



The Donor Committee for Enterprise Development

Natural Resource Management: Empowering Women, Nurturing Nature

Disclaimer

There is a dominant narrative that portrays women as victims of climate change. This brief is part of a series of examples that challenges this view, portraying women as active agents of change, in the hope of inspiring donors to advance women's economic empowerment to address climate change. Donor Committee for Enterprise Development (DCED) members helped the Canopy Lab team identify the women featured in the briefs as examples of innovation. We thank the women that generously shared their experiences with us.

June 2024

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Introduction

The prevailing view in high-income countries that nature is an externality is leading the world towards a **tipping point**. But human activities do not happen in a vacuum: there is ample evidence that the overexploitation and degradation of natural resources **accelerates** the effects of climate change, and **vice versa**.









There is also evidence supporting the view that to stop the degradation of our environment, women must play a **key role in natural resource management**. Many donors are aware that **supporting women** as ecosystem stewards can foster economic empowerment and social equity, which are fundamental aspects of climate resilience.

By providing them with access to land, credit, and technology, women can diversify livelihoods, generate income, and reduce their communities' dependency on environmentally destructive practices.



Natural Resource Management: Empowering Women, Nurturing Nature

This brief highlights the determinants of success and lessons that interviewees shared with the research team. Their experiences can serve as inspiration for the development of support packages to similar women-led initiatives in the natural resource management sector.

	Water Management and WEE	Natural Resource Management and WEE
TARGETED RECIPIENTS	Association (Tunisia), and Community Development Committees (Bangladesh)	Community groups (Nepal), Cooperative (Senegal)
INCLUSION	HIGH (Women in remote rural areas in Tunisia, and internally displaced people in Bangladesh) 	MEDIUM (Women with increased presence in decision-making in Senegal, and women in leadership positions and access to resources for women's group in Nepal) 
EMPOWERMENT	MEDIUM (Increased mobility and women's entrepreneurship in Bangladesh, increase in agriculture and income generating activities in Tunisia) 	HIGH (Transformation of gender roles in Senegal, and increased women leadership in Nepal) 
ENVIRONMENT	MEDIUM (Improved infrastructure in Bangladesh, improved water access for 500 people in Tunisia) 	MEDIUM / HIGH (Early stages in Senegal but despite lack of environmental metrics, promising signs; positive results in Nepal measured in forest hectares under management) 
SUSTAINABILITY	HIGH (Both initiatives are continuing their work and rolling out projects) 	HIGH (Both initiatives have commercially sustainable operation models) 

Women and natural resource management

Water Management

Natural Resources

Natural resource management involves practices that promote the sustainable management of land, water, soil, and biodiversity with a view to restore the ecological balance, thus mitigating greenhouse gas emissions¹.

Women, as caregivers and resource users in many communities and societies, often possess traditional knowledge and practices that are crucial for the sustainable management of these resources. By increasing women's agency

and empowering them to participate in decision-making processes, their capacity to drive sustainable practices in the fight against climate change is enhanced. On the other side, environmental degradation, exacerbated by climate change, can further aggravate challenges faced by women, leading to increased poverty and vulnerability.

When women are empowered to participate in natural resource management, they can adapt to changing environmental conditions and

mitigate the impacts of climate change on their communities. The participation of women in natural resource management is associated with **better resource governance and conservation outcomes**.

