officers.

**Adverse impact on reproductive health: political, economic and physical disempowerment**
Women in the target area suffer from nutritional deficiencies as a result of the cultivation of cash crops such as hybrid rice, maize and cotton replacing the more nutritious traditional food crops. During food and water shortages women keep aside less food for themselves, and consume less water as well. Health facilities in remote coastal locations are poor, adding to the burden of women who need pre- and post-natal care, and for those who look after sick children and the elderly. The study also revealed how climate change deepens existing gender inequality and further perpetuates it by limiting the weakest groups' ability to access information, relief, technology and the skills to influence climate change policy and actions. At village level, women especially, had very limited decision-making power and hardly participate in the community level planning process.

**Process and Results**
Using the information gained from the base line study, RCDC did a consultation and planning process involving local women, men and youth to prioritise CCA and DRR interventions that would
1. Empower the most marginalised groups;
2. Make effective use of local resources and knowledge to build ecosystem health;
3. Lessen the drudgery of domestic and care work of women; and
4. Build leadership skills and knowledge of women and men on climate-smart livelihood options.

**Equal membership ratio of women and men in community institutions**
One of the first steps of both the programmes was to ensure that women and poorest groups were not left behind in the community-based management and decision-making processes at village and hamlet level. Village and hamlet committees for *Paribartan* and *Prayas* comprised an equal number of local women and men members.

**Women and youth play an active role in community-based disaster response**
In order to build the community’s awareness and skills to prepare and deal with extreme climate events the *Paribartan* programme facilitated the creation of a **Task Force (TF) for disaster response** in all the 84 villages where the programme was being implemented. Each Task Force consists of an equal number of women and men who are trained in Early Warning, Search & Rescue, First Aid, Water & Sanitation, and Shelter Management by accredited trainers from reputed organisations.

There was a special emphasis on training the women members and providing them with early warning kits to ensure that they gained essential skills and equipment for gender-sensitive relief and rescue work during disasters.

The role of the TF members, especially women and youth, during the recent Cyclone *Phailin* and Cyclone *Hudhud* was exemplary and earned them the praise and admiration of the local government as well as villagers.

![Adolescent girls use theatre as part of awareness-raising action for community-level disaster response; Photo: RCDC India](image)

**Regular community consultation and monitoring process**
The Community Risk Vulnerability Assessment (CRVA) is an annually recurring participatory consultation with villagers to monitor the progress of programme activities and signal areas that need further attention. Due to their strong networking and social skills, women play an active role in these assessments. As a result of these assessments the programmes have responded to needs of women, the elderly, youth and landless people, resulting in a number of appropriate pilot interventions that integrate social and gender equity with environmental sustainability:

- **Organic homestead gardens and women-friendly gardening tools**
  During the CRVA process the poor health of women and adolescent girls emerged as a problem, particularly as the proactive role of women during and after disasters requires good health. The women highlighted the need for nutritious food for their families too. Many of them had homestead kitchen gardens but the efforts were unorganized and their tools clumsy. They used to buy seeds from suppliers who pressured them to also buy chemical pesticides. Women preferred to grow local vegetables to enrich their diet, and use low-cost organic inputs.
  Responding to this need, the programme provided 1000 households with various local seeds and interested women were trained on efficient design for home gardens, cultivation techniques and
preparation of organic manure and bio-pesticides by resource persons with expertise in low-input organic farming. The neediest households were supported, including women headed families, poor and elderly marginal farmers, with women-friendly gardening tool kits to make cultivation easier. The organized way of gardening and use of organic inputs has increased yields. The health of women and their families is perceived as improved. The taste of the food is also better. When they sell the surplus in the market they are received well, as the products are organic.

- **Community managed mangrove regeneration and conservation**
  At the start of the Paribartan programme mangrove saplings were purchased and transported to the project area for plantation. While the plantation operation and further supervision of the planted saplings was done by local people, it was later felt that that setting up a nursery in the project area itself would be a better option. This decision served two purposes; the saplings grown in the same location of plantation had better chances of surviving, and the nursery could be a viable livelihood option for poor and vulnerable landless families, many of whom were women-headed. Collaborating with state Forest Officials and villagers, the programme leased forest and community land and sub leased it to landless families selected by the Paribartan Village Committee who prepared the beds, did the fencing, obtained and planted the seeds and looked after the growing plants. While the poor households, received project support in the first year, they are expected to sustain themselves independently in the following years, earning income from selling the saplings to the Forest Department and Integrated Coastal Zone Management Project (ICZMP) for plantations to be taken up by them under various projects. The mangrove saplings were planted in two vulnerable locations in the project area and have flourished well.

- **Fuel-efficient cooking stoves for reducing drudgery, and improving health of women**
  In surveys conducted by RCDC in the coastal areas women talked about the drudgery related with their cooking task due to having to cook with mud stoves in cramped spaces. Excessive smoke and soot emitted during cooking has resulted in serious respiratory disorders for women and infants they care for. Women find fuel collection in forests and during extreme weather events very difficult and dangerous, and say it is impossible to cook on wet mud stoves during rains, when water seeps into the kitchen.
  The introduction of portable, fuel efficient stoves as a pilot project was a success as it greatly reduced the drudgery of cooking for women and gave them more time for other productive work. Women could cook in the open with these stoves, and their portability provided an added benefit as they could be carried to cyclone shelters in times of disaster. Women users also suggested improvements for stove design that are being looked into, before scaling up the pilot intervention to other areas. It was envisaged that these stoves would also help lower the carbon footprint of the coastal communities as well as conserve the mangrove forest.

- **Cultivation without land – floating gardens**
The livelihoods of poor people in coastal Odisha are constrained by 7-8 months of water stagnation due to floods. To solve the problem the RCDC team worked with a local resource person to introduce ‘floating gardens’ in the region – a micro-farm made by using a bamboo framework and a culture bed comprised of local materials like dried water hyacinth, manure, vermi-compost and silt. The Prayas Village Committee successfully targeted this innovative agri-technology to help women-headed and landless households generate food and income during the lean period.

**Women as climate action ambassadors**

Recognising the availability and social mobilisation potential of women and youth in the coastal areas, RCDC targeted their training programmes for leadership and advocacy skills to them. The training teaches them how to assess climate change risks, how to carry out inclusive and gender-responsive community consultations, and how to facilitate the empowerment of women and most marginalised people in their community. Especially adolescent girls at school have responded enthusiastically to these trainings, helping other adult and elderly women come forward to join the trainings and develop their skills as climate action leaders.

