

IMPLEMENTING A STRATEGIC FRAMEWORK FOR SCALING UP ECOSYSTEM-BASED ADAPTATION

Success factors and lessons learned
from the EbA LAC program

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ACRONYMS/ABBREVIATIONS

ACUS	Áreas de Conservación y Uso Sostenible (Conservation and Sustainable Use Areas)
AFS	Agroforestry systems
APH	Áreas de Protección Hídrica (Water Protection Areas)
ARESEP	Autoridad Reguladora de los Servicios Públicos (Public Services Regulatory Authority)
ASADAS	Asociaciones Administradoras de Sistemas de Acueductos y Alcantarillados Comunes (Community Aqueduct and Sanitation System Management Associations)
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza (The Tropical Agricultural Research and Higher Education Center)
COCODES	Consejos Comunitarios de Desarrollo (Community Development Councils)
CONAP	Consejo Nacional de Áreas Protegidas (National Council for Protected Areas)
DAG	Decentralized autonomous government
EbA	Ecosystem-based Adaptation
EbA LAC	Scaling up Ecosystem-based Adaptation measures in rural Latin America
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICT	Instituto Costarricense de Turismo (Costa Rican Tourism Institute)
INAB	Instituto Nacional de Bosques (National Forest Institute)
INDER	Instituto de Desarrollo Rural (Institute for Rural Development)
INGUAT	Instituto Guatemalteco de Turismo (Guatemalan Tourism Institute)
MAE	Ministerio de Ambiente (Ministry of Environment)
MAGA	Ministerio de Agricultura, Ganadería y Alimentación (Ministry of Agriculture, Livestock and Food)
MARN	Ministerio de Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources)
NAP	National Adaptation Plan
NbS	Nature-based Solutions
NDC	Nationally Determined Contribution

PNDRTS	Plan de Desarrollo Rural Territorial de Sarapiquí (Sarapiquí Rural Territorial Development Plan)
SBD	Sistema de Banca para el Desarrollo (Development Banking System)
SUGESE	Superintendencia General de Seguros (General Superintendency of Insurance)
TPRH	Tarifa de Protección del Recurso Hídrico (Water Resource Protection Tariff)
UGAM	Unidad de Gestión Ambiental Municipal (Municipal Environmental Management Unit)
UNFCCC	United Nations Framework Convention on Climate Change



KEY MESSAGES

- ✓ **The experiences of the EbA LAC program show that scaling up Ecosystem-based Adaptation follows diverse and non-linear trajectories.** In every case, moving toward sustainable scaling processes requires strategies that integrate adaptive governance, capacity-building, and enabling conditions.
- ✓ **Integrating EbA into planning and management instruments faces common challenges in the three countries analyzed.** Successful experiences show that factors such as strengthening institutions' technical capacities, the evidence generated by successful pilot interventions, and coordinated work between local, sectoral and national actors have been key to overcoming these challenges.
- ✓ **Replicating good production practices rooted in the conservation and sustainable use of ecosystems was more effective when technical support was coupled with territorial governance processes.** Participation platforms and replication structures, as well as the inclusion of women, young people and local knowledge in decision-making, were fundamental in consolidating these processes.
- ✓ **The most dynamic thematic sectors for scaling up EbA in the countries analyzed include ecosystems and biodiversity, food and agriculture, water and sanitation, and infrastructure and human settlements.** These sectors show great potential for integrating EbA into policies, investments, institutional frameworks and local, sub-national and national governance mechanisms.
- ✓ **The experiences of EbA LAC in Costa Rica, Ecuador and Guatemala reveal distinct trends,** thereby confirming that scaling up EbA is a contextual process. Nevertheless, it is also a replicable process when adapted to the local environment and when success factors are brought together effectively.
- ✓ **The lessons learned show that scaling up EbA is more effective when it builds upon existing institutional frameworks and processes,** strengthens multi-level governance, and establishes financing pathways for long-term sustainable adaptation.



B. INTRODUCTION

In the face of rising climate impacts across the region, countries are seeking adaptation approaches that are effective, inclusive and sustainable in the long term (Ley et al., 2023; Feron et al., 2024). Against this backdrop, Ecosystem-based Adaptation (EbA) is increasingly being recognized as a strategic approach to tackle complex climate risks and promote various environmental, social, and economic benefits (Lo, Qi, & Jang, 2022).

In recent decades, governments, civil society organisations, local communities, and scientific institutions have made significant progress in implementing EbA measures. However, **scaling up** EbA – meaning the ability to consolidate, replicate, and institutionalize these experiences at the territorial and sectoral levels and within public policy and investment frameworks – remains one of the main challenges. Scaling up EbA, which falls under the broader umbrella of Nature-based Solutions (NbS), requires not only technical interventions but also robust enabling environments, including political leadership, adaptive governance, capacity-building, sustainable financing, and the integration of scientific information with local and Indigenous knowledge, among other key factors (Qi, Terton, & Jang, 2025).

Against this backdrop, the **Scaling up Ecosystem-based Adaptation Measures in Rural Latin America (EbA LAC)** program, implemented in Costa Rica, Ecuador and Guatemala, offered valuable insights into how EbA measures are scaled up in practice. Based on the documented evidence from **18 cases**, it is demonstrated that scaling up does not follow a single path, but rather manifests itself through multiple trajectories that combine **vertical** processes – associated with public policies, management tools and institutional frameworks – as well as **horizontal** processes linked to replicating community, sub-national/territorial and sectoral successful practices.

The aim of this publication is **to share lessons learned regarding the success factors that enabled the scaling up of EbA in the three countries**, using a strategic framework that integrates the dimensions of **i) governance, ii) capacity-building, and iii) enabling conditions throughout the EbA mainstreaming cycle** (Figure 3). The methodology included interviews and focus groups with key actors involved in the program, along with expert input and review. The fieldwork was supplemented by a review of specialized literature and of the United Nations Framework Convention on Climate Change (UNFCCC).



This publication is divided into four parts. The first presents the **conceptual framework** which guides the analysis. The second details the **scaling up experience briefs** generated through the EbA LAC program's implementation. Subsequently, a **regional summary** is presented, analyzing trends, success factors, challenges, and opportunities observed in the three countries. Finally, **conclusions and recommendations** to strengthen and accelerate future EbA scaling efforts are provided.

In offering an integrated analysis aimed at professionals and decision-makers, this publication seeks to contribute to global discussions on how to advance, expand and accelerate the adoption of the EbA approach. This approach is vital in the face of the triple socio-ecological crisis that confronts humanity, providing solutions to the impacts of climate change, biodiversity loss, and land degradation in Latin America and around the world.



KEY CONCEPTS

● What is Ecosystem-based Adaptation (EbA)?

EbA is an approach that uses **biodiversity and ecosystem services** to help people adapt to the adverse effects of climate change ([CBD, 2009](#)). The approach is based on the acknowledgement that healthy ecosystems **contribute to tackling climate impacts**, sustain livelihoods, and provide essential social, economic, and cultural benefits as part of a comprehensive adaptation strategy.

As a subcategory of Nature-based Solutions (NbS)¹, EbA focuses on **clear adaptation objectives**, ensuring that interventions produce tangible climate benefits while simultaneously promoting biodiversity conservation and sustainable development ([Qi & Terton, 2025](#)).

For a measure to qualify as EbA, it must meet certain criteria ([FEBA, 2017](#)):

- A.** Helps people adapt to climate change.
- B.** Makes active use of biodiversity and ecosystem services.
- C.** Is a part of an overall adaptation strategy.

Based on the most recent accepted definition of NbS ([UNEA 2022](#)), EbA measures can be classified into four main categories, which cover a range of interventions (Table 1). These categories are not exclusive and are often brought together within comprehensive adaptation strategies.

¹ Nature-based Solutions (NbS) are “actions to protect, conserve, restore, and sustainably manage natural or modified terrestrial, freshwater, coastal, and marine ecosystems which address social, economic, and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience, and biodiversity benefits” (UNEA, 2022).

Table 1. Categories of Ecosystem-based Adaptation (EbA) measures

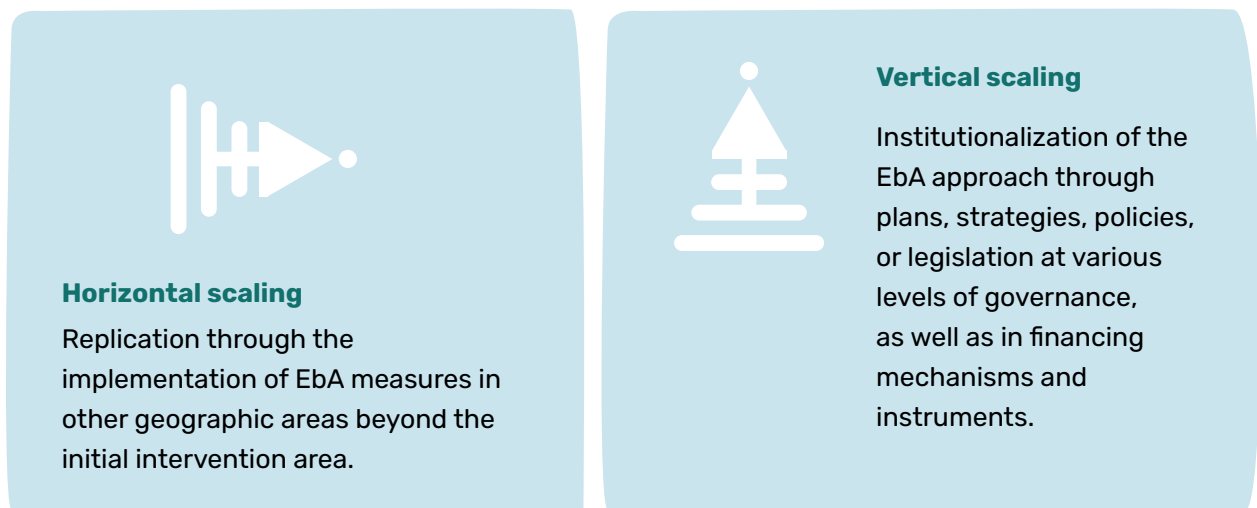
Category	Description	Level of human intervention	Main objective	Examples
1. Protection 	Keeping ecosystems intact and free from degradation, preserving their ecological integrity.	Very limited or non-existent.	Prevent the loss or alteration of ecosystems that are key for climate resilience.	Strict nature reserves; core areas of biosphere reserves; no-take marine zones.
2. Conservation 	Managing functional ecosystems, allowing sustainable human uses that do not compromise their services.	Sustainable use permitted.	Maintain ecological integrity while directly meeting human needs.	Community co-managed forests; biological corridors with regulated tourism; protected areas with management plans.
3. Restoration 	Recovering degraded ecosystems to restore their biodiversity and ecological functions.	Intervention during the restoration; possible human use thereafter.	Recover lost ecosystem services and strengthen resilience.	Reforestation; riparian restoration; wetland rewetting; coral reef rehabilitation.
4. Sustainable management and use 	Active use of ecosystems, ensuring their health and productivity in the long term.	Human intervention is an integral component.	Balance ecological functions with livelihoods and economic activities.	Agroforestry; Sustainable grazing; community forest management; co-management of fisheries.

