



Until we are all equal



Seaweed farmers in Kwale, Kenya, rely on shorelines that are shifting with climate change.

# Turning the Tide: Women leading climate action on Kenya's coast

With your help, 3,000 women are building the resilience of coastal ecosystems – and communities – in the face of climate change.

The first year of the **COSME** (Conservation and Sustainable Management of Coastal and Marine Ecosystems) project assessed **community needs**, identified **key partners** and raised awareness on climate-related issues, setting a **foundational shared vision** and **collective goals**.



Students plant trees in Kwale County.

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Women like this seaweed farmer are at the heart of climate solutions in Kenya, and of the COSME project.

THE FIRST WORD

# New Futures in the Blue Economy

Women in coastal Kenya can stand at the forefront of climate response and become leaders in new sustainable businesses.

**A**s a seaweed farmer in coastal Kenya, Mima knows the coastline intimately. Over the years, she has seen the devastating impacts of the climate crisis and harmful practices like overfishing and trees being cut down for charcoal. Fish populations are disappearing, and the shoreline keeps creeping further inland. Mima and many in her community rely on industries like fishing, seaweed farming and subsistence farming, but it has become increasingly difficult to make a living and support a family.

“These communities understand the impact of environmental degradation better than anyone,” says Annick Gillard-Bailetti, coastal resilience advisor for the **Conservation and Sustainable Management of Coastal and Marine Ecosystems (COSME)** project. “They see first-hand how deforestation and mangrove destruction affect their livelihoods, health and even their children’s access to education.”



COSME supports coastal communities in Kenya – especially women – in finding ways to protect the environment that so closely impacts their lives and livelihoods. With new skills like mangrove restoration, sustainable seaweed farming and forest conservation, these women are restoring ecosystems and helping their communities be better prepared for the impacts of the climate crisis.

Beryl Odour, who leads the project in Kenya, adds, “We hope women’s voices will strengthen advocacy for environmental protection, disaster risk reduction and sustainable livelihoods. Now is the time for the women to rise and lift up their families and communities.” >

**Seaweed farmers share their experiences with a member of the COSME project team.**



These women have been stewards of these lands for generations. Tapping into their knowledge and leadership is critical.”

—Annick Gillard-Bailetti,  
COSME coastal  
resilience advisor

## NATURE-BASED SOLUTIONS

These new skills give women opportunities to step into leadership roles in businesses. For example, seaweed can be processed into products that can be sold locally, like detergents and bio-stimulants for soil, rather than sending it away to other industries. Forest conservation includes growing marketable plants like mushrooms and medicinal herbs.

As women in Kwale and Kilifi counties build businesses that respond to and withstand climate change, they are also becoming vocal advocates for tackling the environmental issues in their region. “Many of these initiatives are done in groups, which creates a sense of camaraderie,” says Gillard-Bailetti. “This teamwork helps build momentum to push for lasting change.”

Each component of the COSME project will help feed into this momentum. “We recognize that everything is connected,” Gillard-Bailetti says. “What happens on land affects the coast, and what happens at the coast impacts the sea.”

## THANK YOU FOR YOUR SUPPORT

Your trust in Plan International’s mission is deeply appreciated. Thank you for standing with the women of Kenya as they build sustainable livelihoods and restore the vital ecosystems they depend on.

This report details how your support has raised awareness of the effects of climate change, identified key environmental risks and helped implement real solutions to protect Kenya’s coastal communities. Together, we’re turning the tide.

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## Project facts

**WHO:** The COSME project will work closely with 3,000 women to restore vital ecosystems and advocate for inclusion in climate solutions. Additionally, through activities like school clubs and trainings, 49,000 people – including 26,000 women and girls – across 110 coastal communities in Kenya and Tanzania will take part in the project. The project is funded by Global Affairs Canada and individual Canadian donors, and delivered in partnership with the Jane Goodall Institute of Canada and Cascadia Seaweed Corporation.