Table 1. From the empowerment approach the following improvements can be identified:

<table>
<thead>
<tr>
<th>Political empowerment</th>
<th>Economic empowerment</th>
<th>Socio-cultural empowerment</th>
<th>Physical empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor and women in Village Committees: decision-making</td>
<td>Organic gardens production</td>
<td>In all project components the work of women was appreciated.</td>
<td>Improved health as result of products of organic gardens</td>
</tr>
<tr>
<td>Women 50% of members of Task Force for Disaster Response</td>
<td>Sale of products of organic gardens</td>
<td>Improved stoves: women were asked for their opinions</td>
<td>Improved cooking stoves: less smoke</td>
</tr>
<tr>
<td>Women climate action ambassadors</td>
<td>Income from mangrove saplings</td>
<td>Women seen as leaders, for example they take active part in sub regional workshops</td>
<td>Less fuel needed, so less drudgery work of fetching wood</td>
</tr>
<tr>
<td>Women take active part in dissemination workshops</td>
<td>Income from floating gardens</td>
<td>Various training especially for women</td>
<td>Food products of floating gardens in lean seasons</td>
</tr>
</tbody>
</table>

**Enabling Conditions**

- Gender-sensitive baseline research in the targeted coastal districts delivered a wealth of information about the local context and the problems faced by different socio-economic and ethnic groups. It gave the impetus for prioritising project activities such as equal membership in village and hamlet committees and agricultural options for landless and women-headed households.
- Use of participatory action research methods for monitoring and evaluation made sure that interventions were benefiting those for whom they were intended, and that there were no negative consequences for social equity and environmental sustainability. For example, the Community Risk Vulnerability Assessment (CRVA) exercises informed the project staff about sustainable options for improving nutrition and livelihood opportunities for poor households, the community’s preference for local mangrove nurseries. The CRVA also kept TF members well informed about households and vulnerable people living in them, thus helping them in their search and rescue operations. Also, the drudgery of women in attending to their domestic chores came up repeatedly during the Knowledge-Attitude-Practices (KAP) study and also during focus group discussions (FGD) with the community members during early 2012.

**Challenges Faced**

- The married women members in the target area were initially reluctant to express their opinions and needs publicly, and to be involved in the activities. Staff noted that they refused to attend
meetings in which male members of their household were present; particularly the elder brother-in-laws. However it was noticed that this was not the case with girls and adolescents. The programme ensured the cooperation of the latter group and pushed them into leadership positions. It was these adolescent girls who then encouraged the married women to shed their inhibitions and participate fully in programme activities.

- Despite building the capacity of the coastal communities for effective disaster response, the inadequacy of cyclone shelter facilities and state relief during disasters often put a further strain on local resources and efforts. Women suffer the most at these times due to inadequate sanitation facilities in shelters, and having to cook at shelters using their own limited food provisions and stoves, to meet the needs of family members.

**Lessons Learned**

- Gender sensitive baseline studies are crucial for informing project design and implementation, as well as for gender monitoring.
- Systematic and participatory consultations such as the Community Risk Vulnerability Assessment, involving all community members, give more chance for sustainability of interventions, and encourage local ownership of them.
- Tap women’s knowledge: women traditionally played a secondary role in decision-making in the target area. Through stipulating equal membership quotas for women and men in community based organizations and task forces, women’s abilities and concerns were brought to the forefront, making the project more effective.
- Innovations and interventions work better when they are rooted in local context of resource (land, water, tools, labour) constraints and availability, and when they make use of local social capital such as motivation, social networking and mobilisation skills of youth, women, elderly.
- Gender mainstreaming is not a linear process, nor can it be top-down. It is a long-term continuous process involving simultaneous actions and negotiations between various stakeholders. NGO staff, if gender sensitized, can play a crucial role in linking different stakeholders to generate positive actions for gender mainstreaming.
- State institutional capacity for disaster response could be improved by better coordination and communication between local government bodies, community-based organisations (CBOs) and NGOs. At the same time, CBOs could be trained to lead strong and inclusive advocacy campaigns to push required actions from national/state-level.
- Documentation of gender-responsive interventions is important for learning within a project team, as well as for sharing with other projects working in the same geographical area and/or theme. RCDC has continuously documented how different interventions have been taken up by the local coastal population, and how it changes their situation.
- It is important to have local women, youth, and men talk about their experience in dissemination events to give a different perspective to project staff and policy makers, as well as to motivate the grassroots leaders. Experience from the Paribartan programme was periodically shared through sub regional workshops in which women leaders took active part.

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For details on RCDC’s specific interventions in organic and floating agriculture, disaster response, fuel-efficient cooking stoves, see: [https://rcdcindia.org/resources/publication-film/](https://rcdcindia.org/resources/publication-film/)

10
The pollution of oceans and seas by marine litter and microplastics is a chronic problem faced by the planet, incurring serious losses in coastal and marine biodiversity, and posing threats to human and ecosystem health. Urban coastal areas in many countries face particularly high risks to the health and wellbeing of their inhabitants and natural habitats, due to the high concentration of plastics found there from household waste, fisheries, tourism, commercial shipping and other maritime activities. This case study draws from the experiences of the coastal town of Celestún in Yucatán, Mexico where increasing immigration from inland areas, unplanned urbanization, overfishing and unsustainable tourism have degraded and eroded much of the beach and disrupted the coastal wetlands ecosystems. Inadequate municipal management of solid waste has led to a crisis in people’s health and livelihoods, especially for the poorest households in the area. However, this crisis has also driven the growth of women-led grassroots organizations which play an active role in local waste management and plastics recycling. These community based organizations challenge exclusionary gender norms by increasing women’s participation in sustainable urban development, and their efforts have significantly raised community awareness on the link between solid waste management, health, empowerment and wellbeing in the coastal wetlands.
**Background**

Internationally, the overflow of land-based plastic wastes into the oceans is one of the most pervasive pollution problems faced by marine species and coastal communities. Most studies focused on social behaviours related to plastic waste and informal waste management, however, have focused on large, inland urban centres. This inland focus on waste management is problematic and contributes to the problem; half of the world’s population now live within 150 km of a coastline, and by 2025 that figure is likely to double. Coastal waters and shorelines in many regions are accumulation zones for marine plastic litter, being the receiving body for land-based plastics and the zone where fisheries, aquaculture, commercial shipping and other maritime activities are concentrated.

Celestún is a town located on the northwest coast of the Yucatán Peninsula, within the boundaries of a federally protected conservation area, the Ría Celestún Biosphere Reserve. The area around the reserve forms part of a larger protected corridor of wetlands that is recognized as an international priority site for biodiversity conservation. Despite its location within a conservation area, Celestún shares the same characteristics as many other coastal cities worldwide - increasing in-migration from inland areas and unplanned urbanization, high levels of consumption of disposable products, and an influx of temporary residents during fishing and tourist seasons, all of which lead to the gradual erosion of the coastal landscape and threaten its biodiversity.

State and international sustainable development projects in Yucatán have largely prioritized the protection of wetlands from unsanitary human activities, rather than directly addressing the human and environmental health issues surrounding urban sprawl in the wetlands, such as sanitation and solid waste and wastewater management. While some programs solicit gender-mainstreaming efforts, government work subsidies in and near natural protected areas in Yucatán tend to provide

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16 A lot of information from this section is cited and/or derived from numerous other UN publications. To view a list of these please view the following publication: Anne-Marie Hanson (2017) Women’s environmental health activism around waste and plastic pollution in the coastal wetlands of Yucatán, Gender & Development, 25:2, 221-234, DOI: 10.1080/13552074.2017.1335450.
incentives to participate in eco-tourism or join co-operatives for sustainable fishing – two male-dominated activities. Women do not benefit directly from these subsidies and even when they are employed in tourism activities in hotels and restaurants, and in the cleaning and processing of fish, their work is considered to be part of their responsibility as housewives or helpers to men’s activities. At one point, a lot of families in Celestún participated in fish processing activities, but currently only a small number of women are involved in this work. Fish processing declined with the increase in population, which led to fewer fish available, and due to more federal regulations regarding when and how many of each fish species can be caught in any season.