Note: Author's elaboration.

● What is Scaling up?

By **scaling up**, we refer to expanding the impact of EbA, which can manifest itself in various ways: the replication of initiatives in new locations or geographic areas; increases in the number of interventions implemented or beneficiaries; the expansion of the size, territorial scope or duration of actions; the integration of EbA into development planning and management instruments; the institutionalization of EbA within processes and public policies; as well as increases in and sustainability of financing allocated to EbA. In practical terms, we are analyzing two main types of scaling: horizontal and vertical (GIZ, 2022) (Figure 1)

Figure 1. Types of scaling

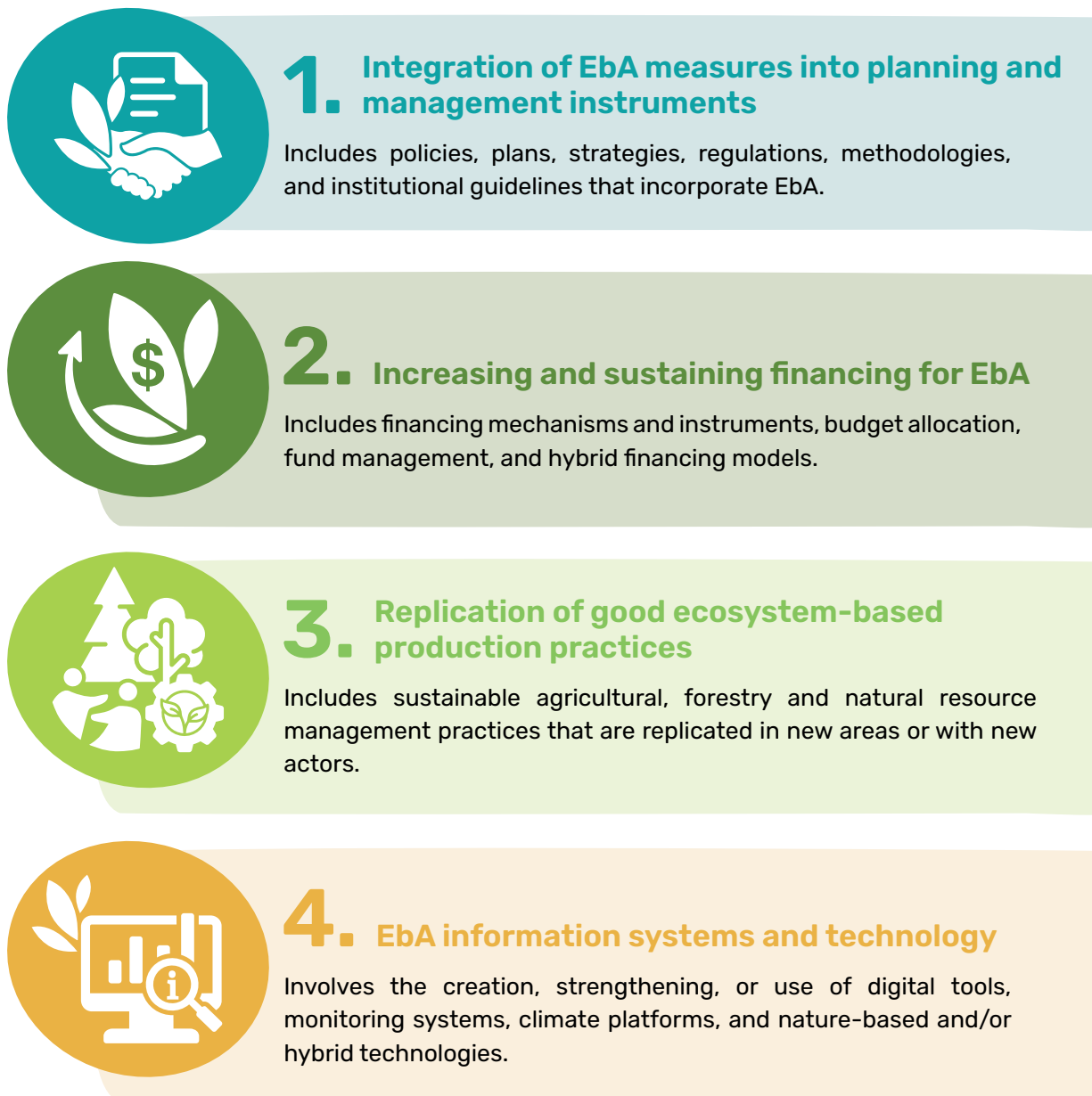


Note: Author's elaboration based on Capacity Works (GIZ, 2022)

Both types of scaling can interact and mutually strengthen one another: while vertical scaling enables the conditions for sustainability and implementation on the ground, horizontal scaling produces evidence and social legitimacy that reinforce vertical processes.

Successful cases were identified through interviews and focus groups in the EbA LAC program's implementation countries, along with expert input and review. Based on this triangulation, 18 experiences of vertical and horizontal scaling of the EbA LAC program were selected and documented, and **four main categories or approaches** that group the scaling trajectories were identified (Figure 2).

Figure 2. Categories or approaches of the EbA LAC program's scaling trajectories



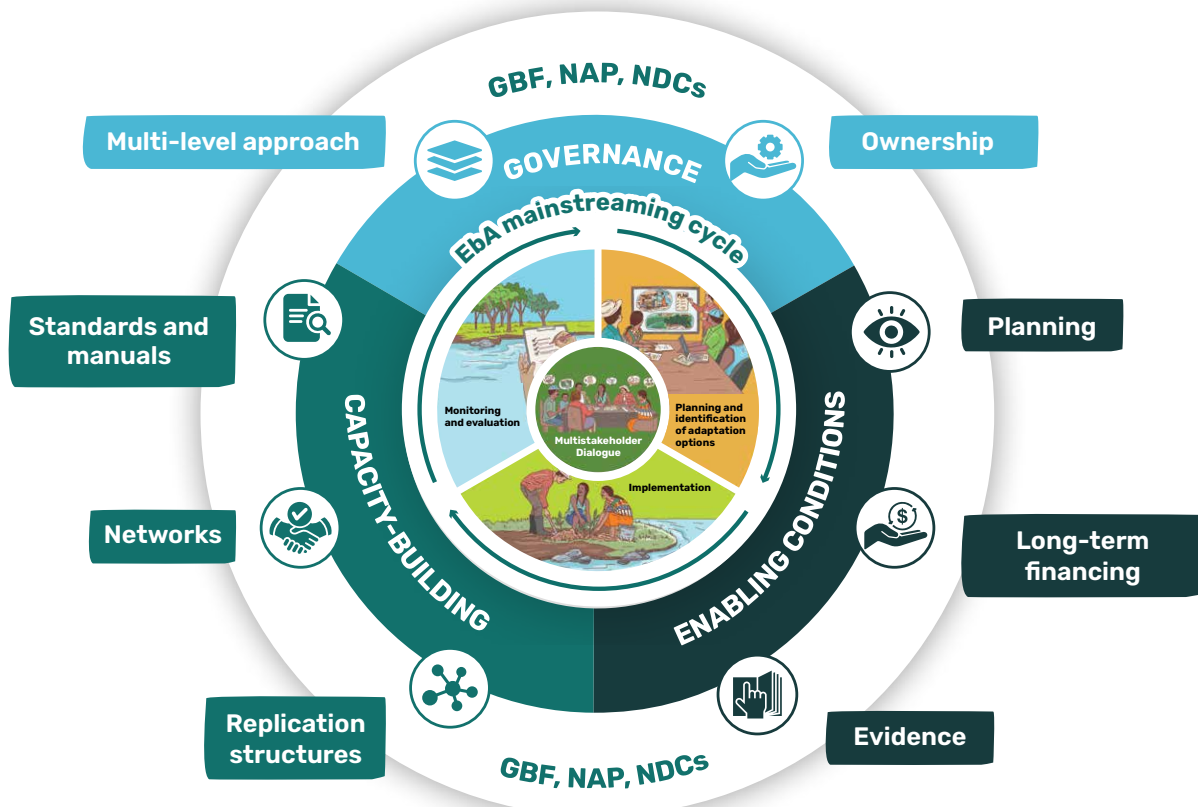
Note: Author's elaboration.

D. STRATEGIC FRAMEWORK FOR SCALING UP EbA MEASURES

To reveal the lessons learned from the EbA LAC program's experiences, a strategic framework for scaling up, based on Michels (2024), was used. This framework combines three dimensions and GIZ's (2022) eight success factors for scaling up, along with the EbA LAC program's inputs.

The three dimensions are **adaptive governance, capacity-building, and enabling environments**, which are linked through the EbA mainstreaming cycle (planning, implementation, monitoring and evaluation). This cycle enables scaling up to function as a dynamic process in which the three dimensions and eight success factors (GIZ, 2022) reinforce one another and adapt according to the context. Figure 3 details the EbA mainstreaming cycle's three dimensions and eight success factors.

Figure 3. Framework of success factors for scaling up EbA measures



Source: Michels (2024)

Adaptive governance

Adaptive governance is an approach to managing complex systems, based on continuous learning and adaptation in the face of uncertainty and change. In the conceptual framework of the EbA LAC program, two factors stand out within this dimension:



Multi-level approach: strengthening coordination between institutions and actors at various levels – local, sub-national and national – to guarantee coherence between policies, plans, and processes linked to climate change adaptation and ecosystem conservation.



