



SUSTAINABLE MANAGEMENT OF COASTAL AND MANGROVE ECOSYSTEMS PROGRAM 2014 - 2024



PROCOSTA

INTRODUCTION

long certain pacific coastal shores in Latin America, dramatic changes are underway. Mangroves, with their twisting roots and tangled foliage are increasingly under threat from deforestation and climate change. The degradation of marine-coastal systems depletes the rich productivity of these ecosystems, resulting in significant drops in fish and shellfish supply, decreasing agricultural harvests and a downward quality of life for the communities who depend on these areas for their livelihoods. These populations, many of whom are historically and culturally deeply tied to these ecosystems, are increasingly strained under the pressures of climate change to secure sustainable livelihoods amid such displacement and change. Heifer International, having worked previously in mangrove conservation and sustainable livelihood management, has developed the Sustainable Management of Mangroves and Coastal Ecosystems (PROCOSTA) to contribute to the environmental and economic sustainability of families, communities and territories in coastal and mangrove ecosystems. Working across eight countries, PROCOSTA provides a broad program framework under which select projects will integrate careful analysis, meaningful community and stakeholder collaboration and results-oriented and practical interventions with lasting conservation and community livelihood change.



BACKGROUND AND JUSTIFICATION

PROCOSTA tackles a central driver of increased poverty: the negative effects of climate change. Around the world, climate change is pushing poor people beyond their capacity to respond.



ivelihoods suffer as natural resources dwindle, precious resources and ecosystems required for maintaining environmental health disappear and communities are pushed further into poor health and lack of opportunities. Women and children are disproportionally represented in these contexts; the impact groups of PROCOSTA are no exception to this gendered face of poverty. Low-lying coastal zones suffer erosion and land loss, resulting in significant biodiversity decline and damage and expanding poverty pockets. It is critical to address these issues in the locations most affected, and PROCOSTA targets two ecosystems vital for mitigating climate change and improving livelihoods: oceanic coastal ecosystems and mangrove ecosystems. Coastal zones play a key role in oceanic carbon cycles and biological sequestration while wetland mangrove ecosystems help to regulate water ecosystem services.

A number of issues highlight the interreliance between mangrove and coastal ecosystems and the communities who live there. Deforestation in mangrove zones affects mangrove populations' resilience to face climate change. There are estimates that within 100 years, all mangroves worldwide could disappear if current trends in deforestation, urbanization, big business expansion and human practices continue. The increased economic vulnerability of mangrove communities especially affects women.

As women traditionally focus on the small-scale fishing and gathering that is so prevalent in these areas, poverty takes on an engendered dimension as scarcity grows and access to productive areas decreases. The food insecurity of people living in the mangrove ecosystems is a growing issue as populations grow and food prices increase due to falling production. For those people relying on healthy ecosystems for their livelihoods, their food security is directly tied to ecosystem security. Finally, the loss of biodiversity in these ecosystems (considered among the most productive on earth) leads to major losses for dependent

populations regarding their critical water, agricultural, and related livelihood needs.

The program opportunities in *PROCOSTA* focus on ensuring healthy marine and coastal ecosystems that are critical for the wellbeing of a growing population. In working with communities, stakeholders and partner organizations to develop and implement more sustainable human livelihood practices while also protecting and restoring increasingly fragile ecosystems, Heifer International expects *PROCOSTA* to make significant contributions to the broader fight against increasing poverty and environmental damage.



IMPACT GROUPS

PROCOSTA covers the ecosystems of mangroves, wetlands and coasts of Ecuador, Haiti, Guatemala, Honduras, Nicaragua, El Salvador, Mexico, and Peru. Working with nearly 200,000 families, the program will target low-income small-scale fishermen and gatherers who live in and rely on these ecosystems for their livelihoods. Ninety percent of these families live permanently in mangrove territories and work in artisanal fishing and also gather shellfish, crabs and other mangrove products. Twenty percent also work in complementary agriculture such as salt production, small animals and/forest species. Almost half of the target families live in Ecuador, Haiti, and Guatemala with the remainder living in Honduras, Nicaragua, El Salvador, Mexico, and Peru. These families all experience chronic vulnerability due to constant exposure to natural hazards, labor-intensive, low-yield work in physically demanding conditions (damp low tides infested with flies, etc.) and a lack of political representation and support.



Heifer International has developed an integrated three-tiered classification system for impact group selection. For PROCOSTA, Type A families are the most vulnerable families who gather foods in the mangroves with a low capacity for sustainable gathering and conservation practices. Thirty percent of *PROCOSTA* families will be Type A and will engage in activities to improve these gathering capacities. Type B families represent fifty percent of the target group and have a degree of productive overall capacity but need support to strengthen their market linkages

and role as value chain stakeholders. Activities will include diversifying income sources, community tourism and developing their capacities to pursue economic initiatives relevant to their contexts. Type C families have achieved a level of sustainable resilience regarding their livelihoods and represent twenty percent of the target group. Working with Type C families to further stabilize their livelihoods and business capacities will provide a critical "pull" dynamic for the bulk of the broader program beneficiaries to advance into Type C status.

PROGRAM ANALYSIS

he strategy, objectives, products and activities of *PROCOSTA* are all framed within the Heifer International theory of change (TOC) which proposes that "vulnerable, smallholder farmers and small-scale fishermen can attain sustainable and resilient livelihoods if their capacities are enhanced to increase income, access adequate food, and engage in environmentally sustainable production¹." With a concentrated focus to build women's empowerment along with social capital within producer organizations, *PROCOSTA* will use this theory as the analytical program basis.

^{1.} Source: PROCOSTA long form strategy pg 17.