Historically, non-organic wastes such as plastic bottles, scrap metal, and derelict construction materials have been used in Celestún as inexpensive stabilizing materials to fill in uneven or eroding backyards. Recycling activities are welcome and promoted by government agencies and some local authorities, but there are little to no resources allocated for services and products for this sector. Today, many homes in Celestún are located in areas where individuals previously used municipal solid wastes to fill in unstable land, or are located on the edges of wetlands or lagoons that have doubled as open-air dumps due to lack of alternate disposal sites. The unplanned urbanization interrupts natural flows of fresh water, disrupts and pollutes ecosystems, and also puts residents at higher risks from climate change-induced weather patterns and annual flooding. The combination of solid wastes and lack of drainage in many informal residential areas has also been linked to the proliferation of infectious disease vectors - in particular mosquitoes and bacteria. Residents associate this waste decomposition to past outbreaks of cholera, dengue, and rotavirus.

Due to the gendered responsibility of women for household work, women in Celestún have been most burdened with the inadequacy of the municipal waste collection and management services, with the urgency of the problem increasing for those who live in poor and informal settlements. The rise of diseases linked to poor waste management also further increases the care work of women who look after sick children and family members, giving them less time to spend in other work that generates income or other benefits for themselves and the community.

Undeterred, and perhaps even fuelled by the lack of public facilities for dealing with solid waste in a safe and integrated manner, local women in Celestún, as well as many small towns along the coast of Yucatán, have been strongly advocating for community-based waste management for the past two decades, forming grassroots recycling and composting groups, as well as inter-municipal garbage alliances. This case study describes how a grassroots women’s recycling cooperative became a primary driver of gendered social change and urban sustainability in a low-lying coastal area. The research that informs this case study is based on mixed-method ethnographic methods which included collection of 400 surveys with coastal residents, 14 oral histories with coastal women, and 120 interviews with residents, government officials, and conservation/development practitioners.

The women’s recycling group, Chen Kole ’Lob (meaning “only women” in Yucatec Maya) is a group in Celestún that emerged out of women’s concern for public health, environmental protection, and urban sanitation. In 2002, a group of 17 women began to organize around waste issues following a lecture given at a bi-monthly meeting of Oportunidades, a national development program that gave small stipends to poor women with children who regularly attend school. The talk focused on the practice of throwing garbage in the wetlands, and the health risks linked to garbage in coastal environments. Women were especially concerned with the overflow of garbage - in particular plastics and other disposable packaging - in providing breeding grounds for dengue-vectoring mosquitoes, as well as the links between waste decomposition and the cholera outbreaks that affected many coastal residents in the 1990s and early 2000s.
Process and Results

**Bottom-up formation and institutional networking**: The formation of *Chen Kole ‘Lob* and the process leading to its current activities were truly grassroots efforts. The women involved in the process went through many stages to get to where they are today. In the first stages of the recycling group, women had little economic support, so they went to town businesses to ask for donations to trade with residents for plastic bottles. They would give residents sacks of flour, toilet paper, or other items in exchange for used plastics. Eventually, the women went to various government offices to ask for small grants to support their efforts. They went to the Secretary of Social Development (SEDESOL) and the National Commission for Natural Protected Areas (CONANP). The group was successful in securing a temporary employment grant from CONANP, and has since secured annual funding from private, state, and municipal donors for a collection center, and for related recycling and waste management activities. *(Economic and political empowerment)*

**Social mobilization for plastic recycling and clean-up activities**: Every two weeks, women from the group collect bottles and other recyclable materials from individual residences, and bring them to the collection centre, where a truck picks them up and brings the items to a larger recycling facility in another town. The group gets the going rate for recyclables (about 2 pesos per kilogram), half of which they pay out to the individual residents. At least two tons of plastic containers are collected every two weeks, as well as increasing amounts of scrap metals, cardboard, and recyclable papers. *(Economic empowerment)*

**Fundraising for scaling up**: The women of the group have been proactive in seeking out funding efforts for their projects. They view this work as an opportunity to better community health, and to make small contributions to their families’ economic situations. *Chen Kole ‘Lob* has also inspired similar projects in other coastal towns in the region. In addition to bi-weekly bottle recycling of over 2000 kilograms of plastic, *Chen Kole ‘Lob* also organized yearly wetlands and beach cleanup projects that removed several tons of solid waste and brought temporary work grants to hundreds of community members (men and women). *(Economic empowerment)*

**National and state-level recognition**: In 2009 and in 2013, the group was recognized nationally for their efforts of waste management within natural protected areas. Currently, national and state-level environmental agencies credit them and seek their support as important actors in a future integrated waste management system that is currently under design throughout the state of Yucatán. *(Political empowerment).*

**Benefits to community and environmental health and to local livelihoods**: The work of *Chen Kole ‘Lob* has boosted community health, as well as local tourism and conservation initiatives. As women are the main constituents of community waste management in small cities of coastal Yucatán, they...
protect aesthetics and environmental health in the coastal region. Residents note that with the cleaner streets and less waste in wetlands, fewer people have fallen ill to dengue or other garbage-related diseases. (Physical empowerment).

Table 2. From the empowerment approach the following improvements can be identified:

<table>
<thead>
<tr>
<th>Political empowerment</th>
<th>Economic empowerment</th>
<th>Socio-cultural empowerment</th>
<th>Physical empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>− National and State-level environment agencies credit the women’s organisation and seek their advice for future IWM</td>
<td>− Local tourism is boosted, which gives more employment</td>
<td>− Women waste workers were the lowest possible status, but have now recognition as environmental managers</td>
<td>− Fewer cases of cholera, dengue and rotavirus</td>
</tr>
<tr>
<td>− Successful institutional networking</td>
<td>− Successful fundraising</td>
<td>− Women are recognised for their cleaning campaigns and the health results.</td>
<td>− Cleaner streets</td>
</tr>
<tr>
<td>− More attention in politics for waste</td>
<td>− Payment for waste</td>
<td>− Recognition of local women’s abilities and important contributions in coastal waste management</td>
<td>− Cleaner wetlands</td>
</tr>
<tr>
<td>− Organising massive clean-ups is huge effort</td>
<td>− Hundreds of men and women had paid work in clean-up of wetlands and beaches</td>
<td>− Fewer cases of cholera, dengue and rotavirus</td>
<td>− Cleaner beaches</td>
</tr>
<tr>
<td>− Women’s group have become a major stakeholder in sustainable urban planning and coastal solid waste management</td>
<td></td>
<td>− Cleaner streets</td>
<td>− Healthier environment</td>
</tr>
</tbody>
</table>

Challenges

- Due to local gendered expectations where women previously did not often work long hours outside the home and the negative public image related to garbage clean-up, the women were often stigmatized. People belittled them and teased their children, and many residents were at first, generally unresponsive to the recycling efforts. (Socio-cultural empowerment).
- Most environmental policies in Mexico do not directly support recovery activities nor stimulate growth of the recycling industry. This has often hindered government reforms (at all scales) towards more efficient collection, recovery, and recycling systems and new waste management technologies. For example, in the last 30 years, individual consumption of plastic products was heavily promoted throughout Mexico, in urban and rural areas. Lack of clean drinking water also means people often have to buy water in plastic containers. (Political empowerment)
- Recycling and wetlands clean-up are tasks that require complicated organization and very hard work with little financial gain. CONANP officials as well as some local NGOs assisted the women in locatig certain forms of economic and technical support, but the women themselves did the vast majority of the labour and strategizing. (Political and physical empowerment)

Enabling factor

- Recognition of local women’s abilities and important contributions in coastal waste management by community members, as well as local, state and national agencies consolidated their legitimacy and power as an important stakeholder in sustainable urban planning and coastal solid waste management. This in turn gave the push for up-scaling their effort to the wider coastal area in Yucatán. (Political and socio-cultural empowerment).