Ownership: promoting effective participation in decision-making, in building alliances and trust-based relationships, and in fostering political and community backing for the implementation of far-reaching actions that ensure long-term sustainability.

Capacity-building

Strengthens both the technical and soft skills necessary to scale up the interventions. This dimension recognizes that human and institutional capacity form the foundation for adopting, adjusting, and replicating the EbA approach. Beyond technical training, it promotes a social and organizational structure that sustains and amplifies EbA over time. This key dimension encompasses the following factors:



Networks: involves the creation or strengthening of existing platforms for generating and exchanging knowledge on EbA, promoting peer learning, institutional coordination, and capitalizing on experiences to support wider dissemination and scaling.



Replication structures: strengthening the capacities of actors who serve as multipliers, such as rural extension service staff, field school workers, government officials, finance institution staff, and community leaders. This is implemented through Training of Trainer models (ToT) which amplify and spread EbA knowledge, methodologies, and practices.



Guides and manuals: development of technical instruments and educational resources that standardize steps, methodologies, and good practices for the implementation and scaling up of EbA. These materials are designed following adaptability criteria, using a variety of languages and formats according to the needs of different stakeholder groups.

Enabling conditions

Enabling conditions represent the institutional, technical, and financial environment required for EbA to expand, be sustained, and contribute to sustainable processes. The following factors are key:



Planning: involves defining scaling pathways from the outset of program or project planning and implementation processes. Includes climate risk analysis in order to prioritize EbA measures based on evidence, the involvement of key actors from the outset, and the strengthening of adaptation and conservation planning capacities. It also takes into account the integration of EbA into public policy instruments, institutional frameworks, and sustainable financing mechanisms.



Long-term financing: involves increasing and diversifying financial flows, both public and private. This includes consolidating existing financing mechanisms and developing innovative adaptation finance instruments that facilitate access to inclusive financing, particularly for women, young people, Indigenous peoples, and historically marginalized communities.



Evidence: involves generating, systematizing, and disseminating evidence on EbA results and lessons learned, ranging from its local impact to its contribution to national public policy agendas and international agreements. This knowledge base will inform decision-making, improve learning, and strengthen monitoring, evaluation and learning (MEL) systems.

E. FROM THEORY TO PRACTICE: IMPLEMENTING THE FRAMEWORK FOR ANALYZING THE EbA LAC PROGRAM'S EXPERIENCES OF SCALING UP

Through the systematization of **18 experiences** in Costa Rica, Ecuador and Guatemala, EbA LAC demonstrates how the strategic framework is used to facilitate scaling up EbA across various geographic areas, public policy sectors, and levels of governance. For systematization and comparative analysis, **four levels of governance** (Figure 4) and **eight thematic sectors** aligned with the Global Goal on Adaptation (GGA) framework (Figure 5) were considered. Additionally, the experiences were grouped into **four scaling categories** (Table 1), which make it possible to identify scaling pathways and combinations of success factors observed in the three countries.

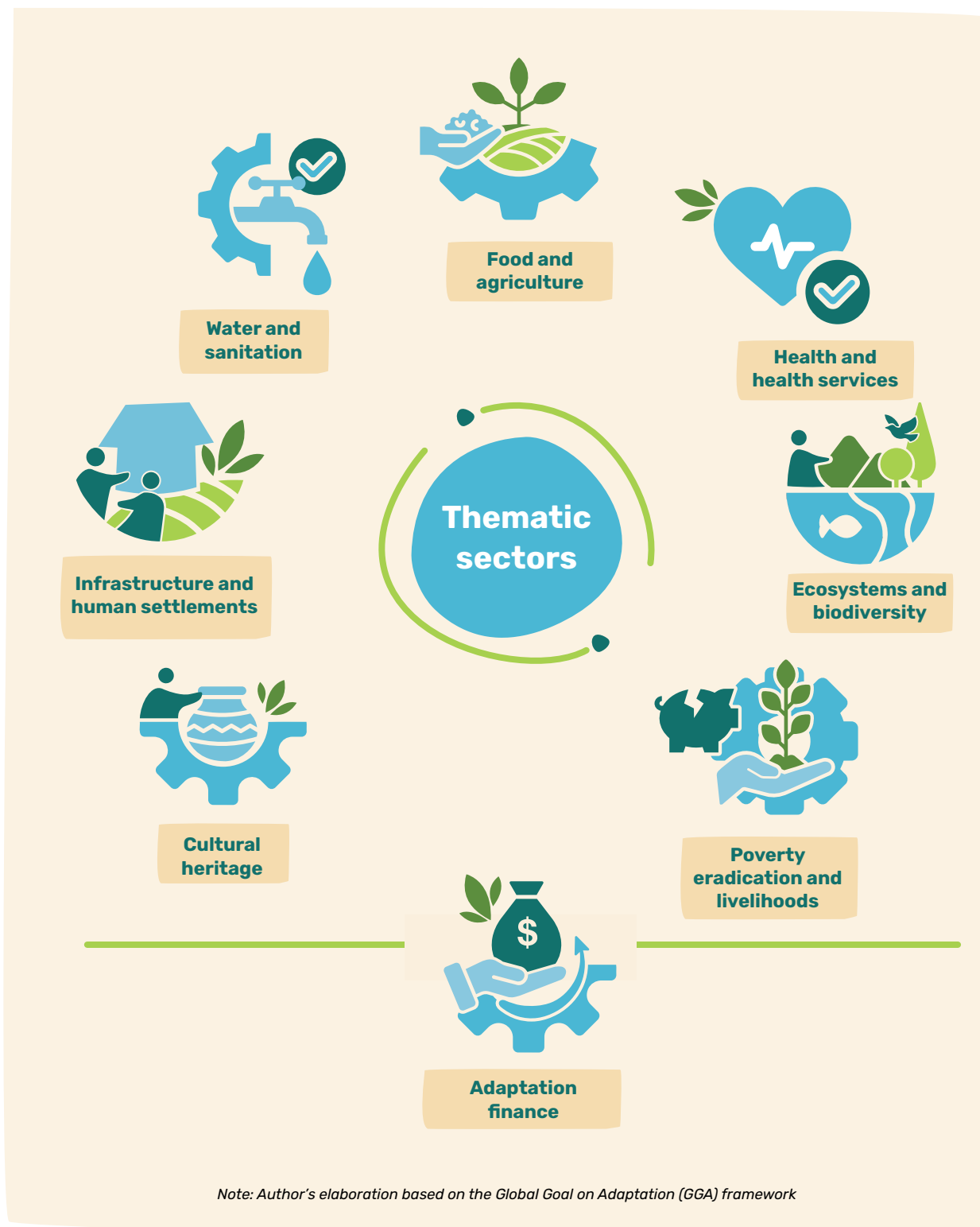


Figure 4. Levels of governance used for systematizing scaling up experiences

	National level	Regulatory frameworks, policies, and strategies are established that guide public sector action (including climate change adaptation and ecosystem conservation).
	Sub-national level	Comprised of institutions, rules, and systems that operate at sub-national level. This includes, for example, planning processes and regional, provincial, departmental, or municipal governments.
	Local level	This is the level closest to the communities themselves, where ecosystem management actions are put into practice. At this level, local knowledge, social participation, and community governance are fundamental.
	Landscape level	Geographic area that enables comprehensive ecosystem management, beyond jurisdictional boundaries (e.g. municipalities). Includes ecological units such as watersheds, protected areas, or biological corridors.

Source: Luna Rodríguez (in press)

Figure 5. Thematic sectors used for systematizing scaling up experiences



SCALING UP EXPERIENCE BRIEFS



CATEGORY:

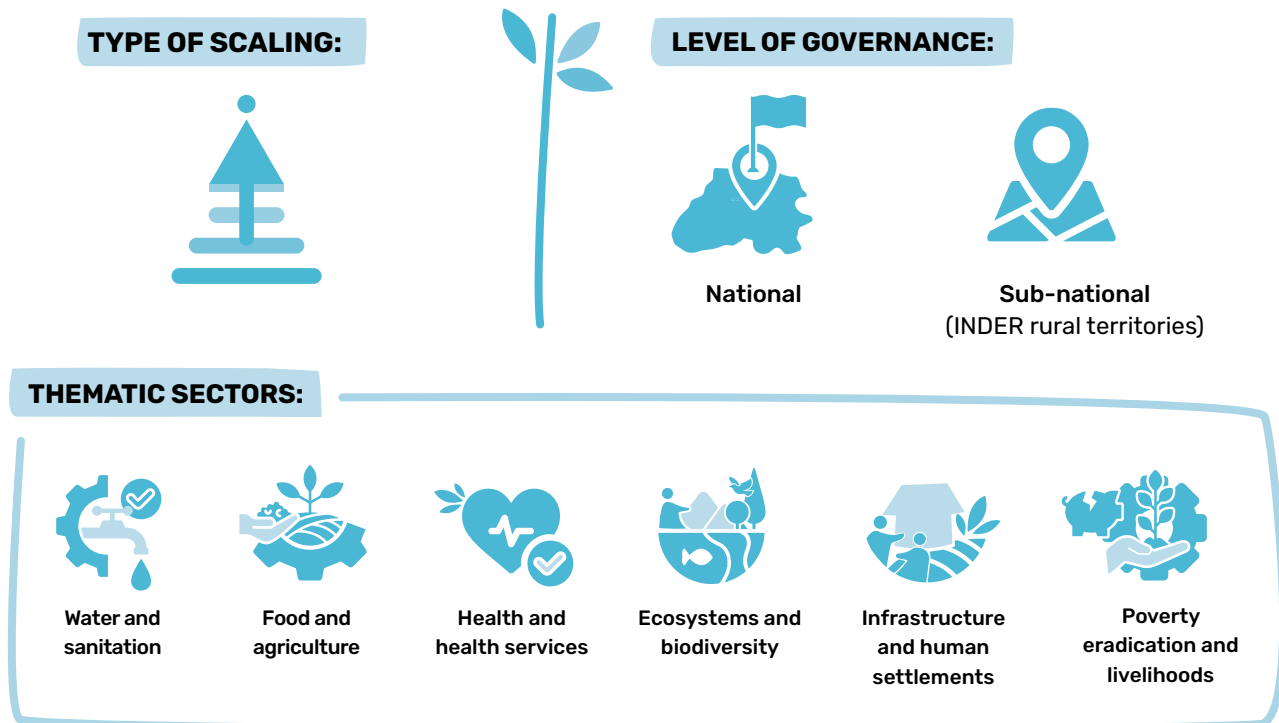


**Integration of EbA
measures into planning
and management
instruments**



1. Incorporating the EbA approach into rural territory planning.

Instituto de Desarrollo Rural (Institute for Rural Development, INDER), Costa Rica.