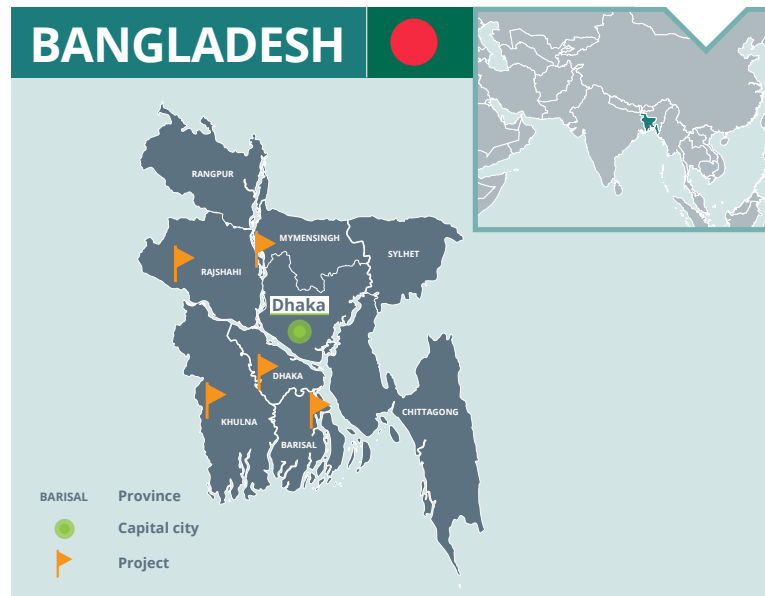
SIDE NOTE

¹ This can happen through afforestation, reforestation and sustainable forest management that restore forests' carbon sink functions; promoting sustainable agriculture practices that ensure that the soil continues sequestering carbon; or wetland management practices that ensure aerobic decomposition to avoid methane emissions.

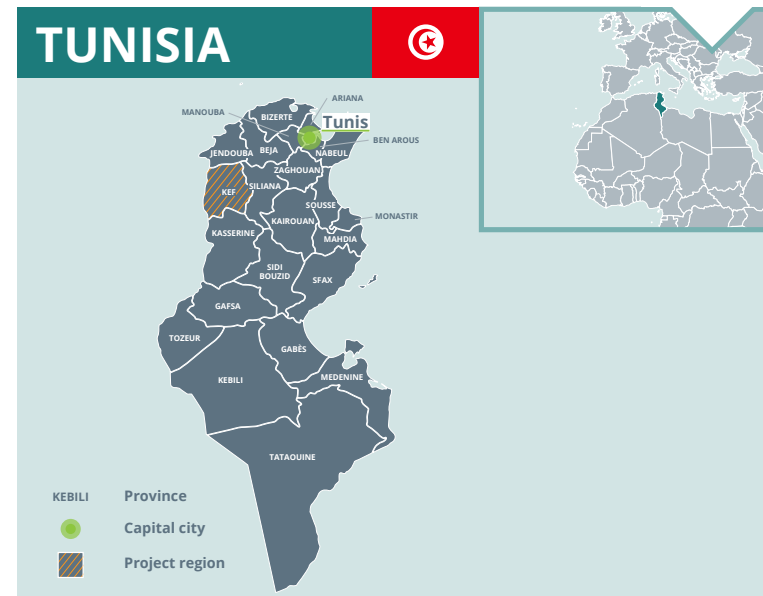
As the following examples show, women-led initiatives focusing on waste management, sustainable agriculture, reforestation, and water conservation not only contribute to ecosystem health but also enhance community resilience to climate-related disasters.



This brief features four women-led initiatives in the areas of water, waste, and natural resource management across a range of geographies and urban and regional contexts:



Through the **Urban Management of Internal Migration due to Climate Change (UMIMCC)**/ Urban Management of Migration and Livelihoods (UMML)² project in Bangladesh, the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) GmbH provided support to Ms. Rokeya Rahman to represent the interests of the informal settlement community that to a high degree consists of internally displaced persons who were affected by the climate crisis;



Ms. Chala Missaoui received support **from the United Nations Development Programme's (UNDP) Small Grants Programme**³ to test sustainable water delivery models to remote villages in Tunisia;