Lessons Learned

- Addressing both gender and conservation issues can be complicated. From the case of Yucatán in Mexico we see how international and state policies and subsidies have unintentionally ended up marginalizing women and urban coastal residents by targeting their subsidies and incentives towards rural-based, temporal and male dominated activities such as eco-tourism and sustainable fishing. This emphasizes the importance for future policies and projects in marine
and coastal conservation to be informed of the ways that local gender norms and expectations can lead to different environmental responsibilities.

- The study also highlights that urban sanitation and waste management in coastal areas has often been overlooked by international and national institutions, particularly in low-lying tropical areas in developing countries. Moreover, by prioritizing protection of wetlands from unsustainable human activity over sanitation and waste management issues surrounding urban sprawl in coastal areas, the regional government policies have increased the burden on women in their gendered responsibilities of managing household waste and as caregivers.

- As tourism and unsustainable consumption practices are both directly responsible for the plastic waste problem in coastal Yucatán, it is imperative for the government to address these issues through effective policies and regulation, and their enforcement by engaging these stakeholders.

- Government engagement with CBOs, and especially women’s groups, in urban planning and policy can generate big gains for public and ecosystem health and integrated waste management. The case of Chen Kole ‘Lob shows the ways in which women’s knowledge and action are central to creating innovative strategies to address removal and recycling of waste products within protected coastal environments, and in raising awareness on human and environmental health within these urbanizing areas.

- Participatory grassroots organisations like Chen Kole ‘Lob can be a positive role model for mobilising women’s and men’s collective actions in addressing plastic waste management in coastal cities and other areas. Their members’ motivation and networking skills could achieve much more than top-down planned interventions could, and, as a result, may lead to growth of similar initiatives at regional and national levels.

- Chen Kole ‘Lob prioritises women’s engagement, which could be construed as gender-biased; however, initially, this gender focus was what inspired women to work together and to become active participants in coastal sustainability efforts, in a project that was separate from other top-down efforts that were focused on male-centred activities. Currently, the group proactively engages men and youth in its awareness and mobilising efforts. Women viewed their work as natural to the gendered divisions of labour in the region, but also, they have now become recognized as sustainability professionals in their community, thus increasing their status and power in the wider community. The group continues to expand, and to include more women and men of all ages.

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2.3. Gender Mainstreaming for Reducing Poverty in Coastal Philippines

Although the fisheries sector is an important source of foreign revenue for the government and income and food for the population in the Philippines, fisher people are amongst the poorest groups in the country. Coastal areas suffer from degradation of the ecosystem, climate-change related disasters and depletion of fish stocks, driving the most marginalised groups such as women-headed households further into poverty. This case study looks at an integrated fisheries and coastal management project in the Philippines which aims to increase income of fishing households, especially the poorest, through livelihood diversification and through the adoption of sustainable management of fishery and coastal resources. The project’s gender mainstreaming strategy builds on learning from past projects and programmes in the country and starts with building livelihood security of the poorest households and the capacity of local institutions in the coastal areas. It is shown that to improve the environment goes hand in hand with empowerment of poor women.

The fisheries sub-sector in Philippines is a major foreign revenue earner for the country, and an important employer with over 1.37 million near-shore fishers, 16,500 commercial fisheries workers and 226,200 aquaculture workers (2002 National Census of Fisheries), many of whom are women\(^\text{17}\). Despite the important contributions of fisheries to the national economy, fisher people are among the poorest groups in the country, with a poverty incidence of 41.4 per cent in 2009\(^\text{18}\). Women-headed households, indigenous people and unemployed youth form some of the most marginalised groups among the fisher people. There are many inter-related issues for the poverty of the fishing

\(^{17}\) Due to lack of gender disaggregated data there are no statistics of the number/proportion of women employed in the fisheries sub-categories.

\(^{18}\) Regional data from the National Statistics Coordination Board (NSCB), Poverty Statistics, 2009.
community including: low coastal productivity due to habitat and watershed degradation; fish stock depletion due to illegal fishing practices, pollution, and overfishing; lack of access to basic services and institutional support; high population density in coastal areas; increased stress from climate change and disasters; poor post-harvest handling and distribution systems often resulting in low fish prices; lack of alternative income-generating activities; and weak political will on the part of local leaders to enact and/or enforce fishery laws.

To address these complex issues underlying poverty in the coastal regions of Phillips, the Fisheries, Coastal Resources and Livelihood (FishCORAL) Project began in 2016, in 11 bays in the poorest regions of the Philippines, namely: the Autonomous Region in Muslim Mindanao (ARMM), CARAGA in North-east Mindanao, Eastern Visayas and Bicol in Southern Luzon. The overall aim of the five-year project is to reduce poverty in the targeted coastal areas by increasing income of fishing households through livelihood diversification and through coastal households adopting sustainable management of fishery and coastal resources. Specifically, the project targets a 10 per cent increase in the annual household income of the poorest households in the project area and a 20 per cent increase in the number of women employed in income-generating activities, by 2020.

The project adopts the ecosystem approach to coastal resource management and includes among its interventions, activities that will protect both the aquatic and coastal zone habitats including mangroves, coral reefs and sea grasses. The national Bureau of Fisheries and Aquatic Resources (BFAR) is the project’s lead implementing agency, while the International Fund for Agricultural Development (IFAD) is the main donor.

Gender-responsive elements in project design and implementation

Based on past experience from the implementation of previous programmes and projects in the country (Asian Development Bank, World Bank, USAID, Global Environment Fund), FishCORAL’s project design incorporates a gender mainstreaming strategy that is cross-cutting its three components: Coastal Resource Management (CRM), Livelihood Development and Project Management and Coordination. Gender is mainstreamed in various ways:

1. **Gender responsive recruitment**: To encourage more women in the project management structure, the project has set a target of 30% of all recruited staff to be female. *Institution and Gender Officers (IGO)* at the national and regional project management offices ensure that there is gender expertise available to guide gender sensitivity in the planning, implementation, and monitoring and evaluation processes of the project. The IGO works closely with gender focal points in the government institutions, community organisations and other project implementing agencies. At local government level the IGOs supervise and train *Gender Focal Persons* while at local community level they supervise and guide the *Community Facilitators (CF)*. The CF are locally recruited staff based in the local government institution who form the vital link between the community, BFAR and the project. It is the CF’s responsibility to ensure that women are actively participating in the CBOs. *(Socio-cultural and economic empowerment)*