CONTEXT

Economic activities in rural areas strongly depend on ecosystems and their services; however, these are being affected by the impacts of climate change. Paradoxically, although ecosystems are an essential part of the climate solution, unsustainable practices place increased pressure on them, compromising the services they provide and the livelihoods of local communities. A gender-sensitive, ecosystem-based approach to rural territory planning is key to laying the foundation for effective and just climate change adaptation (Crawford, 2025; Dazé & Terton, 2021; Sahoo *et al.*, 2021). In this scenario, INDER, as the leading authority on rural development policy in Costa Rica, leads the implementation of sustainable development initiatives and projects in these territories.



SCALING UP OBJECTIVE



Institutionalize the EbA approach within the country's rural development planning instruments in order to guide decision-making and optimize the allocation of resources toward programs, projects, and measures that increase climate resilience in rural territories.

RESULTS



Support was provided for updating the [National Rural Territorial Development Plan \(PNDRT 2024-2030\)](#), achieving the integration of EbA and gender-responsive approaches as core, cross-cutting themes. This plan defines the main strategic approaches for promoting comprehensive and sustainable development across Costa Rica's 29 rural territories.



A methodological guide was prepared to support EbA mainstreaming in rural development planning processes.



This guide was implemented during the update of the [Sarapiquí Rural Territorial Development Plan² \(PNDRTS\)](#) as a pilot at sub-national level, aligning this instrument with the PNDRT.

ASSOCIATED EbA MEASURES



Conservation of key biodiversity areas and maintenance of ecosystem services.



Restoration and/or rehabilitation of degraded ecosystems that are key to the provision of ecosystem services.



Sustainable management and use of the production landscape to strengthen the resilience of rural livelihoods against climate change.

SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. INDER is a strategic player for scaling up. With the aim of improving the living conditions of the rural population, it leads multi-level and multi-sectoral dialogue platforms where initiatives are discussed and selected, resources are allocated, and cooperation among public and private actors and civil society is coordinated. Furthermore, its robust legal framework and planning instruments facilitate the transfer of information and citizen representation and participation in decision-making across multiple levels and sectors, which ensured the inclusion of the EbA approach within the PNDRT as a cross-cutting theme in the planning and implementation of initiatives in the country's rural territories.

² Sarapiquí is a region on the Caribbean slope located in northeastern Costa Rica, according to INDER's territorial division.



Planning [enabling conditions]. Evaluating public policy formulation cycles made it possible to identify strategic instruments for scaling up and windows of opportunity for including EbA and gender-responsive approaches. INDER's planning instruments have institutional structures, roles, responsibilities, and financing defined by law, as well as communication channels between the national and sub-national levels. This facilitates the adoption of new approaches and instruments and accelerates their institutionalization.



Ownership [adaptive governance]. Together with INDER, an EbA awareness-raising and training strategy was designed and implemented before, during, and after the planning processes. Technical presentations and reflection exercises were delivered during meetings with decision-makers, planning workshops, and launch events for updated plans. This encouraged the internalization of EbA as an approach that improves existing programs, projects and actions, rather than viewing it as an additional activity in work plans.



Networks [capacity-building]. INDER's governance structure is coordinated with other intersectoral spaces, such as the cantonal interinstitutional coordination councils, thereby creating a national-level cooperation network. This national cooperation network expanded the reach of the awareness-raising and training strategy on EbA and gender-responsive approaches, enabling the participants themselves to act as multipliers in various advocacy spaces.

LESSONS LEARNED



Updating public policies represents a major opportunity for vertical scaling up when linked to multi-level institutional structures, multisectoral and participatory decision-making spaces, and financing sources, as well as when mainstreaming takes place in coordination with instruments at different levels (e.g. PNDRT at national level and PNDRTS at sub-national level).



Identifying adequate territory management instruments for successful EbA scaling requires prior analysis of institutional planning cycles, as these update periods represent an opportunity for the integration of new approaches and concepts.



Awareness-raising initiatives are fundamental to fostering ownership, particularly among decision-makers; however, their impact is greater when combined with public investment planning (e.g. regular institutional budgets and grant funding payments), thereby strengthening the financial sustainability of adaptation measures.



2. Ecosystems at the heart of municipal planning for climate change.

Municipality of Pococí, Costa Rica.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(Municipality of the canton of Pococí³).

THEMATIC SECTORS:



Ecosystems and biodiversity



Water and sanitation



Food and agriculture



Health and health services



Infrastructure and human settlements



CONTEXT

Pococí faces multiple climate threats, including floods, droughts, heatwaves, tropical storms, forest fires, and rising sea levels. These events significantly impact key sectors such as agriculture and livestock, fisheries, tourism, transport, and basic services. The territory's vulnerability is exacerbated by the low income levels of a large portion of the population, which restricts their capacity to respond and adapt, as well as by the degradation of strategic ecosystems which compromises services essential for local resilience.

The [National Climate Change Adaptation Plan](#) invites municipalities to integrate adaptation criteria into municipal management, taking advantage of the planning instruments available at the cantonal level. In this context, there emerges the need for a Canton of Pococí Climate Change Adaptation Plan that guides and coordinates actions toward strengthening climate resilience and protecting ecosystems.

³ Pococí is located on the Caribbean slope in northeastern Costa Rica. It has an area of 2,155 km² and a population of 470,383 (INEC, 2022).



SCALING UP OBJECTIVE

Integrate the EbA approach into the Canton of Pococí Climate Change Adaptation Plan, consolidating it as a leading instrument that guides decision-making and the optimization of investments in the canton.

RESULTS

The updated [Canton of Pococí Climate Change Adaptation Plan](#) includes 22 EbA measures linked to six strategic pillars. Its implementation is expected to:

- ✓ **Mobilize** public resources through municipal management for EbA projects that conserve and restore ecosystem functions essential for community resilience.
- ✓ **Align** sectors, reduce conflict over land use, drive technology transfer, and promote private investment in EbA measures.
- ✓ **Encourage** the municipality to draft a land-use plan that responds to climate threats and reduces risks for communities.
- ✓ **Integrate** the gender-responsive approach, recognizing the specific vulnerability that female heads of household face and promoting their effective participation in decision-making spaces on program financing.

ASSOCIATED EbA MEASURES



Conservation of terrestrial and costal ecosystems.



Restoration of marine and costal ecosystems; restoring naturally floodable areas and recharge zones, among others.



Sustainable management and use of the production landscape; developing agrobiodiversity; promoting sustainable land-use and marine resource practices, including in agriculture, fishing, and tourism.



SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Updating the Canton of Pococí Climate Change Adaptation Plan was supported by three multi-level coordination platforms that bring together actors from governmental institutions, academia, civil society, and the private sector: a) the Cantonal Institutional Coordination Council, b) the Environmental Technical Committee, and c) the Participation Forum. Dialogue forums and decision-making enabled the integration of both technical knowledge and local expertise, ensuring that the prioritized measures responded to the realities and needs of the cantonal context.



Planning [enabling conditions]. Updating the Pococí adaptation plan relied on the technical support of the [Territorial Strategy for the Implementation and Scaling Up of EbA measures in Pococí, 2025-2030](#) (Quirós et al., 2024). This instrument, based on a climate risk and cost-benefit analysis, was a determining factor in prioritizing EbA measures. Additionally, it was key to prioritizing measures and integrating them into municipal planning.



Guides and manuals [capacity-building]. Effectively integrating the EbA approach into the adaptation plan was facilitated through the use of key methodological resources, among them the [Guide for Climate Change Adaptation Planning at the Cantonal Level](#) (DCC-MINAE, 2021) and the [Methodological Guide for Mainstreaming the EbA Approach in the Preparation of Territorial Rural Development Plans](#) (EbA LAC, 2025), developed within the EbA LAC project framework. Using these resources also ensured the plan's consistency with other national instruments and strengthened its applicability in municipal management.

LESSONS LEARNED



Evaluating the capacities and perceptions of the actors involved in the planning process provides greater clarity on priorities and better strategic alignment between institutions, production sectors, and communities.



Climate risk and cost-benefit analyses of the adaptation measures are key elements for informed decision-making and the strategic prioritization of measures. Transparent and effective communication of these studies not only legitimizes the process but also promotes active involvement and commitment from stakeholders involved in territorial implementation.



The private sector can be a strategic ally in implementing the plan, whether through investment, dissemination of good practices, or partnership mechanisms that expand territorial reach and promote sustainability.



3. Strengthening resilience at the landscape level through biological corridors.

Biological corridors in northern Costa Rica

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national



Landscape

(Paso de las Nubes, San Juan-La Selva, Pococí-La Suerte biological corridors)

THEMATIC SECTORS:



Ecosystems and biodiversity



Water and sanitation



Food and agriculture



Infrastructure and human settlements



CONTEXT

Landscape fragmentation is one of the main factors that increases ecosystem vulnerability and, as a result, the vulnerability of the livelihoods of communities that depend on their services. Against this backdrop, in 2006, Costa Rica institutionalized the [National Biological Corridor Program](#) (PNCB), establishing biological corridors (BC) as a key strategy for ensuring connectivity between protected areas and maintaining the ecological functionality of rural landscapes. Currently, the [country has 54 BCs, covering 38 per cent of the national territory](#), and the regions where they are located are largely characterized by agricultural and tourism activities. BCs are managed by local committees that form spaces for coordination and social and institutional integration, where actors from the public sector, the private sector, and civil society come together. The local committees are linked to the institutional structure of the Ministry of Environment and Energy, and possess executive decrees that establish strategic goals, working tools (e.g. strategy or management plans) and a mandate to facilitate multisectoral dialogue and decision-making (Morera-Beita et al., 2021).