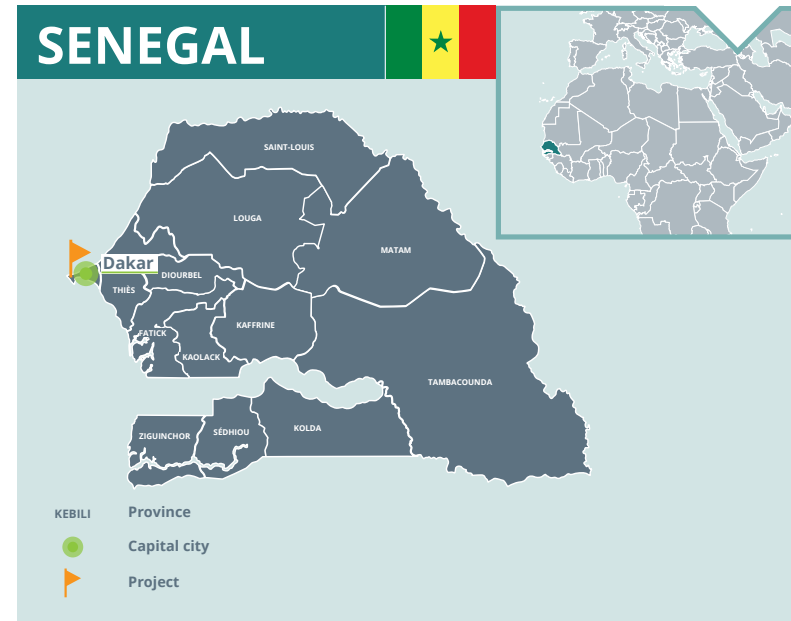
SIDE NOTE

2 Funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), co-funded by the European Union (EU), and implemented by GIZ Bangladesh. "The project aims to improve the living conditions of climate migrants and other vulnerable urban poor in 47 slums, and those of EU returnees in the cities of Barishal, Khulna, Rajshahi, Satkhira and Sirajganj". [Website](#), accessed May 2024.

3 "The Small Grants Programme (SGP), funded by the Global Environment Facility (GEF) and implemented by the United Nations Development Programme (UNDP), supports community-led initiatives that address global environmental issues. SGP empowers local civil society and community-based organizations, including women, indigenous peoples, youth, and persons with disabilities, through a decentralized delivery mechanism at the country level". [Website](#), accessed May 2024.



The Federation of Community Forestry Users Nepal (FECOFUN) received support from the Swedish International Development Agency (Sida) to advance the interests of women representing their communities' interests in sustainable forestry management as shared by Ms. Bharati Pathak, formerly a Chairperson and currently an advisor to FECOFUN; and



In Senegal, Ms. Ndeye Marie Rose Mendy shares the **Cooperative Society of Solid Waste Collectors of Mbeubeuss-Bokk Diom's** experience receiving support from the International Labour Organisation (ILO) to establish itself and advance the rights of women.

Ripples of Change: Water Management through Women's Economic Empowerment



Ms. Chahla Missaoui,
member of a water
association

Across low-and-middle-income countries, women are primarily responsible for water collection and management at the household and community levels. But they are also agents of change when it comes to ensuring that safe water is available in their communities. The research team interviewed Ms. Chahla Missaoui, whose association received support from UNDP's Small Grants Programme to increase access to water in **rural** Tunisia.

The team also interviewed Ms. Rokeya Rahman from Bangladesh, who shared the experience of the support from UMIMCC/UMML⁴ project, implemented by GIZ. This support was used to expand her network to secure access to safe drinking water for climate induced internally displaced persons as well as for host communities in informal **urban** settlements.

SIDE NOTE

4 **Urban Management of Internal Migration due to Climate Change project/** Urban Management of Migration and Livelihoods.





INCLUSION

Inclusion: women fighting for the rights of youth and internally displaced people to access water.