2. **Gender-sensitive and participatory planning, implementation and evaluation**: A gender-disaggregated baseline study has been conducted in all the 1098 barangays or villages, by the Community Facilitators, to gather information about the extent of participation of women, youth, elderly and indigenous people in resource management activities, such as mangrove rehabilitation, fish sanctuaries, sea grass management and other activities. Results of the

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19 IFAD (2015), FishCORAL Design Completion Report.
20 Increase compared to baseline data on average household income and percentage of women in income-generating activities.
baseline study inform the CRM plans as well as the gender capacity-building plan of the project with gender-disaggregated data. (monitoring may lead to more recognition of women’s work: socio-cultural and economic empowerment)

3. **Gender-responsive capacity building of local government and community-based institutions (CBOs):** Training on relevant gender topics and issues is provided for staff of the project, government institutions as well as CBOs, who are implementing activities within the three components of the project. This is very important as currently all the institutions involved in bay and coastal management are male dominated. The members of community fisher associations are also mostly males. There is a need to sensitize these members and educate them on the role of women in fisheries and the importance of their participation in CRM. (political and socio-cultural empowerment)

4. **Pro-poor and women-friendly income diversification interventions:** the project targets its income diversification interventions at those households who live below the poverty line, including women-headed households, out-of-school youth and indigenous groups. The rationale for this is that enterprise development and alternative livelihoods for the members of the marginal fishing households are essential to reduce pressure on coastal fisheries, and that their implementation should precede conservation initiatives at regional and national level. (economic empowerment)

5. **Membership quotas for women in CBOs:** The Livelihood Development component provides capacity building and support for livelihoods identified by the fisher people, especially for women. To pave the way for the participation of women in the currently exclusively male fisher associations, the criteria for the selection of livelihood beneficiaries is that 40-50 per cent of the group members and of the functionaries are women. This condition provides an incentive for the group to invite women to join. Those women and men who are not yet members of an existing organisation can form a new group to benefit from livelihood with the same conditions. (political empowerment)

**Process and Results**
The FishCORAL Project builds on past gender mainstreaming knowledge and experiences of the donor IFAD, and of the main implementing agency, BFAR. For example, experience from past IFAD projects showed that the employment of NGOs was not always the most appropriate way to mobilise communities. Some NGOs operated as outside contractors rather than as true community facilitators. In addition, other projects (Fisheries Sector Programme and Fisheries Resource
Management Project) found that the availability of capable local NGOs is often overestimated. To avoid this problem, the Project recruited Community Facilitators, recruited locally, based in the local government institution, but employed by BFAR.

The project incorporates gender-sensitive tools and resources developed earlier by BFAR interventions, such as the Gender and Development (GAD) Checklist for Fisheries which outlines essential steps to promote equal participation of women and men in fisheries-based interventions in livelihood, training, coastal resource management, and research\(^\text{21}\). The project also uses gender disaggregated information gathered from pilot projects in women-managed coastal and fishing activities such as mangrove reforestation, seaweed farming, marine sanctuaries protection and provision of women-friendly fishing gears for fisherwomen in selected regions. Furthermore, the project revised the BFAR Fisher people Registration Form to capture the socio-economic position of women and men as well as their roles and interest in the value chain of the fisheries sector. In short, the FishCORAL Project provides an opportunity for the BFAR to scale up these gender-inclusive efforts and fortify them with other activities to empower coastal women.

As actual field implementation of the project only commenced in 2016, it is too early to discuss the results of the project. However, in terms of the process of gender mainstreaming, the following findings have emerged during implementation of project activities in CARAGA, North-east Mindanao:

- An increasing number of women are members of fisher associations due to the membership quota. Male members are more open and receptive to female membership as they can see the direct benefit of increased income-generation options for the group. (political and economic empowerment)

- The introduction of integrated fisheries management techniques such as *aquasilviculture*\(^\text{22}\) – which combines fish production and mangrove development, provides options for increasing income and food security for poor fisher households, especially women, while regenerating and conserving coastal biodiversity. (economic and physical empowerment)

- Baseline information revealed that there is a marked divide in women’s and men’s fishing work. Men go out to capture fish further from the shore, while women are involved in on-shore capture fishing, aquaculture and processing activities. (this information leads to socio-cultural empowerment)

- The baseline also showed that more women than men are getting involved in coastal clean-up and fish sanctuary monitoring activities initiated by BFAR. (recognition of women’s work: socio-cultural empowerment)

- Access to savings clubs, organised by the project, is encouraging both men and women to join as members. More men are now saving instead of spending on alcohol, while women say that their savings give them easier access to their earnings and more autonomy over how to spend them. (Economic empowerment)

- Gender Focal Persons from two partner municipalities who underwent the gender training provided by the project are now actively participating in gender mainstreaming activities in

\(^{21}\) The Bureau of Fisheries and Aquatic Resources GAD checklists can be downloaded on w3.neda.gov.ph/hgdg/main/HGDG-Fisheries-Sector-checklist.pdf

\(^{22}\) Silviculture is the management of forests.
the coastal areas together with Community Facilitators. For example, they are involved as resource persons in community-based aquaculture activities in local schools. So far, Gender Focal Persons are mostly women. (political empowerment)

Table 3. From the empowerment approach the following improvements can be identified:

<table>
<thead>
<tr>
<th>Political empowerment</th>
<th>Economic empowerment</th>
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<th>Physical empowerment</th>
</tr>
</thead>
<tbody>
<tr>
<td>− Women’s membership in Fishers Groups, Quota of 40-50%: more voice and more decision-making power for poor women</td>
<td>− Access to savings clubs</td>
<td>− More recognition of women’s work in fisheries, in coastal clean-ups</td>
<td>With improved livelihood options poor women are expected to be able to improve their health and that of their families. The case does not relate to gender-based violence and other physical empowerment aspects.</td>
</tr>
<tr>
<td>− Recruitment of many more women in offices, as Gender Focal Persons and as CFs</td>
<td>− Aquasilviculture: mangroves management gives diversified income for poor women</td>
<td>− More recognition of women’s skills and knowledge related to coastal and marine management. Recognition of one’s skills leads to a higher status in society and in a better self-image.</td>
<td></td>
</tr>
<tr>
<td>− Gender training of LGAs leads to more attention in all fields for women’s work and interests.</td>
<td>− More women in Livelihood groups who benefit from increased income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>− Monitoring gender indicators yields information that contradicts prejudices.</td>
<td></td>
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</table>

Enabling conditions

- **Availability of gender policy documents at donor and national level:** IFAD’s Gender Equality and Women Empowerment Policy and the Philippine government’s Gender and Development (GAD) Mainstreaming Guidelines provided an institutional backing for mainstreaming gender in the FishCORAL project, as well as provided a template for more specific gender activities and guidelines at project level.

- **The setting of gender specific objectives and indicators** in the project design document and in the FishCORAL Gender Mainstreaming (policy) guidelines provided not only a clear path of change that should happen to make coastal resource management gender responsive, but also how to measure and monitor this.

- **The country-level IFAD Philippine Gender Network**, composed of gender experts from other IFAD-Assisted projects, civil society organizations and implementing agencies in the Philippines, provided the FishCORAL project’s gender focal persons a forum to learn from peers and discuss and analyze ongoing gender issues and find ways to tackle them.