SCALING UP OBJECTIVE

Develop the capacity of local committees to scale up EbA and promote socio-ecological resilience in biological corridors (BCs).

RESULTS

- ✓ The new “La Suerte” BC, as well as its local management committee, was created in the EbA LAC’s working area.
- ✓ The technical and organizational capacities of local committees in political advocacy, EbA training and project management, effective participation, and environmental education have been strengthened.
- ✓ Awareness-raising has been carried out with local committees on the importance of planning their management, taking into account climate risk and EbA as a cost-effective solution in agricultural landscapes.
- ✓ Two local committees have integrated the EbA and gender-responsive approaches into their management and operational plans.
- ✓ Strategic EbA project profiles have been created and the process of mobilizing financing, as part of the local committees’ management responsibilities, has begun.
- ✓ Local committees have become multipliers, capable of influencing sub-national planning instruments and promoting the adoption of EbA practices by communities, institutions, academia, and civil society.

ASSOCIATED EbA MEASURES



Conservation through the creation of BCs and other conservation designations.



Restoration of landscapes and rehabilitation of biodiversity-important areas.



Sustainable management and use of areas for the provision of ecosystem services; water resource management and good production practices for the restoration of degraded soil.



SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Strengthening local committees has improved coordination between various actors, dynamizing cooperation. As a result, the committees have developed management plans that include coordination between, for example, local governments, national public institutions, and the private sector, generating greater coherence between local planning, national policies, and global goals, such as the [Costa Rican National Climate Change Adaptation Plan 2022-2026](#), the [National Plan for Gender Equality in Climate Action](#) and the [Kunming-Montreal Global Diversity Framework](#).



Evidence [enabling conditions]. The committees already had practical evidence of implementing EbA measures from previous experiences restoring landscapes and promoting sustainable production practices (even if they were not always formally identified as EbA). Technical support from the EbA LAC program made it possible to systematize these experiences and combine them with climate risk analyses to guide the prioritization of actions and investment.



Guides and manuals [capacity-building]. The availability of [methodological guides](#) and training materials adapted to the local and organizational context was key to consolidating the committees' capacities. These instruments facilitated the development and implementation of EbA projects, incorporating cross-cutting approaches such as gender equality, social inclusion, and financial sustainability.



Planning [enabling conditions]. The self-evaluation carried out by the local committees facilitated the integration of a climate lens into their management instruments. This process was based on reflections and consensuses reached through key questions such as: "What are the functions of a local BC committee?" and "What is its role in climate change adaptation?"

LESSONS LEARNED



Having a communication strategy on the social benefits of ecosystem services and the role of biological corridors in local resilience is fundamental to creating ownership and fostering partnerships with the private sector and local governments.



Coordinating biological corridor management plans with municipal plans and land-use plans facilitates their effective institutionalization and generates synergy in the planning and implementation of EbA measures.



It is necessary to improve the monitoring of the ecological connectivity generated by biological corridors, for example through the use of open geospatial data, in order to guide actions that strengthen their resilience and effectiveness.



4. Incorporating adaptation into conservation area planning

Municipality of Acatenango, Guatemala

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(municipality of
Acatenango)



Landscape
(Parque Regional
Municipal Astillero
Volcán de Acatenango)

THEMATIC SECTORS:



**Food and
agriculture**



**Water and
sanitation**



**Ecosystems
and biodiversity**



**Infrastructure
and human
settlements**



CONTEXT

The Parque Regional Municipal Astillero Volcán de Acatenango is located in the department of Chimaltenango, Guatemala. It covers an area of 890 hectares which includes cloud forests, agricultural areas, and high mountain ecosystems. It protects unique biodiversity and offers ecosystem services such as groundwater recharge, soil conservation, and nature tourism. It is managed by the municipality of Acatenango through the Municipal Environmental Management Unit (UGAM), in coordination with national organizations such as the National Council for Protected Areas (CONAP), the Ministry of Environment and Natural Resources (MARN), the Ministry of Agriculture, Livestock and Food (MAGA), the National Forest Institute (INAB) and the Guatemalan Tourism Institute (INGUAT), as well as with local authorities such as the community development councils (COCODES), among other institutions, which together form the technical panel for the Acatenango volcano. The park faces multiple levels of human pressure such as unregulated tourism, forest fires, illegal logging, and soil erosion, in addition to the threat of phenomena linked to volcanic and seismic activity in the area.



SCALING UP OBJECTIVE

Strengthen the integral management and conservation of the Parque Regional Municipal Astillero Volcán de Acatenango by incorporating it into municipal strategic and budgetary planning. Adopting the EbA approach into its management model helps protect its ecosystems, while generating essential co-benefits for disaster risk reduction and for enhancing the socio-environmental resilience of surrounding communities.

RESULTS

Incorporation of EbA-focused measures into the updated Master Plan for the Parque Regional Municipal Astillero Volcán de Acatenango, taking into account the following key results:

- ✓ Creation of a five-year monitoring plan (2025-2029) that is aligned with the master plan and the annual municipal operational plan (POA).
- ✓ Definition of output, outcome, and impact indicators for protection, restoration, tourism, education, and governance actions.
- ✓ Forest stand delineation⁴ and technical analyses (carrying capacity assessments) to support sustainable management and access to financing (Emissions Reduction Program - PRE).
- ✓ Identification and mobilization of municipal and national level financing sources (e.g. forest incentive programs linked to biodiversity and water resource conservation, as well as carbon fixation), and the strategic management of projects through international cooperation.
- ✓ Clear definition of the roles of institutions (UGAM, INAB, CONAP, INGUAT, COCODES) and community actors in planning, implementation, and management.

⁴ Forest stand delineation (the term in Spanish being: *rodalización*) is a forest planning tool which involves dividing forests into units based on similar characteristics in order to manage them more effectively.



ASSOCIATED EbA MEASURES



Protection of ecosystems and their biodiversity, particularly forest cover, in order to maintain ecological stability, reduce erosion risk, and guarantee groundwater recharge.



Conservation of forest cover and critical ecosystems, with particular focus on unique and fragile ecosystems, as well as flagship and endangered species.



Restoration of ecosystems (passive and active) applying principles of ecological restoration, using native species, and prioritizing the most degraded areas.



Sustainable management and use of ecosystems (particularly forests), in harmony with the management of community livelihoods (such as agriculture and livestock), and economic diversification through community-based nature tourism and payments for environmental services (PES).

SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Governance was strengthened at multiple levels through a participatory process for updating the Master Plan for the Parque Regional Municipal Astillero Volcán de Acatenango, which involved local, sub-national, and national actors. This included reactivating coordination spaces, such as the volcano's technical panel, with the participation of community organizations, COCODES, women's associations, and producer cooperatives supported by MARN.



Ownership [adaptive governance]. The implementation of EbA measures, such as agroforestry and living fences in the areas surrounding the Acatenango volcano, was promoted through alliances with non-governmental organizations (NGOs) and political actors. Awareness-raising processes on the ecosystem-based approach and its contribution to climate change adaptation, targeted at local, municipal, and departmental actors, have been fundamental to consolidating ownership. In this context, the mayor's leadership proved to be a catalyst for institutional ownership, thanks to their previous technical experience and the training provided by EbA LAC, which facilitated and promoted EbA and Eco-DRR integration into the volcano's master plan.



LESSONS LEARNED

- ✓ The processes for updating territorial management instruments represent a key window of opportunity for scaling up the EbA approach by coordinating various actors across multiple levels of governance.
- ✓ Capacity-building processes require ongoing support to ensure the sustainability of EbA measure implementation. The long-term importance of this support will largely depend on a successful Training of Trainers process that will ensure the replication, dissemination, and continuity of knowledge within institutional and community infrastructure.
- ✓ Providing strategic support to change agents who exercise positive leadership in their communities is essential. Their adoption of the EbA approach makes them vital to effectively linking local and technical knowledge in decision-making processes.



5. Development and land-use planning with EbA and gender-responsive approaches.

Decentralized autonomous governments (DAGs) in Manabí, Ecuador

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Province of Manabí: cantons/municipalities of Chone, Tosagua, Junín, Bolívar, Jipijapa, Portoviejo and Santa Ana, and the parishes of Bachillero, Honorato Vásquez, Ángel Pedro Giler, Quiroga, San Plácido, Chirijos and Membrilla)

THEMATIC SECTORS:



Ecosystems and
biodiversity



Poverty
eradication and
livelihoods



Infrastructure
and human
settlements



Adaptation
finance



CONTEXT

The province of Manabí, Ecuador is highly exposed to droughts, coastal erosion, and seasonal flooding, affecting its productivity, water security, and rural livelihoods.

Development and land-use plans (PDOT) are strategic instruments that guide the decisions of decentralized autonomous governments (DAGs) on land use and the direction of development efforts. Based on this reality, the opportunity was identified to strengthen the capacities of sub-national governments to integrate sustainability, gender equality, and climate resilience criteria into territorial planning.

With this objective in mind, a joint process was promoted with the prefecture of Manabí, the Ministry of Environment and Energy (MAE, formerly the Ministry of Environment, Water and Ecological Transition), and the Development Bank of Ecuador.



SCALING UP OBJECTIVE

Integrate the EbA and gender-responsive approaches into Manabí territorial planning through strengthening institutional capacities, updating PDOTs, and creating EbA projects with local DAGs.

RESULTS

- ✓ 11 PDOTs incorporated climate change, EbA and gender-responsive approaches into their territorial planning instruments (e.g. [PDOT Prefectura de Manabí](#)).
- ✓ 7 DAGs have a portfolio of EbA projects, prioritized for their management and implementation.
- ✓ The technical and institutional capacities of the DAGs were strengthened in the areas of EbA, gender, and territorial planning and management.
- ✓ Vertical coordination between local and provincial levels was improved in order to incorporate the EbA approach into policies and development plans.

ASSOCIATED EbA MEASURES



Conservation through the strengthening of programs such as Conservation and Sustainable Use Areas (ACUS) and Water Protection Areas (APH).



Restoration through the reforestation of degraded ecosystems.