In Tunisia, Ms. Missaoui shared that “the ones who benefited the most [from improved water infrastructure in rural areas] were women who needed water to carry out their daily lives, at home but also in agriculture”. The association she set up in Tunisia piloted the establishment of water reservoirs in households located in a remote village to capture rainwater, and distributed water tanks to young people in rural areas, aiming to support their economic activities and improve their livelihoods. These activities have been inclusive on several fronts: because of the remoteness of the area where they take place, because access to water has allowed women to improve their household health while also supporting their economic activities, and because youth

have been supported to act as water stewards. In the very different context of Bangladeshi cities, Ms. Rahman shared her experience as the President of the Federation of Community Development Committees (CDC)⁵ from Khulna City, which represents 96,720 households. As she explained, the CDC Federation has been advocating to city officials to support climate-induced internally displaced persons (IPDs) arriving in urban centres and improving the living situation in informal settlements, where they mostly live. This support includes climate adaptation measures and access to utilities for slum dwellers. Ms. Rahman also shared her experience working with the project in developing Community Action Plans as part of the “Social Lab” participatory planning approach. Through this, her group identified that access to safe drinking water was an issue in the informal settlement



SIDE NOTE

⁵ According to the GIZ, each Community Development Committee (CDC) is formed of 10–12 members, 5–25 CDCs form a cluster in one city ward, and there is a Federation of CDCs across wards. CDC leaders are democratically elected. The CDCs are officially recognised by city officials and focus on women’s empowerment. CDCs are entities that are democratically elected and 90% composed by women.





where she lives, and through the preparation of a proposal and funding request they got local government support for the “construction of two tube-wells, toilets, and a bathing house for women”. In other cities or informal settlements the problems might vary, but through participatory planning communities are advocating to address their most pressing challenges. These efforts support more inclusive environments for women, who are also sharing their knowledge with unschooled children through trainings, for instance, on community rooftop gardening.

Design features that contributed to inclusion as an outcome: Ms. Missaoui emphasises the importance of linking with the public sector for her initiative. The grant she received allowed her to establish a partnership with a regional agricultural directorate, which ensured that water infrastructure was installed closest to the most vulnerable. Similarly, involving local authorities in Bangladesh and supporting women as credible interlocutors for local authorities supports a mentality shift that favours inclusion beyond programme objectives.





ACCESS

Access and agency: from water to entrepreneurship.

Ms. Rahman was adamant that she never expected that the support she received in the framework of the CDC would advance women's causes to the degree it has. She shared that women participating in the CDCs are encouraged by their husbands to engage in economic activities outside of the household, whereas **"before they would not want us to leave our homes"**. She notes there has been a significant increase in women's entrepreneurship throughout her city, and more women can now contribute to their households' incomes. As she explained, **"results went beyond our expectations: we never thought that women would be going out for work or other reasons without their husbands' permission. But they now see our potential for income generation, and our husbands encourage us to go out"**. This is a result of the project's trainings and entrepreneurship

support. While in Tunisia the emphasis on entrepreneurship was less strong, Ms. Missaoui is convinced that ensuring women's access to reliable water close to their homes has allowed them to increase their agricultural and income generating activities.

Design features that contributed to access as an outcome: While the focus of support was on livelihood improvement for the residents of informal settlements, GIZ included trainings on entrepreneurship as part of its work with CDCs.

This knowledge was seized by women and has resulted in increased rates of business start-ups and self-employment.



**Ms. Royeka Rahman,
network for safe
drinking water**





ENVIRONMENT

Environment: the case for resilience.

Increased flooding, extreme weather events, health risks, and internal displacements caused by the climate crisis add to the pressure on informal urban settlements in Bangladesh. Resilience-building measures are crucial to mitigating these impacts. The work that CDCs undertake in improving drainage systems, enhancing infrastructure, promoting water conservation, and integrating climate adaptation into urban planning are essential.

Similarly, in remote rural areas in northern Tunisia, water scarcity leads to increased vulnerability, both through direct mechanisms such as limited access to safe drinking water or direct impacts on agriculture, as well as through increased rates of conflict and emigration. Piloting small-scale solutions that can support improved resilience at the community level is an important way to address the issue. According to Chahla, "what our region [North of Africa] needs is citizen

involvement in water management. Climate change has led to water shortages. We have many water sources that are not well managed. Regional administrations lack funds to do it properly". Through the association, "we partnered with the regional agricultural directorate to select sites to improve water infrastructure and ended up improving access to water for 500 people".