**WHAT:** COSME focuses on supporting communities, especially women, to better prepare themselves for the effects of climate change by promoting climate-resilient earning opportunities and by improving the health of the ecosystems they rely on.

**WHERE:** In Kwale and Kilifi counties in Kenya. (Project activities led by the Jane Goodall Institute are taking place in the Tanga and Pwani regions of Tanzania.)

**WHEN:** March 2023–March 2026

**WHY:** The COSME project has three goals:

1. Women are better able to adapt to the effects of climate change, thanks to ecological restoration and sustainable nature-based businesses.
2. Local organizations, like women’s rights groups and youth groups, are equipped to bring their voices to regional and national forums, where they can demand inclusion in climate response plans and policies.
3. Women are able to exercise more agency in household and community decision making.

Thank you for  
your continued  
support.



Coastal communities in Kenya rely on a web of interrelated ecosystems.

## THE SCENE

# Rising Seas: Kenya's Coastal Crisis

Women and girls bear the brunt of the effects of climate change.

**K**enya's coastal ecosystems drive tourism, fishing and agriculture, support biodiversity and protect communities from flooding. But a triple threat has them on the brink of collapse:

- 1.** Coastal warming and extreme weather are disrupting the life cycle of fish and other vital plant and animal life.
- 2.** As the environment changes, indigenous species and pollinators are disappearing, destabilizing the ecological balance.
- 3.** Ecosystems that protect against the effects of climate change are being depleted by overfishing, tree cutting and land clearing.

### AS CLIMATE CRISES WORSEN, WOMEN AND GIRLS SUFFER MOST

"In rural areas, women handle most household tasks like food production, water collection and gathering firewood – all of which are highly sensitive to climate disruptions," explains Gillard-Bailetti. When floods occur or natural resources are damaged or depleted, women and girls are often forced to travel longer distances, under unsafe conditions, to get what they need. Or they lose access entirely: When fish migrate further offshore for cooler water, for example, women simply have no way to reach them.

That's why women are at the heart of the COSME project. With your support, we are partnering with women's collectives to implement three powerful solutions that preserve and revitalize fragile ecosystems while offering empowering leadership opportunities for women. "Women's participation in climate action is crucial because their livelihoods, health and safety are so directly tied to natural resources," says Gillard-Bailetti.

## Three eco-friendly solutions

- ▶ **Mangrove restoration**  
Mangroves protect coastal communities from storms and rising sea levels, storing up to four times more carbon than inland forests. Restoration will help reduce the damage that climate-related events have on communities.
- ▶ **Sustainable seaweed farming**  
Seaweed reduces coastal erosion and creates fish habitats. It can also be farmed for export or processed into marketable products like shampoos and lotions.
- ▶ **Forest conservation**  
Eastern Africa's coastal forests are biodiversity hot spots under threat. COSME promotes conservation techniques to restore terrestrial forests (such as planting native species) and alternative livelihoods like mushroom foraging that don't deplete the environment.

BY THE NUMBERS

# A few highlights of what your support is making possible

The first year of the COSME project assessed community needs, identified key partners and raised awareness on climate-related issues, setting a foundational shared vision and collective goals.

*In the project's first year, these numbers are subject to change, based on community needs and interests.*

## BUILDING PARTNERSHIPS FOR ECO-FRIENDLY BUSINESSES

We've partnered with local conservation groups to promote sustainable practices and create new income opportunities, with a focus on empowering women.

**1,200** members (840 women) of 43 conservation groups will receive mangrove conservation training.

**20** groups, including 600 women, will be trained in seaweed production.

**44** groups, with 1,800 members (1,215 women), will receive forest conservation training.

**62** savings groups will gain skills to access loans for business and household needs.

## PLUS

- > A study was launched to explore **climate-resilient seaweed varieties**.
- > **6,767** solar water-purification kits were acquired for participants and schools, saving women time spent collecting water.



Seaweed growing along the Kenyan coastline



Grade 6 student  
Elizabeth practices  
sustainable farming  
through her  
school's 4K club.