Sustainable management and use of agricultural, livestock, and agroforestry systems, among others.

SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Coordination between local governments and national actors facilitated the effective integration of the EbA approach into territorial planning instruments. This process fostered coherence and alignment between different levels of management. Likewise, updating the PDOTs encouraged the participation of local actors, who validated the EbA measures so that they could subsequently be implemented within institutional management processes.



INTEGRATION OF EbA MEASURES INTO PLANNING AND MANAGEMENT INSTRUMENTS



Ownership [adaptive governance]. The use of participatory methodologies boosted DAG involvement in the creation of management projects and documents, generating institutional commitment and continuity in the implementation of EbA measures. The next stage requires each DAG, through its organizational structure, to operationalize the PDOT by coordinating with other actors and incorporating it into their operational budgets. It is the responsibility of the DAGs to operationalize the projects, strategies, and programs defined in their planning frameworks. In this regard, the fact that various local governments now have technically structured project portfolios is a significant step forward, as they ensure the viability of implementing adaptation measures.



Planning [enabling conditions]. The inclusion of climate change, EbA, and gender-responsive approaches in planning instruments was key to sustainably scaling up the implemented measures. This process was supported by a multicriteria analysis that included spatial, social, economic, and biophysical variables to classify the territory and evaluate EbA measures. This made it possible to identify and prioritize relevant solutions for the local context and support their effectiveness and sustainability.



Long-term financing [enabling conditions]. The PDOTs provide strategic guidelines that enable the DAGs to manage funds from different sources. The availability of these resources requires effective inter-institutional coordination between various levels of government and territorial actors, ensuring that planned projects and strategies can be implemented sustainably over time.

LESSONS LEARNED



Integrating climate change, EbA and gender-responsive criteria in development and land-use plans facilitates project operationalization, strengthens local ownership, and ensures the continuity of actions, creating favourable conditions to replicate good practices in other territories.



Involving women, young people, and rural communities in territorial planning and management enhances the social relevance of EbA measures and strengthens local governance, facilitating sustained and adaptive scaling.



Incorporating climate risk and gender-responsive approaches into the PDOTs not only expands opportunities for sustainable financing but also enables this financing to be effectively channeled through project portfolios and local budgets, and to support the mobilization of the resources required to maintain and scale up EbA measures across different territorial levels.



6. Participatory management of conservation and water protection areas.

Municipal governments, Ecuador

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Province of Manabí; cantons/
municipalities of Chone, Junín,
Bolívar and Jipijapa)

THEMATIC SECTORS:



Ecosystems and
biodiversity



Water and
sanitation



Food and
agriculture



Health and health
services



CONTEXT

The pressure on water resources and strategic ecosystems in the province of Manabí requires participatory management mechanisms and landscape-level planning. Meeting this need calls for participatory processes to create, plan and manage areas designated for conservation.

Water Protection Areas (APH) and Conservation and Sustainable Use Areas (ACUS) are territorial management mechanisms that aim to conserve strategic resources and key ecosystems. APHs are managed by management committees comprising environmental authorities, DAGs, and local communities, while ACUS are designated by provincial and municipal DAGs and promote the sustainable use of resources, involving community and sectoral actors in planning and conservation.



SCALING UP OBJECTIVE

Strengthen the management and conservation of landscape-level ecosystems by integrating the EbA approach into the participatory planning of water protection areas (APH) and other conservation programs.

RESULTS

- ✓ Two management plans integrating EbA measures for the [water protection areas \(APH\)](#) in Garrapata (Ricaurte parish, Chone canton) and Balsa Tumbada (Junín Canton) were developed using participatory processes.
- ✓ Ecosystem-based climate change adaptation measures were implemented at landscape level, with community participation.
- ✓ The creation and consolidation of conservation and sustainable use areas (ACUS) in Chone (100,000 hectares), Junín (11,000 hectares) and Bolívar (20,000 hectares) was promoted, integrating EbA criteria into ecological restoration and territorial planning processes.
- ✓ Local capacities and multi-level coordination between communities, decentralized autonomous governments (DAGs), and the Ministry of Environment (MAE) were strengthened.
- ✓ Replication structures were created through community associations and organizations.
- ✓ Technical and socioeconomic evidence was gathered that supports decision-making and the institutionalization of EbA.
- ✓ A proposed delimitation for the La América APH (Jipijapa Canton) was developed.

ASSOCIATED EbA MEASURES



Conservation through the participatory creation and management of water protection areas (APH), conservation and sustainable use areas (ACUS), and other conservation designations.



Restoration of degraded areas.



Sustainable management and use through agroforestry systems (AFS), agrobiodiversity, and sustainable bamboo management.



SUCCESS FACTORS FOR SCALING UP

Multi-level approach [adaptive governance]. Coordination between levels of national, provincial, cantonal, and parish governments, together with community and sectoral actors, made it possible to align APH and ACUS management with environmental public policies. This coordination facilitated landscape-level planning, ensuring coherence between local decisions and national regulatory frameworks.



Ownership [adaptive governance]. The participatory creation of management plans fostered local community ownership of conservation and restoration processes. Their active involvement in decision-making strengthened the sense of co-responsibility and promoted the continuity of the implemented measures beyond the program's intervention period.



Planning [enabling conditions]. The participatory development of management plans made it possible to evaluate climate risks, identify and prioritize adaptation measures, and plan the financial resources necessary for their sustainability. This comprehensive planning approach strengthened local actor ownership and laid the foundations for scaling up management and conservation practices in new areas, integrating EbA, climate change, and gender equality criteria.

LESSONS LEARNED



Involving local actors and authorities from the outset in assessment, design, and management processes of conservation areas facilitates instrument ownership and ensures replicability and scalability in different contexts.



Having reliable evidence and shared learning mechanisms makes it possible to make informed decisions, support the institutionalization of measures, and expand their implementation to other territories with similar conditions.



The continuity and effectiveness of conservation areas depend on structures that combine local capacities with technical and institutional support. Consolidating coordination, financing, monitoring, and evaluation mechanisms will ensure the continuity of actions and facilitate the scaling up of good practices in other territories.



7. Inter-municipal coordination to scale up adaptation.

Departments of Quiché and Chimaltenango, Guatemala

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Department of Quiché, municipalities of San Bartolomé Jocotenango and San Andrés Sajcabajá, and Department of Chimaltenango, municipalities of San Martín Jilotepeque and San José Poaquil).

THEMATIC SECTORS:



Food and
agriculture



Water and
sanitation



Infrastructure
and human
settlements



Ecosystems and
biodiversity



CONTEXT

The municipalities where the inter-municipal climate change adaptation plans (PIACC) were developed are located in areas highly vulnerable to the adverse effects of climate change. These areas form part of the upper and middle watersheds of the Chixoy and Motagua rivers and, in turn, lie within the Central American Dry Corridor's influence area. As a result, the communities settled in these territories must repeatedly face droughts and changes in rainfall patterns.

Furthermore, these communities are highly dependent on natural ecosystems for water, food, and their livelihoods. In turn, these ecosystem services are being affected by forest fires, soil degradation, and loss of forest cover.



SCALING UP OBJECTIVE

Strengthen adaptive territorial planning to integrate and scale up EbA measures in municipal and inter-municipal planning and management instruments in order to enhance resilience against climate change.

RESULTS

- ✓ Development of two inter-municipal climate change adaptation plans (Quiché and Chimaltenango) with the participation of more than 200 actors from national, sub-national, and local organizations (municipal and ancestral authorities, community organizations, and national bodies).
- ✓ Institutionalization of EbA measures within land-use instruments, ensuring their strategic alignment with municipal development and land-use planning (PDM-OTs), the [inter-departmental climate change adaptation plans of Quiché and Chimaltenango](#), and [national policies](#) (e.g., PNA, NDC).
- ✓ Identification and prioritization of strategic ecosystems (e.g. the Los Achiotes forest and the ancestral forests of San José Poaquil) for conservation and restoration efforts.
- ✓ Strengthening of multi-level governance (ancestral authorities, municipalities, the State, and international cooperation actors).
- ✓ Strengthening of local and sub-national capacities in adaptation and climate planning.

ASSOCIATED EbA MEASURES



Conservation of forest cover in headwaters and groundwater recharge zones through the strengthening of “forest brigades”.



Sustainable management and use through the implementation of climate-resilient production practices, such as agroforestry systems with fruit and timber-yielding species, community gardens (managed by women), and the strengthening of the tree nursery network. The sustainable management of community and ancestral forests was also included.



SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Coordination between local organizations, ancestral authorities, municipalities, and national institutions (the National Forest Institute, the Ministry of Environment and National Resources, the National Council for Protected Areas, the Nature Protection Division, the Ministry of Agriculture, Livestock and Food, and the Planning and Programming Secretariat of the Presidency, etc.) made it possible to consolidate social and political legitimacy for the implementation and future institutionalization of PIACCs.



Planning [enabling conditions]. The institutionalization of EbA at the landscape level in the PIACCs was built upon existing instruments (the PDM-OT and the Departmental Climate Change Adaptation Plan of Quiché), facilitating its institutional adoption and access to financial mechanisms such as the INAB's forest incentive programs.



Networks [capacity-building]. The participatory process strengthened local capacities through workshops, participatory mapping, the development of a shared vision, and technical validation from multisectoral actors. These networks generate social sustainability.



Long-term financing [enabling conditions]. Local actors identified the PIACC as a financial management instrument for accessing public resources, forest incentive programs, and international cooperation projects.

LESSONS LEARNED



The participation of ancestral leaders and inter-municipal coordination strengthens multi-level and multi-actor climate governance. Including Indigenous authorities and traditional religious associations (term in Spanish being *cofradías*) in the design of EbA measures strengthens local legitimacy and territorial sustainability.



The use of pre-existing planning instruments accelerates vertical scaling (e.g., municipal development and land-use plans, sub-national adaptation plans, national development plans, as well as the PNA and the NDC), avoiding duplication of effort and facilitating institutional coordination.



Local ownership is key for sustainability. The training and participation of communities, their leaders and decision-makers have been a critical factor in ensuring continuity beyond the program.