Design features that contributed to environmental outcomes: in both examples, donor support has been instrumental in managing water as a precious resource – whether through improved harvesting techniques or through improved infrastructure, combined with technical assistance that allowed beneficiaries to gain new skills, strengthen networks and exposure to political decisionmakers.





SUSTAINABILITY

Sustainability: inspiring change.

Ms. Rahman shared that some organisations are copying the interventions initiated by her CDC such as community gardens and expressed a wish to see the project rolled out to more cities to support more women affected by the climate crisis and urban poverty. Ms. Missaoui shared that she is continuing her mission to distribute water in rural areas in Tunisia, targeting two further regions.

Design features that contributed to sustainability as an outcome: CDCs are recognised institutions in Bangladesh: by choosing to channel its support through CDCs, the UMIMCC project ensured sustainability while supporting public private partnerships for the provision of a public good. In the Tunisia example, this has also been sought at a smaller scale by promoting a partnership between Ms. Missaoui's association, which acts as a service provider, and the regional agricultural directorate.



Landscapes of Opportunity: Exploring the Intersection of Natural Resource Management and Women's Economic Empowerment



**Ms. Bharati Pathak,
Advisor and Former
Chair-person of the
Federation Community
Forestry Users Nepal
(FECOFUN)**

In many countries, women living in rural areas have responsibilities linked to sustainably managing and generating livelihoods from the forest. Within and outside their homes, they are also primarily responsible for waste management and are often involved in waste picking activities as part of recycling efforts that are often informal.

Ms. Bharati Pathak, Advisor and Former Chairperson Federation of Community Forestry Users Nepal (FECOFUN)⁶ in Nepal, shared her experience on successfully advocating for policies to allocate forest resources more equitably between men and women. With Sida's support, FECOFUN supports community groups that must include at least 50% women representation to establish community-based enterprises to economically benefit and sustainably manage forest resources. In Ms. Pathak's opinion, **"FECOFUN has been instrumental in promoting women's leadership and participation in natural resource management"**, even though they still struggle with **stereotypical** ideas of male leadership.

SIDE NOTE

⁶ FECOFUN is the largest civil society and community representation organisation in Nepal. FECOFUN's structure comprises various levels, from provincial to local federations, down to community forest users' groups (CFUGs). Notably, there is a mandatory 50% representation of women in all leadership positions within CFUGs, as mandated by the organization's constitution since 1995.





Ms. Ndeye Marie Rose Mendy, Secretary General from the Cooperative Society of Solid Waste Collectors of Mbeubeuss-Bokk Diom



Ms. Ndeye Marie Rose Mendy, who is the Secretary General from the Cooperative Society of Solid Waste Collectors of Mbeubeuss-Bokk Diom (a landfill in Dakar) since 2022, shared a different perspective. The Mbeubeuss-Bokk Diom Cooperative has over 700 members, more than half of who are women. The cooperative was established in 2021 following extensive participatory research conducted by Women in Informal Employment: Globalizing and Organizing (WIEGO) and the International Labour Organisation (ILO).

Landfills such as Mbeubeuss-Bokk Diom are notorious for causing adverse health and environmental effects not only due to decades of accumulated unsorted waste that leaches into water sources and the soil, but also due to airborne particles that are released as pickers try to obtain valuable materials through burning. They are also known for being sites of poverty and insecurity, particularly affecting women.