Context analysis of the impact groups has resulted in five main action fronts in PROCOSTA:

- integrated ecosystem management;
- j improved household economies;
- working with markets under a value chain approach;
- 4 building organizational and institutional capacities and
- 5 advocacy and public management capacity.



Heifer International has completed significant context program analysis for PROCOSTA:

- Sustainable management of mangroves and coastal ecosystems examines how to further integrate ecosystem restoration with community climate change adaptation; *PROCOSTA* will use an ecosystems-based approach to adaption (EBA) that uses biodiversity and ecosystem services to help communities build their own climate change adaption strategies. Some examples of EBA include integrated water resource management, reducing disaster risk by restoring coastal and mangrove habitats and establishing diverse and complementary agricultural systems.
- Economic and sustainable livelihood improvements helps communities to engage more sustainably in their ongoing mangrove livelihood activities and to increase their incomes. As most mangrove communities manage their nutritional needs directly from the forests and also use the forests to maintain small-scale fisheries, doing so in more sustainable ways will strengthen overall community livelihood security.
- Mangrove and gender analysis provides further in-depth understanding of the role that women play in mangrove communities and how to build their role as meaningful stakeholders. Women carry out the bulk of the shellfish gathering but do not have strong organizational linkages or capacity; this further increases their marginalization and vulnerability.

Value Chain analysis and market linkages to promote economic opportunities deepens the understanding of the major opportunities and constraints for individuals and businesses in relevant value chains. There are two main steps: value chain mapping/analysis and producer organization analysis and assessment. The value chain mapping and analysis for PROCOSTA is a participatory process with stakeholders to analyze all the participants in a value chain and the related relationship dynamics shaping overall chain efficiency and equity. For example, key elements of relevant small-scale fishing value chains include production, bulking, transportation, marketing and service links (credit and capital). When stakeholders drive the analysis, solutions are more collaborative and realistic. Basing the analysis on wealth creation (a holistic approach examining multiple kinds of capital2) provides a

more integrated understanding. Value chain analysis also examines the broader operating environment (regulations, legal and political contexts and access to needed goods and services, etc.). The overall purpose of such analysis is to determine which chain aspects require the most support to more fully benefit the producers and consumers. Producer organizational analysis and assessment uses a microlevel approach to scan the business potential and management maturity of farmer or producer group organizations. This is done after the broader value chain assessment so as to understand how to best engage with these organizations. By working closely with these organizations, the PROCOSTA project teams can best support the organizations to maximize their value chain participation, formulate useful strategies and actions, and to undertake stronger policy engagement and advocacy³.

Capacity building and policy engagement trains relevant organizational stakeholders and leaders to apply their strengthened skills towards effective advocacy regarding sustainable management and conservation practices. These vulnerable communities have little

current advocacy capacity and are often simply not considered important players with regards to mangroves and coastal management. By building stronger alliances and informal linkages across various mangrove and coastal ecosystem actors, communities can better shape their broader operating environments.

^{2.} Heifer International defines "wealth creation" as integrating financial, natural, social, individual, established, intellectual, and political capitals.

³ Heifer International has several proven assessment tools that will be applied to *PROCOSTA* projects throughout the program.

TECHNICAL APPROACH

he main goal of *PROCOSTA* is to contribute to environmental and economic sustainability for almost 200,000 families as well as their communities and coastal mangrove ecosystem territories in eight countries in Latin America⁴. This will be achieved by mitigating climate change effects and improving the household economic, food security and livelihoods of the people tied to mangrove and coastal zones. *PROCOSTA* has four strategic outcomes, expected results and related activities:

- 199,835 organized families restore and/or conserve 94,500 hectares of mangroves in the region by designing and implementing territorial management plans, community territory protection strategies and directing mangrove restoration and repopulation actions (recovering soil and reforesting the mangrove). Community-based activities will include technical training in conservation practices and restoration, advocacy and gender, and ecosystem sensitivity.
- 2 199,835 organized families increase their resilience to the impacts of climate change through integrated ecosystem management, including monitoring the mangrove ecosystem and institution-building and capacity-building in advocacy for regional public policy design on climate change and ecosystem management. Activities include learning technical approaches for impact collection and analysis, advocacy, message creation, and building more effective partnerships.

^{4.} Program goal of *PROCOSTA* (source: long-form strategy paper)

- 79,934 program participant families improve their household economy through economic initiatives and using ecosystem services responsibly, including managing value chains for local items with high potential to adapt, working with the market and increasing their income by fifty percent. Communities will drive relevant value chain analysis, design marketing strategies and receive technical training in ecosystem services business and marketing.
- 4 199,835 organized families have improved their access to nutritious foods by conserving biodiversity and developing diverse agricultural systems, using local knowledge and maintaining their crops' genetic diversity, covering seventy percent of their food demand. Communities will learn to diversify food gardens, practice better nutrition and will engage in more conservation-based agricultural systems.



MONITORING, EVALUATION AND KNOWLEDGE MANAGEMENT

ROCOSTA reflects the Heifer International commitment to transparent, effective, and efficient livelihood programs that foster sustained care for the earth. Through this exciting new program approach, PROCOSTA and other Heifer International programs will use a plan that meets the broader long term program goals. While each project will still be carefully monitored and tracked at the qualitative and quantitative levels, the program framework will measure broader progress at this higher level. This framework will be used at all levels to raise and test design assumptions and to demonstrate evidence-based change and success in each of the implementing countries.



RESOURCE MOBILIZATION

s a ten-year regional program, PROCOSTA has a financial goal of USD \$105 million to generate the anticipated breakthrough changes and sustainable impact that the program has set to achieve. The financial support needed to reach this goal is being fundraised by Heifer International, development agencies, governments, foundations, corporations, and other public and private sources.



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