SCALING UP EXPERIENCE BRIEFS



CATEGORY:



Increasing and sustaining financing for EbA



8. Green finance for resilient rural enterprises.

The Laboratory for Innovation and Entrepreneurship ACTIVA-CATIE and the Development Banking System, Costa Rica

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(Northern and Caribbean areas)

THEMATIC SECTORS:



**Adaptation
finance**



**Food and
agriculture**



**Ecosystems
and biodiversity**



Tourism



CONTEXT

Costa Rica's northern and Caribbean areas are highly vulnerable to the adverse effects of climate change. Given this situation, entrepreneurs in the agriculture/livestock and tourism industries must drive innovation through resilient business models that enable them to adapt their production practices and services to this reality. However, access to the financial resources required to drive this adaptation is currently limited. It was for this reason that a strategic alliance with the Development Banking System (SBD) and ACTIVA-CATIE was established, for the development and implementation of a climate-finance funding call titled *AdaptActiva*, which will directly benefit these entrepreneurs through seed capital and technical counsel to strengthen the sustainability of their businesses.



SCALING UP OBJECTIVE

Support climate-resilient business models through non-reimbursable funds (seed capital) and specialized counsel to strengthen their business strategies, incorporating adaptation and EbA measures where relevant.

RESULTS

- ✓ Three seed capital calls, in 2023, 2024, and 2025 under the name *AdaptActiva*, benefitting a total of 90 entrepreneurs.
- ✓ Approximate investment of USD 1 million from the Costa Rican Development Banking System (SBD).
- ✓ Three trade shows (2024-2025) that promoted the participation of entrepreneurs, helped bring their products and services to market, and provided opportunities to access new financing sources.
- ✓ More than 250 entrepreneurs were trained (both in-person and virtually) on climate change, adaptation, business plans, and the commercialization of goods and services.
- ✓ Building on the experience of the *AdaptActiva* calls, the SBD has developed and launched a new thematic call for proposals that urges the system's operating agencies to develop calls specifically targeted at climate change, with a particular focus on adaptation, during 2026.
- ✓ In addition to the financing, technical support was provided to the SBD to design an impact monitoring system for the seed capital programs.



ASSOCIATED EbA MEASURES



Protection of primary and secondary forest areas on agricultural and livestock farms.



Conservation of secondary forests and riparian buffer areas along watercourses.



Restoration of rural landscapes on farms and plots through the reforestation of livestock and agricultural areas, including assisted natural regeneration.



Sustainable management and use of rural landscapes through interventions on farms and plots, including planting trees in livestock areas (silvopastoral systems) and in agricultural areas (agroforestry systems). The production of agricultural bioinputs and organic fertilizers, as well as improvements in land use, was also included.

SUCCESS FACTORS FOR SCALING UP



Long-term financing [enabling conditions]. Through the SBD, the availability of non-reimbursable seed capital funding was secured for entrepreneurial initiatives that integrate the EbA approach into their business models.



Ownership [adaptive governance]. Open calls for entrepreneurs with innovative business ideas (in the agriculture/livestock, forestry, and tourism sectors), which contributed to participants' ownership of the initiative.



Networks [capacity-building]. The program fostered networking among entrepreneurs that enabled peer learning. Furthermore, additional activities were included that helped strengthen these efforts, such as trade shows, field visits, and specialized mentoring processes.



LESSONS LEARNED

- ✔ Establishing alliances with second-tier financing mechanisms, such as the Development Banking System, provides various financing options, among which seed capital stands out for its demonstrated potential to drive climate-resilient enterprises.
- ✔ Strengthening alliances with training and support centers that incorporate the pre-incubation stages for business ideas proved to be a key component in improving the quality of proposals and business plans, as well as the capacities of entrepreneurs to grow their businesses through access to new markets and financing sources (e.g. loans, venture capital, or guarantee funds).
- ✔ Providing context-specific support to the enterprises through specialized mentoring and technical assistance, taking into consideration their cultural, territorial and sectoral characteristics, is key to strengthening their sustainability and impact.
- ✔ Monitoring results through indicators that allow us to measure impacts over time is key to determining how seed capital and the support provided affects entrepreneurs' quality of life in the medium- and long-term.



9. Community financing to strengthen local water security.

Community Aqueduct and Sanitation System Management Associations (ASADAS), Costa Rica.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Local



Landscape-level
(watersheds)

THEMATIC SECTORS:



Adaptation
finance



Water and
sanitation



Food and
agriculture



Ecosystems and
biodiversity



Infrastructure
and human
settlements



CONTEXT

In Costa Rica, there are more than 1,200 Community Aqueduct and Sanitation System Management Associations (ASADAS) (Dirección de Agua, 2025). These community organizations, by delegation from the Costa Rican Institute of Aqueducts and Sewers (AyA), take responsibility for planning, managing, operating, maintaining, and developing local water supply systems. There are also various partnership mechanisms among ASADAS (e.g. leagues, federations, unions), as well as water sustainability centers that provide them with support and technical assistance.

Within this context, the water resource protection tariff (TPRH), established by the Public Services Regulatory Authority (ARESEP), is a financial mechanism that ASADAS can request in order to protect and conserve water sources, and may also be used to finance EbA measures. This instrument provides an opportunity to strengthen the technical and organizational capacities of ASADAS in order to integrate EbA measures into their management. Through the TPRH, ASADAS can raise resources locally and reinvest them in efforts that not only support the management of climate risks but also contribute to the security of the drinking water supply.



SCALING UP OBJECTIVE

Promote sustainable financial mechanisms that enable the implementation of EbA measures at the local level, through the strengthening of ASADAS.

RESULTS

- ✓ 3 ASADAS in the canton of Sarapiquí (Sarapiquí, Chilamate and Pablo Presbere) submitted TPRH implementation applications to ARESEP, with technical support and validation from participatory forums.
- ✓ 16 ASADAS and two water sustainability centers received training on the TPRH application process and on water security.
- ✓ 42 people, including governing board members, administrators, and ASADAS and water sustainability center (CSA) staff received training on developing an EbA measure investment portfolio and on managing projects aimed at strengthening water security.
- ✓ In the short term, three ASADAS are expected to implement the financial mechanism, allocating resources to priority actions such as acquiring land and legalizing easements for spring protection, implementing reforestation campaigns, and developing environmental education programs that aim to promote a new culture around water and the conservation of ecosystems.
- ✓ In the medium term, more ASADAS are expected to adopt this model, based on the evidence generated on its benefits and the financial mechanism's sustainability.

ASSOCIATED EBA MEASURES



Protection, conservation, and restoration

of areas that provide water-regulation ecosystem services.



Sustainable management and use of water, complimented by rainwater harvesting systems.



SUCCESS FACTORS FOR SCALING UP



Long-term financing [enabling conditions]. The water tariff represents a sustainable financial mechanism for implementing EbA measures as it ensures the continuous mobilization of resources through regular payments from subscribers who, in turn, are the direct beneficiaries of the protection and restoration of ecosystems that are strategic for water security.



Ownership [adaptive governance]. The water tariff application process required ASADAS staff to analyze the threats that affected their water supply sources in order to prioritize and design EbA projects that met the specific needs of each community. By being actively involved in this process, the ASADAS strengthened their sense of commitment and responsibility for implementation and results.



Replication structures [capacity-building]. Engagement with ASADAS makes it easier to replicate the experience in other locations. The ASADAS staff, community water managers, and water sustainability center staff who received training can transfer acquired knowledge to other ASADAS that they work with. Furthermore, this coordination facilitates the joint implementation of activities in shared groundwater recharge zones, expanding the reach and impact of EbA measures.



Guides and manuals [capacity-building]. The development of support materials, such as the training facilitation guide and the [water tariff application tool](#), have been key to standardizing the process, improving understanding of opportunities and requirements, and facilitating TPRH management.

LESSONS LEARNED



The TPRH process fosters strategic data-driven planning that encourages ASADAS to define medium-term investments using technical information that strengthens the sustainability of their water supply systems.



Strengthening the capacities of territorial training and support centers is key to sustaining the technical and financial capacities of ASADAS and to providing continuous support beyond the specific training sessions.



Coordination at the watershed landscape level and partnerships between ASADAS make it possible to plan joint investments, generate synergy, and achieve a greater impact on water security.

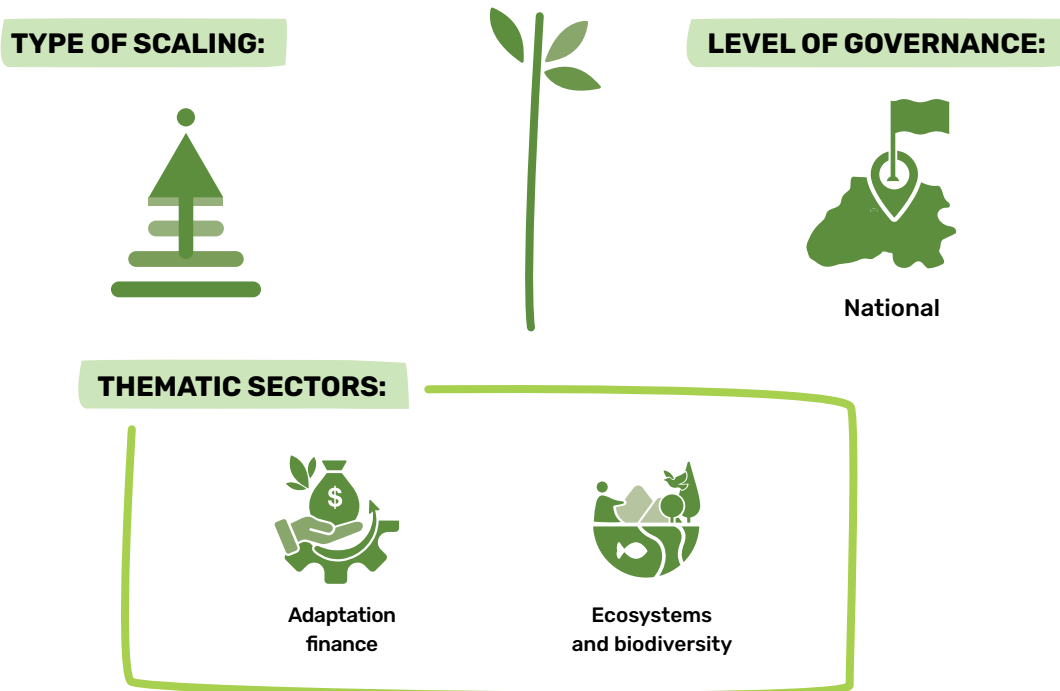


Institutional and water governance strengthening requires clearer role definition and improved interinstitutional coordination to ensure effective support for ASADAS in processes such as TPRH implementation.