### IGNITING A NEW GENERATION FOR CLIMATE PROTECTION

The COSME team has partnered with schools, educators and community groups to raise awareness about environmental threats and solutions.

**114** educators and  
government representatives  
(37 women) have helped create  
school programs on climate resilience.

**8,663**

students (4,582 girls)  
have joined school clubs through  
Jane Goodall's Roots and Shoots  
program and participated in  
hands-on environmentally  
friendly projects.

#### > School agricultural clubs

Plan is working with school "4K" clubs.  
"4K" stands for *Kikundi ha Kilimo na Kaha* and is Swahili for "Agricultural and Rural Development Groups."  
Each club will come up with its own eco-friendly project to support the environment in their area.

“

Climate change  
heightens our  
struggles, because  
we don't have  
the knowledge  
and information  
to anticipate  
disasters and  
adapt to how they  
will affect our  
farms.”

—Marinda, a COSME  
project participant  
in Kwale County

A STORY OF CHANGE

# Seaweed and Survival

Faced with a changing world, the women of Funzi Island are seizing new opportunities to protect their livelihoods.

**O**n Funzi Island in Kenya's Kwale County, the community thrives on fishing, small-scale farming, mangrove conservation and seaweed farming. For more than four decades, Mima has relied on seaweed to support her family, fund her children's education and sustain her household. "Seaweed is my daily livelihood," she says.

Once harvested, seaweed can be sold for export and processed into other products, like the food additive carrageenan. But in recent years, Mima has faced new challenges. Rising sea levels and increasingly harsh weather conditions threaten her crops. Drought brings disease, and heavy rains wash away the seaweed farms. "Thirty years ago, the ocean was far from where it is today," Mima says, pointing to the tide that is now just 30 metres from her home.

In 2019, Mima and other members of the Furaha Women's Self-Help Group received support from the Kenya Coastal Development Project and other organizations to bolster their seaweed farms. For a while, with this boost, the



group enjoyed plentiful harvests and growth. But in 2022, the project ended, and the women struggled to find buyers. Then, in October 2023, El Niño destroyed their crops. "The El Niño rains left us with nothing," Mima says. "We lost everything, even the seedlings."

## A FRESH START

With the launch of the COSME project – funded by Canadian supporters like you – Mima and the other Furaha Women's Self-Help Group members found a new source of support to help them recover their businesses. Plan is providing the seaweed farmers with new equipment, including drying shades, storage facilities, seedlings, ties, ropes and pegs.

Groups like Mima's are also learning sustainable seaweed production techniques and new ways to market seaweed, like producing bio-stimulants that restore >

Mima (centre) and members of the Furaha Women's Self-Help Group

**The COSME project will train 20 women's groups in sustainable seaweed production.**



soil health and provide a more environmentally friendly alternative to chemical fertilizers.

“My 120 ropes are ready [to tie the seedlings in place while they grow]. Now I’m looking forward to receiving the seedlings,” says Mima. With the support provided by the COSME project, Mima expects to increase her harvest enough that the earnings will allow her to finish building her house.

The Furaha Women’s Self-Help Group is also trained to act as a village savings and loan association. Now they have the tools to save collectively and access low-interest loans for their businesses or cover their household expenses. By the end of the year, Mima’s group had already saved KES 200,000 (C\$2,100).



Dried seaweed can be used in soaps, lotions and shampoo.

“Poverty is our greatest challenge. We rely on seaweed farming for income, but we refuse to lose hope.”

–Marinda, a COSME project participant in Kwale County

## OUR PARTNERS

### Jane Goodall Institute Canada

The institute will leverage its experience and expertise in community-centred conservation initiatives in Tanzania, focusing on forestry and school-based programs. Its experience will enhance community engagement through education and proactive conservation actions.

### Cascadia Seaweed Corporation

The corporation will lead research into locally relevant climate-resilient seaweed varieties and provide technical assistance. It will bring Canadian innovations in seaweed to the farming groups to help them improve their crops and identify other products the farmers can produce and sell from their harvests.