INCLUSION

Inclusion: fighting for representation:

In Mbeubeuss-Bokk Diom, before the cooperative was established, Ms. Mendy shared that **“there used to be a clear hierarchy when it came to choosing the most valuable waste as new truckloads arrived. When women spoke, we were ignored. Men said they were in charge”**. Through a series of workshops in which both men and women participated, this has started to change, and women are more heard in decision-making processes. While Ms. Mendy says that it is more advantageous for younger women to be members of the cooperative as they are more economically active, the benefits extend to older women as well. She believes it is important that men and women are part of the

cooperative, though she does acknowledge that since women start out from a more disenfranchised position, they experience the benefits of belonging to the cooperative faster than men. From her side, Ms. Pathak sees inclusion from three angles. First, in terms of representation at community level, she observes that while women may be put forward in leadership positions, they still are likely to face criticism from men and suffer from insecurity. This has led FECOFUN to prioritise the provision of capacity building for leadership development for women. Secondly, by supporting User Group Committees in the forest sector, women are empowered to derive economic benefits from working in





the forest. In Ms. Bharati Pathak's words, "Community Forest User Groups benefit from income linked to working in the forests, and the Committees force users to allocate a budget line to women, indigenous people, and poor people": within Community Forest User Groups, forestry area must be allocated to women for 15 to 20 years. Thirdly, FECOFUN's executive leadership must be composed of **50 percent women**: this has proven vital to gain legitimacy as an organisation that supports equality and inclusion.

Design features that contributed to inclusion as an outcome: ensuring that statutes require at least equal membership rates and preferably women representation at senior level is an important way to ensure that women's voices are heard. Ensuring that women receive not only technical capacity building but also support to build their confidence and leadership skills also supported inclusive outcomes in the cases presented.





ACCESS

Access and agency: creating safe spaces

Ms. Mendy highlighted that since its inception in 2021, the Cooperative has played an important role in empowering its members, particularly women. She emphasized the economic benefits and the transformation of gender roles within the waste recovery process, as the cooperative provided a platform for women to assert themselves and challenge traditional gender stereotypes prevalent in waste management. A notable success highlighted in the interview was the cooperative's gender-based violence awareness training, which contributed to a better understanding of gender issues and fostered a safer working environment for women waste pickers. Membership in the cooperative has also led to increased income opportunities for its members, which has helped make the business case for more women to join

as they see the economic benefits of selling larger amounts to buyers, combined with the possibility of accessing protective equipment that limits their exposure to harmful waste. Ms. Mendy discussed the cooperative's potential to further enhance members' economic and social well-being through initiatives such as transforming waste materials and supporting members to benefit from health coverage. She is adamant that one of the most impactful ways in which the project helped women was through capacity building, particularly around self-confidence and leadership: **"it changed our lives"**. Belonging in the cooperative has also allowed some women, including Ms. Mendy, to become micro-entrepreneurs, which is an important way for them to diversify their income sources. According to Ms. Pathak, for





FECOFUN it was also important to create safe spaces for women to be able to voice their views: “when we invite men and women to jointly discuss issues, we notice women remain quiet”. This has prompted FECOFUN to organise separate groups and to continue supporting women through capacity building so they can access leadership roles. One of the unexpected effects of this is promoting women into leadership positions outside of forest groups.

At the local government elections that took place in 2017, several women who had engaged with community forestry **won seats**, and this could be partially explained by the capacity building support they received to build their leadership skills.

Design features that contributed to access as an outcome: in Senegal, ILO’s support has allowed the cooperative to present a clear and compelling business case for women to become members: they can get benefits from selling aggregated waste, while challenging gender stereotypes and building self-confidence and leadership skills.

Sida’s support to FECOFUN to establish spaces where women can exchange without men has also been instrumental to ensure women’s needs are heard. In both cases, it was key for donors to combine several support interventions that contributed to women’s access and agency.





ENVIRONMENT

Environment: claiming spaces for women and for nature

Based on its successes to date, FECOFUN is now advocating for 60% of the national parks to be administered under community user groups, which would be a huge win for indigenous communities and the women that represent them.

While FECOFUN has seen an improvement in sustainably managed forests since its establishment in 1995, Ms. Pathak shares an unresolved issue “**core to the rights of indigenous people and women’s rights: the human-wildlife conflict playing out at the National Park**”, which FECOFUN is trying to address. In Senegal, safer waste

management practices and capacity building are supporting pickers to reduce the need for raw materials by collecting and treating waste in ways that allow it to be sold and reused: this limits the need to purchase virgin inputs across a range of industries.