- **Gender-responsive legislation at national level:** laws such as: *Magna Carta of Women* which mandates all government agencies including local government units to mainstream gender in their policies, plans, projects and activities and the establishment of the GAD Focal System and; *Women in Nation Building and Development Act* which directs all government agencies to allocate at least 5% of their total budget for gender and development.

- **Resource Pool of local gender experts**, certified by the Philippine Commission on Women (PCW), who can be tapped for GAD trainings and technical assistance.

- **Gender-responsive plans and budgets at local level:** local government units participating in the project are obliged to have gender activities and budget for them.
• **Gender training** of Community Facilitators, government partners and project management staff so they can effectively collaborate in awareness-raising on gender in fisheries and coastal resource management at community level.

• **Availability of gender analysis tools** such as the *Harmonized GAD Guidelines to Assess Gender Responsiveness of Projects* and; the *GAD Checklist for Fisheries* (livelihood and food security, fisheries and coastal resource management and conservation, research, and training) should ensure that BFAR projects are not only aware of gender issues faced by women and men, but also addressing them.

• **Presence of Gender Officers** at the national and regional FishCORAL project offices, who are primarily responsible for facilitating gender mainstreaming activities at their level.

**Expected Challenges**

• Top management and project team leaders who are highly competent in coastal resource management and less knowledgeable on gender tend to prioritize the technical aspects of coastal resource management and do not always respond to the recommendations of the gender officer. This could undermine gender equality outcomes of the planned interventions.

• Community Facilitators cover between 15 to 9 barangays or villages, which means that they have to deal with 9 to 15 CBOs that require assistance in the development of their livelihood projects and the preparation of coastal resource management sub-projects. The priority at this stage is to encourage women to join and to actively participate in the community organizations and to sensitize the men on the importance of women’s participation. This means that the facilitators will need to be skilled in the livelihood components, but also in gender-sensitization and training and facilitation skills – a very demanding terms of reference, which they may not all be able to fulfill effectively.

• Ensuring the gender-equitable allocation of resources for sub-projects, especially infrastructure projects such as fish-landing, jetty ports, watchtowers and the construction of bay management council buildings, will be a challenge because only men are trained to work in construction related activities and these resources are mostly used by men so far.

• Institutionalizing the gender mainstreaming processes in fisheries and coastal resource management in regional offices of BFAR after the project period will be a big challenge. BFAR regional offices are not adequately staffed, and especially lack gender expertise. This will pose difficulties for BFAR staff to take over the job of the Institution and Gender Officer, who is recruited by the project for the duration of the project only. Moreover, the GAD Focal Persons in the local municipalities are assigned their gender-specific duties in addition to their other administrative duties, which may lead to them prioritizing the latter.

**Lessons Learned**

Although it is too soon to derive final lessons from the FishCORAL project as it is still in its early stages, there are some good practices for gender mainstreaming related to the project design and initial implementation:

Sharing and building on **already existing gender resources** and tools, and knowledge from previous gender studies and projects of the donor and national agencies has helped chalk out a clear

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23 These challenges are only indicative at this stage, based on on-going experiences and expectations of the contributor from her first year of work in the FishCORAL project.
gender mainstreaming strategy for the FishCORAL project. The aim is to add value to the gender results achieved by previous interventions, while being aware of the main obstacles to overcome. For example, past experiences revealed that there are few traditional community organizations of fishers, and those were all male and did not consider the needs of women, who are involved in small scale mariculture or fish trading and processing activities. The project thus incorporated strategies such formation of CBOs in poorest coastal areas with quotas for women to improve livelihoods and of the neediest households. However, having more women in the groups does not automatically lead to their increased participation and decision making. Community Facilitators are tasked with monitoring the process of women’s empowerment through increased membership in CBOs, to share with their peers and project and government administration. (political and economic empowerment)

Conservation and sustainable CRM goes hand in hand with poverty reduction and income diversification of the poorest groups, especially women. Based on the learning that enterprise development and alternative livelihoods for women and marginal fishing households are essential to reduce pressure on coastal fisheries, FishCORAL has prioritized its livelihood diversification component in the initial phase of the project. Simultaneous actions to achieve this include gender-sensitive and participatory community consultations, and building gender capacity and sensitivity in local municipal governance and institutions. The findings are used to develop, innovate and adapt livelihood options according to the needs and interests of women, unemployed youth and indigenous groups. Best practices and challenges are shared with project management as well as with government institutions. (Economic empowerment)

It is important that local-level gender expertise accumulated during the project is not lost when the project terminates. An important component of the project’s gender mainstreaming strategy is building capacity of local level staff, such as the Community Facilitators and Gender Focal Persons, for carrying out gender-sensitive studies, participatory community-level consultations, and leadership development for women and the most marginal groups. It is important that during the project itself ways and means are found to retain dedicated and qualified gender staff in BFAR and the municipality and village administration units.

Case study contributed by: Paulina Lawsin Nayra, President WEAVERS (Women Enablers Advocates and Volunteers for Empowering and Responsive Solutions); Email: bestweavers@gmail.com

For more details on the FishCORAL project please visit the IFAD website
2.4. Good Practice: Advocacy for Gender-inclusive Ocean Management and Research

Both women and men are active users and managers of marine and coastal spaces, and have valuable related knowledge and capabilities, but the contributions of women have been routinely ignored or underestimated. At the UN Ocean Conference held in June 2017, Member states recognized the crucial role of women in the implementation of Sustainable Development Goal 14, Life Under Water, in their Call for Action.

Marine and coastal research, policy and management are areas where the gender gap needs to be urgently filled. To recognise the important contributions and work of Asia-Pacific women in marine sciences and ocean management, and to encourage involvement of more women in marine management planning, an international advocacy event was organized on 5 June 2017 at the UN Ocean Conference in New York, with the collaboration of 18 international agencies.

Titled "Healers of our ocean: Asia Pacific women leading action to achieve SDG14", the event showcased women's contributions to, and strategies for gender-inclusive ocean management and research. It also drew attention to on-going efforts to document valuable contributions made by Pacific women in ocean science or management. One such example is the Women Ocean Leaders website with, so far, thirty-one profiles of women researchers, students, entrepreneurs, trainers and managers making valuable contributions in oceanography, meteorology, fisheries, and in marine conservation, trade and even navigation.

The success of the June event and website profiles has stimulated more actions. In September 2017 UN Environment led a gender-mainstreaming workshop for climate and environment sectors in Samoa. In November 2017, another side event showcasing women's contributions in inclusive ocean and climate management was held at the 23rd United Nations Framework Convention on Climate Change (UNFCCC) Conference of Parties in Bonn.

Lessons learned:

- One-off advocacy events can be used as opportunities to generate a longer-term campaign on raising awareness of women’s contributions in coastal and marine ecosystem planning.
- Participatory and transparent discussion and planning between a wide group of national and international agencies led to a more organic growth and follow-up after the event, with stronger motivation and ownership of stakeholders.
- Advocacy initiatives should collect knowledge and experiences from a broad base, in this case of women linked to oceans and seas through their work, lives and study.