### Solvatten AB

Solvatten AB creates portable water-treatment and water-heating systems for off-grid households. These units reduce reliance on firewood for heating water and provide a practical solution for treating unclean water sources closer to home.

### Government of Kenya

The government will support Plan International by utilizing the expertise of different ministries – including the State Department of Fisheries, Aquaculture and the Blue Economy and the Ministry of Environment, Climate Change and Forestry – to support implementation in this area of Kenya.

PROJECT SPOTLIGHT

# Ecology and Equality: A Powerful Duo

Empowerment and gender justice are central to the COSME project. By shifting ideas about their roles, women will be able to step up as leaders to build more resilient communities and ecosystems.

**T**he COSME project empowers women to lead community and climate resilience through our Gender Justice Journey initiative. This enables women to advocate for themselves and their environment, enhancing their roles in businesses and community groups. So what does it take to achieve gender justice?

## GENDER JUSTICE JOURNEY

Each women's group receives training on their economic rights and on how the climate crisis exacerbates gender inequalities. They learn essential life skills like leadership

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“Many women along the coast are facing poverty and struggling to assert themselves. I want to see them empowered and working to enhance the precious ecosystem.”

—Beryl Odour, COSME project lead, Plan International Kenya

and decision making, outlined in newly developed Gender Justice Journey training materials. The program also brings men and women together to talk about gender equality and to re-envision their roles together.

## WOMEN AS CLIMATE ACTIVISTS

By collaborating with conservation groups and women's rights organizations, COSME contributes to a collective momentum to establish women as environmental leaders. This includes representing their communities at higher political levels and ensuring their voices shape solutions, policies and plans related to climate change, the blue economy, and coastal livelihoods.

## DEMANDING FAIR COMPENSATION

Currently, women in seaweed farming sell their harvests to intermediaries. With support from Cascadia Seaweed Corporation, a Canadian company specializing in sustainable seaweed cultivation, the COSME project is exploring new seaweed varieties and market opportunities, enabling farmers to create higher-value products to sell directly to customers. This shift will provide farmers with better compensation for their seaweed, hard work and dedication.

Women participants discuss their role in promoting sustainable ecosystems.





Senior project manager Beryl Odour (far left) met with farmers in Kwale County to understand their goals and challenges.

## HOW ECO-FRIENDLY SOLUTIONS HELP THE ENVIRONMENT AND THE COMMUNITY

- ▶ **Regenerative agriculture practices** focus on building healthy soil, improving water retention and reducing soil erosion, contributing to better nutrient cycling and carbon sequestration.
- ▶ **Renewable energy sources**, such as solar-powered water pumps, reduce greenhouse gas emissions associated with the use of mechanical irrigation, which uses conventional energy sources.
- ▶ **Strengthening inclusive communities, reducing risks and enhancing preparedness** for climate change will contribute to sustainable resource management and community ownership of natural resources.

## Thank you!

The COSME project is helping transform lives in the coastal communities of Kenya by empowering women to lead in climate resilience and environmental advocacy. Through Plan's innovative Gender Justice Journey, women are gaining the knowledge and skills to advocate for their economic rights while addressing the impacts of climate change.

As we look to the future, we are excited to see these empowered women spearhead initiatives that promote sustainability and climate action in their communities. Your commitment to COSME has made this possible, and we cannot thank you enough for standing with us in this vital work.

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**Thank you again for your continued support.**



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**Plan staff joined participants on a tour of a site where mangrove restoration efforts have begun.**

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## About Plan International Canada

Plan International Canada is a member of a global organization dedicated to advancing children's rights and equality for girls. Plan International has been building powerful partnerships with and for children for over 85 years and is now active in more than 80 countries. We stand with children, especially girls, wherever they are oppressed, exploited, left behind or not equally valued. We're determined optimists, and we will continue to persevere **until we are all equal.**