Design features that contributed to environmental outcomes: forest management and waste are two areas that are directly linked to environmental improvements, which ensures that project results contribute to positive environmental outcomes.





SUSTAINABILITY

Sustainability: expanding membership

Ms. Pathak shares that FECOFUN has grown since its launch in 1995 when it only had 200 members. It currently counts over 30,000 affiliated forest user group members and 550 local federations and supports over 1,075 community forest groups led by women. While Ms. Pathak believes FECOFUN would continue existing even without donor support as it operates based on membership fees, she sees the support that donors provide in terms of capacity building as a huge addition to FECOFUN's work. In terms of replication, she notes that while in Nepal there are other interest groups in the areas of water, irrigation, and electricity, they do not have as strong a mandate for women leadership and representation. Ms. Mendy expects that the Mbeubeuss-Bokk Diom cooperative will continue growing as she constantly receives requests from pickers to join. The cooperative also follows a fee model that means it is commercially sustainable. She highlights that "even before we got project support, we wanted to establish a

cooperative – but we just did not know how to do it":

this means ILO supported an initiative for which there was already buy-in, which is a contributor to sustainability. Besides membership fees, she believes the cooperative will be sustained through the work it does creating spaces for dialogue with public institutions. She also has a vision to start adding value to the waste before selling it as part of the cooperative, to increase economic benefits. For example, she wants to start composting waste and selling it as ready-made compost. She expressed confidence in the cooperative's ability to sustain its efforts even after external support ends, given they operate under a fee-based model.

Design features that contributed to sustainability as an outcome: in both cases, the donors supported initiatives that had previous buy-in and supported them to develop commercially sustainable operating models based on membership fees.



Lessons learned for donors

If you found the above inspiring, here are some suggestions for how you can design a programme that will support women's economic empowerment and natural resource management outcomes:

- **Support local initiatives that predate donor involvement to ensure sustainability and establish links with public institutions:** FECOFUN is a feminist organisation that predates the donor's involvement. Sida's support to FECOFUN showcases its approach to providing support to partners already working on addressing gender equality. Similarly, the ILO supported waste pickers in Senegal to formalise their cooperative, but there was a pre-existing motivation and a basic form of grassroots organisation. FECOCUN in Nepal, Cooperative Society of Solid Waste Collectors of Mbeubeuss-Bokk Diom in Senegal, and the Federation of

Community Development Committees in Bangladesh all include a strong focus on establishing dialogue with the public sector, which not only gives them legitimacy as credible interlocutors for decisionmakers: it also increases their attractiveness to potential members, who see them as effective policy platforms.

- **Think about commercial viability from the outset:** the waste cooperative was established following extensive research and consultation with waste pickers, which led to the articulation of a business model that requires membership fees. FECOFUN also operates as a membership organisation. Expecting that members join an initiative at no fee and that they later are willing to pay is risky: figuring out sustainable membership models supports sustainability.

- **Promote women's leadership and entrepreneurship at individual level:** while supporting women collective efforts seems to promote sustainability, the interviewees highlighted the importance of receiving training on entrepreneurship skills as a key enabler of their work. Building their confidence and leadership has resulted in more vocal attitudes towards driving change.

This document has been created by
The Canopy Lab on behalf of the Donor
Committee for Enterprise Development (DCED)
www.enterprise-development.org.

Layout: EYES-OPEN and weissbunt
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The publication was created in collaboration
with Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH and the finan-
cial support of the German Federal Ministry
of Economic Cooperation and Development
(BMZ). Its content does not necessarily reflect
the views of GIZ or BMZ.

Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany
Friedrich-Ebert-Allee 32 + 36
53113 Bonn

T +49 228 44 60-0
E info@giz.de
I www.giz.de/en



On behalf of





The Donor Committee for Enterprise Development