For more information on the Ocean Healers event and project, please contact Tiffany Straza at unep.pacific@unep.org
SECTION 3: Conclusions and Way Forward

Compile more case studies
This report finds that there is a critical lack of practical examples and case studies illustrating how projects and policies for integrated marine and coastal ecosystem management mainstream gender. Even when gender mainstreaming strategies and actions are explicitly written into project design in integrated coastal zone management projects or in policies for fisheries and coastal management, there appears to be little documentation about and sharing of the process, outcomes and impact of their practical implementation. It also finds that studies and reports on fishing and coastal zone issues such as disaster risk reduction and water and sanitation tend to integrate a relatively more gender-sensitive perspective, while documentation on the subjects of marine industry including shipping, deep sea and offshore exploration, waste management tend to be rather gender-blind. This despite the fact that there are definite gender concerns in the latter areas such as the differentiated impact of marine and coastal pollution on women and men in terms of health, income and work; the human rights and environmental issues related to unregulated and hazardous shipbreaking practices; and the illegal sea-based trafficking of men, women and children trying to escape poverty or war.

Way forward:
- Researchers, gender experts and project management should be encouraged to document their insights on best practices, challenges encountered and lessons learned from mainstreaming gender in the various areas of coastal and marine planning, giving special attention to the areas which lack gender perspective. Like in the case study from Odisha, this could be inbuilt into the project reporting and monitoring for learning between the project staff and the local community, and for learning within the local community.
- A synthesis of these learnings could be shared with peers in similar projects through webinars, dissemination events and an online global knowledge hub.
- The Ocean Healers advocacy initiative and the Odisha case also demonstrate that having local women, youth, and men talk in regional and international advocacy and dissemination events about their experience in managing coastal resources not only gives a different perspective to project staff and policy makers, but also helps motivate grassroots leadership across borders.
- Capacity Building in Gender for NGOs, project management and implementing staff and implementing Government Agencies, to learn why and how to mainstream gender in their work, is a first requirement.

Apply an Empowerment Approach
Technical managers and professionals who implement marine and coastal projects usually have no sociological background and need to learn to see and involve the different categories of people that are influenced by their interventions. An empowerment approach is easy for technicians. Technical staff have to reach their annual targets, which keeps them completely occupied. To encourage them to take the different categories of people into account, they need to learn that it is in the benefit of the outcome of their efforts, to involve all categories, including women and vulnerable groups. It is found that an empowerment approach with four elements, is easy for everybody to use, both to analyse and describe a situation, and as objective of the work.

Way forward:
- Include an empowerment approach with four elements in training programmes for staff, with practical example in a short field visit.
- It is not easy to know where to start to analyse a village, especially not for technical people, but open interviews, transect village walks, focus group discussions and key respondents interviews, which are processed into the 4 elements of empowerment, is possible for everybody.
Empowerment aspects can first be used as baseline, and later for monitoring: “how did the interventions influence the empowerment of the different categories?”

**Take more gender action**

Gender sensitive and gender responsive actions for equitable and sustainable coastal and marine management can be initiated at project, policy or even grassroots level, leading to gender mainstreaming over long term when there is collaboration and shared interest between different stakeholders. All the case studies featured in this report illustrate this clearly with context-specific push factors driving the actions and pull factors contributing to their success. For example, the women-managed plastic recycling cooperative in Yucatán demonstrates a true bottom-up initiative by coastal women that grew with cooperation from the municipal and regional authorities. The case of Odisha shows how an NGO initiates gender-responsive interventions in a resource-poor community hard-hit by climate change, which are taken up and owned by the entire local community, especially the women and youth, in a win-win scenario for people and environment.

**Way forward:**

- At project and policy levels, identifying all the relevant stakeholders through stakeholder mapping and inclusive and gender-sensitive multi-stakeholder consultations involving the local community, local government, civil society organisations and project management can make shared benefits clear for all stakeholders and motivate active participation.
- When projects facilitate regular feedback and monitoring sessions with each stakeholder group it helps to track problems on time and adapt interventions to better meet the needs of the target group and ecosystem.
- **Focus group discussions (FGDs),** at least annually, are enlightening. Most useful are FGDs separate for women and for men.
- These processes also contribute to long term goals such as local ownership of sustainable coastal management interventions and make most efficient use of local agency, knowledge and resources.
- **Separate activities for women** may be needed in case their position is very much behind that of men. In the end it is preferred to mainstream gender in all the project’s activities. This is possible when women feel free enough to speak up.

**Develop Strategies based on Gender Disaggregated Data**

Devising a gender mainstreaming strategy for a coastal management project or policy needs context-specific preparation and valid gender disaggregated data. The cases from Odisha and Philippines demonstrate how gender-sensitive baseline studies and surveys can provide a good picture of the differentiated livelihoods, access to resources and information, agency and interests of women and men of different age groups, ethnicity and socio-economic classes. This information is critical for project design, targeting and appropriate actions to ensure that the most marginal groups benefit from the interventions. On the other hand, the Yucatán research study shows how international and state policies and subsidies have marginalized women and poor urban coastal residents by targeting their subsidies and incentives towards rural-based, temporal and male dominated activities such as eco-tourism and sustainable fishing.

**Way forward:**

- Policies and projects in coastal and marine management must be informed by valid gender-disaggregated data from baseline studies and participatory consultations that include all stakeholders, especially the weaker groups.
- Such data should reveal for example:
  - the paid and unpaid work of women, men, youth and ethnic minorities;
  - their economic, social, political benefits from the work;
  - their ownership and access to productive resources like land, water, credit, equipment;
  - political, economic, socio-cultural and physical empowerment;
- their legal entitlements;
- their access to project resources such as training, information, loans, seeds and;
- their scope for decision-making at household and village level.

- Field staff, surveyors and researchers should be trained in gender-sensitive surveying and interviewing techniques. They should make sure they gather quantitative and qualitative information from the most excluded groups to reveal not just their vulnerabilities and problems, but also their local knowledge and capacities.

**Include all who are influenced**

Crucial for community-based integrated coastal management is the building of inclusive processes and demonstrated results for those who may be strongly affected by measures, but have limited means to engage in participatory processes. As seen in the Odisha and Philippines cases, increasing alternative livelihood options for women-headed and landless households through coastal conservation interventions by the project or NGO, can catalyse other gains such as those made for women’s leadership and their status in the community.

**Way forward:**
- Identification of marginalized groups and their needs and interests, complemented with technical analysis and access to resources can lead to a strong foundation for building more empowerment and sustainable futures in coastal environments.
- This is particularly relevant when initial stages require investment of time and labour from women and other groups who can ill afford them.
- There may be suspicion of trafficking people, in which case it is important that careful inquiries are done, and trust is built. Power relations can be threatening.

**Utilise NGOs’ and CBOs’ flexibility**

NGOs and local authorities can importantly contribute to sustainable management of coastal and marine resources if they are involved in project design and implementation. The Odisha case shows that NGOs can often be more flexible than government agencies and can act as a link between local communities, government bodies and resource agencies, facilitating and initiating new approaches to the protection and management of coastal resources. In the Yucatán case, government engagement with CBOs, especially women’s groups, in urban planning and policy can generate big gains for integrated waste management by addressing pollution caused by tourism and unsustainable consumption practices through effective policies and regulation, and their enforcement.

**Way forward:**
- Coastal and marine management projects should provide the space for multi-stakeholder dialogues involving local government institutions, CBOs and NGOs.
- When these institutions are male-biased in their membership and activities, projects should invest in building their capacity for gender-sensitive and gender-responsive actions, as in the case of the FishCORAL project in Philippines.
- Not all NGOs are more flexible than government agencies, and also not all of them have better contacts with the local people. It is important to use those organisations who have a good report with vulnerable groups.

**Leverage Women’s groups’ channel for ICZM**

Inclusive community-based organizations serve as a positive role model for mobilising women’s and men’s collective agency in sustainable coastal and marine management. Their members’ motivation and networking skills can achieve much more than top-down planned interventions, and may lead to growth of similar initiatives at regional and national levels. Furthermore, given their motivation and interest in household and environmental health, women can be an important
channel for introducing the concepts of integrated coastal management and sustainable development in a way that is meaningful to all members of their community.

**Way forward:**
- To enhance networking and advocacy skills of CBOs and representatives of marginalized groups, projects could provide leadership, public speaking, advocacy and environmental awareness training for women, men and youth engaged in coastal and marine management activities.
- Women, youth and indigenous people can be invited to actively take part in national and regional networks of practitioners working in the area of coastal and marine management.
- As in all the examples, the forums can provide critical space for recognising these groups’ valuable contributions in coastal and marine management, help promote the exchange of information and lessons learnt from the field, as well as engage the wider public in its awareness-raising and mobilising efforts.
- The real change takes place at the grass roots’ level. If women become leaders, they have already gone through a long and often difficult path of empowering themselves. Then they are very important for their villages and for development of coastal areas. These women need to be identified and utilised. Local power-holders may try to stop the women’s work.

**Use existing resources**
Projects and policies in coastal and marine management are not isolated in time or space and often inherit a vast pool of resources, tools and knowledge networks of the donor and national agencies which could be useful for developing effective gender mainstreaming activities. The wheel does not need to be invented again and again. The aim is to add value to the gender results achieved by previous interventions, while being aware of the main obstacles to overcome. In the Philippines example we see that learning from the experiences of previous projects, FishCORAL’s gender mainstreaming strategy incorporated deliberate actions to increase leadership of women in community institutions and to improve livelihood diversification of the poorest households in the target area.

**Way forward:**
- Projects and policies should make inventories of the available gender resources and tools from previous projects and donor and national agencies to assess their relevance for the specific regional and thematic context.
- Such an inventory could be useful in, for example, development of success indicators from management projects already implemented.
- It may also be useful to make use of local gender knowledge networks and resource persons such as community facilitators who have been involved in participatory baseline studies or community mobilization in previous coastal-based projects and interventions.

*Repairing nets, one of women's many tasks in fisheries, Bangladesh. Photo: Gender and Water Alliance*
SECTION 4: Further Resources

Case studies

- Food and Agriculture Organization (FAO) website/Gender and Food security pages. These pages have a wealth of online resources on fisheries and aquaculture including case studies on gender and empowerment through aquaculture and integrated fisheries in Bangladesh, Indonesia, Philippines and Vietnam (search publications on ‘Fisheries’).

- Gender and Water Alliance (GWA) website. This is a vast online resource of information and literature on the subject of gender mainstreaming in the water sector. It includes sector-specific information and resources on Gender in Fisheries and Coastal Zone Management, with case studies from Uganda, Senegal, Tanzania and Bangladesh.

- UNDESA and WWF (1999) The Role of Major Groups in Sustainable Oceans and Seas. Background paper prepared for the Commission on Sustainable Development, Seventh Session, New York. This publication contains several relevant case studies from across the globe, showcasing the contributions made by women, youth and children, indigenous people and other Major Groups in the sustainable development of oceans and seas.

- UNEP (2015) Blue Economy: Sharing Success Stories to Inspire Change. This publication contains a case study about the TRY Women’s Association in Gambia, which works to tackle the joint challenges of unemployment and coastal degradation by empowering women oyster harvesters and educating them about sustainable harvesting and the delicate mangrove ecosystem. TRY is the first women’s association in Sub-Saharan Africa granted exclusive use rights to a fishery by a national government.

- Aguilar, L., Granat, M., & Owren, C. (2015). Roots for the future: The landscape and way forward on gender and climate change. Washington, DC: IUCN & GGCA. This publication includes case studies of gender-responsive initiatives in Climate change adaptation and mitigation, specifically one that examines how a women-led enterprise is helping rid Peru’s coasts of plastic waste, and a case of a gender-responsive approach in reef to ridges fisheries management in Micronesia.

Other Practical Resources

- Aguilar, L., Castañeda, I. (2001). About fishermen, fisherwomen, oceans and tides: a gender perspective in marine-coastal zones. San José, CR: IUCN. 267 pp This is a useful toolkit with step-by-step guidelines on how to mainstream gender into marine coastal management plans in the Mesoamerican region. It provides recommendations for how to include a gender perspective into these plans while providing the basis for why this is important.
Food and Agriculture Organization (FAO) website/Gender and Food security pages. These pages have a wealth of online resources on fisheries and aquaculture including a handbook on gender-equitable small-scale fisheries governance and development, manual for mainstreaming gender into fisheries project cycle management; a policy brief on Promoting gender equality and women’s empowerment in fisheries and aquaculture; and the only desk study ever done on Women’s contribution to the Seafood industry (search publications on ‘Fisheries’).

GIZ, SPC, UNDP, UN Women 2015. Pacific Gender and Climate Change toolkit. This toolkit is designed to support climate change practitioners in the Pacific islands region to integrate gender into their programmes and projects in sustainable development, natural resources management and disaster preparedness. It is designed to be a living document which will be revised and added to in future.

UNEP 2016. Global Gender and Environment Outlook. United Nations Environment Programme, Nairobi, Kenya. This publication includes a chapter ‘Marine and Coastal Communities and Ecosystems’ which gives a good overview of the gendered division of work, benefits and entitlements in fisheries and aquaculture; the gendered impacts of marine and coastal degradation and pollution on the health and vulnerability of women and men.
http://web.unep.org/ggeo/resources/downloads

Asian Development Bank 2006. Checklist for Gender mainstreaming in Agriculture. This tool provides a useful checklist of questions to ask and information to gather for gender analysis in fisheries. This can be used to generate gender disaggregated data that can inform policies and projects in this sub-sector. The toolkit can be downloaded in Bangla, Indonesian Bahasa, Mongolian, Nepali, Russian and Vietnamese languages.
https://www.adb.org/publications/gender-checklist-agriculture

Eisma-Osorio, R.L., Gamale, M.V., Amolo, R.C., Kirit, R.D., Patindol, A.C., White, A.T. 2012. A Sourcebook on Mainstreaming Gender into Coastal Resources Management in the Philippines. Coastal Conservation and Education Foundation, Inc., Cebu City, Philippines. The module was written with the intention of providing guidance to local government personnel, resource managers, and project implementers in addressing the gaps in the Coastal Resources Management (CRM) process that allow gender biases to remain. By setting the CRM process as an underlying framework for integrating gender equity concerns into local plans, programs, and policies, it is hoped that this can serve as a practical and realistic guide to combine aspects of gender and Violence Against Women concerns into local governance for CRM.