10. Dynamizing investment in the forestry sector.

National Forest Institute (INAB), Guatemala.



CONTEXT

Forest ecosystems in Guatemala are affected by the impacts of droughts, floods, and forest fires – events in which factors linked to both human-caused climate change and other direct human activities interact.

Guatemala has a regulatory framework for public and institutional policies that guides the regulation and strengthening of the forestry sector. The Forestry Law (1996) established the creation of a Credit Guarantee Scheme for Forestry Activities, with the aim of supporting loans awarded by the banking system to small landowners through resources primarily from the dedicated forestry fund; however, its implementation had stalled due to the absence of clear procedures.

This scheme has strong potential to enable the financing of EbA measures that contribute to climate resilience at the national level. Given this situation, the need arose to strengthen the capacities of the National Forest Institute (INAB), the organization responsible for forest management outside protected areas, in order to operationalize the scheme by providing technical support in defining the legal and administrative mechanisms required for its implementation.



SCALING UP OBJECTIVE

Promote the financing of forestry activities at the national level through the implementation of the Credit Guarantee Scheme for Forestry Activities.

RESULTS

- ✓ The regulations and operations manual that guides the implementation of the scheme was developed.
- ✓ Coordination was strengthened between the INAB and national financial organizations (Banrural, Banco G&T Continental, Banco de los Trabajadores, Crédito Hipotecario Nacional, Banco Internacional and Banco Industrial), which were informed and made aware of the investment opportunities in the forestry sector offered through the Scheme.
- ✓ INAB's technical staff were trained and informed about the benefits and scope of the Scheme, strengthening their role in promoting access to financing among small producers.
- ✓ 10 million Guatemalan quetzales (approximately USD1.3 million) were allocated to the chosen financial organization, Banco G&T Continental, with the aim of training and monitoring small producers (those with holdings under 15 hectares) in management, reforestation, and forest conservation activities.
- ✓ In the medium term, the scheme is expected to promote access to loans through the national banking system for reforestation and sustainable forest management projects, including forest plantations and agroforestry systems that support climate resilience.

ASSOCIATED EbA MEASURES



Conservation of forest ecosystems.



Restoration of landscapes and reforestation.



Sustainable management and use of forestry systems, integrated fire management, and agroforestry systems, among others.



SUCCESS FACTORS FOR SCALING UP



Planning [enabling conditions]. Defining the regulatory and operational framework required technical and planning analyses that took into account the risks, institutional viability, and identification of financial organizations with the capacity and experience required to manage the fund at the national level.



Ownership [adaptive governance]. Engagement from the INAB's Financial Mechanism Directorate was key to consolidating the development, approval and implementation process for the Scheme's regulations, ensuring institutional backing. Additionally, trust-based relationships and communication with the private financial sector were strengthened, creating favorable conditions for implementing the Scheme.



Long-term financing [enabling conditions]. The Credit Guarantee Scheme for Forestry Activities is a financial mechanism that enables public resources to be channeled through a private organization, promoting investment in sustainable forestry activities and EbA measures, with a priority focus on supporting small producers.

Guides and manuals [capacity-building]. The development of [regulations and the operations manual](#) was a key component in moving toward implementation of the scheme at national level, as it clarified legal, administrative, and technical procedures required to ensure transparency, efficiency, and coherence in its execution.



LESSONS LEARNED



Establishing effective communication channels with public and private actors is essential for creating trust among parties and collaboratively advancing toward the scaling up of EbA measures.



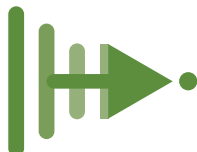
Having a robust regulatory framework and providing support for its effective application enhances institutional functioning.



11. Women-led rural savings banks for the co-implementation of EbA measures.

Rural communities in Manabí, Ecuador.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Province of Manabí: parishes of Honorato Vásquez, San Plácido, Cascol, Balsa Tumbada Adentro, El Algodón, Santa Rita, El Algodón and Membrillar)

THEMATIC SECTORS:



Adaptation
finance



Poverty
eradication and
livelihoods



Ecosystems and
biodiversity



Food and
agriculture



CONTEXT

In the rural communities of Manabí, Ecuador, women face structural gender gaps that restrict their access to employment opportunities, financial services, and decision-making spaces. These inequalities increase their vulnerability to climate change and reduce rural families' capacity to respond and adapt. These gaps must be closed, recognizing the crucial role that women play in food provision and the sustainable management of ecosystems, both of which are fundamental pillars of adaptation.

In response to both climate and economic vulnerability, it is essential to design local financial mechanisms that integrate EbA, with the strengthening of women's economic empowerment being a key element. As a result, community savings banks emerged as local strategic instruments for mobilizing financial resources, with the aim of incentivizing and facilitating the co-implementation of EbA measures in rural communities.

The banks operate through the organization of savings and loan groups managed by community members themselves, particularly women, who periodically contribute to a communal fund. The fund makes it possible to finance small production and adaptive investment projects, strengthen economic autonomy, and reduce the vulnerability of its women members.



SCALING UP OBJECTIVE

Facilitate the scaling up of EbA measures through women-led community financial mechanisms that promote local ownership, gender equality, financial sustainability, and replicability.

RESULTS

- ✓ Eight community savings banks were created and strengthened in Manabí, consolidating themselves as spaces for women's economic empowerment, community management, and the co-implementation of adaptive practices.
- ✓ 62 per cent of the people associated with the savings banks are women. The eight savings banks have enabled more than ten thousand dollars to be saved and have expanded financial outreach in rural areas, benefiting around 200 people who previously did not have access to financial services.
- ✓ Specialized financial products incorporating EbA and gender-responsive approaches have been implemented, such as *Credi-Mujer* and *Credi-Ambiente*.
- ✓ The savings banks are rooted in local groups that drive sustainable production initiatives. This financing mechanism has enabled the scaling up of key activities such as beekeeping and sustainable bamboo management, which not only support families' livelihoods but also strengthen the climate resilience of the beneficiaries.

ASSOCIATED EbA MEASURES



Sustainable management and use through beekeeping, agroforestry systems, agrobiodiversity, and sustainable bamboo management.



SUCCESS FACTORS FOR SCALING UP



Ownership [adaptive governance]. The high level of engagement, leadership, and perceived benefits among women members enabled the community savings banks to be consolidated as sustainable and replicable structures for collective organization and financial inclusion that can strengthen rural women's capacity to manage financial resources and use them in EbA implementation processes.



Replication structures [capacity-building]. The development and strengthening of rural community members' financial and management capacities contributes to building a replication structure. The savings banks are rooted in groups that drive sustainable production initiatives, such as beekeeping and sustainable bamboo management, which have benefited from the financing provided through the banks. The development of personalized resources and tools made it possible to transfer knowledge, methodologies, and good practices to other communities. Strengthening capacities for collective organization supports horizontal scaling.



Planning [enabling conditions]. Participatory planning with the communities facilitated the strategic use of the savings banks as mechanisms for channeling financial incentives that support scaling up EbA measures in the territory. This process involved assessing risks, identifying and prioritizing adaptation options or business opportunities, evaluating scaling potential, and managing financial resources to make investments.

LESSONS LEARNED



The empowerment of women through community business initiatives and managing savings banks facilitated local ownership, collective community organization, and EbA sustainability.



Technical training in EbA and in financial and business management enabled the development of practical knowledge that promotes adaptation and enhances the scalability of sustainable production and conservation initiatives.



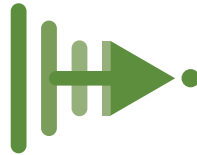
The savings banks drive and strengthen collective organization and collaborative community work because they are inclusive and their women members can see the benefits in the short term.



12. Scaling up EbA through financial mechanisms to facilitate public investment in climate resilience and water security projects.

Development Bank of Ecuador and decentralized autonomous governments, Ecuador.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(province of Manabí)

THEMATIC SECTORS:



Adaptation
finance



Water and
sanitation



Ecosystems
and biodiversity



CONTEXT

In the province of Manabí, pressure on watersheds, deforestation, and the effects of climate change are posing increasing challenges to water security. To address these issues, a dual process was launched that integrated territorial planning with sustainable financial mechanisms, guided by the EbA approach and a gender-responsive perspective.

The first focus area was strengthening the capacities of decentralized autonomous governments (DAGs) through a technical assistance process aimed at local government teams. The objective was to strengthen participatory development of territorial projects, prioritizing the translation of local needs and EbA measures into bankable projects (with high financial potential). This process made it possible to prioritize sustainable conservation and management measures grounded in technical evidence and in the participation and interest of local actors in promoting them.

The second focus area was mainstreaming EbA within the Development Bank of Ecuador (BdE), the main public bank for local-government investment. The integration was initially achieved through Premio Verde grant funds, which incorporate sustainability criteria across their various



investment sectors. This effort was consolidated in the second phase with the development of the [Practical Guide for the Sustainable Management of Watersheds](#), a technical tool created to guide local governments in project design and implementation.

Coordination between both focus areas enabled the alignment of territorial planning and national public financial architecture, with a multi-level approach. This synergy facilitated vertical scaling and the institutionalization of the EbA approach at national level. As a result, the Development Bank of Ecuador, through its Green Banking initiative and in collaboration with EbA LAC, launched a Financial Program for Strengthening Water Security and Climate Resilience.



SCALING UP OBJECTIVE

Integrate the EbA approach into watershed management and financial instruments to facilitate its scaling to other territories.

RESULTS

- ✓ Development of the [Practical Guide for the Sustainable Management of Watersheds](#) as a tool for planning and replicating territorial interventions. It contains three modules that integrate the EbA and gender-responsive approaches.
- ✓ Creation of the National Water Security Program (pending approval), led by the Development Bank of Ecuador. The program supports the sustainable management of watersheds and finances projects that restore and protect aquatic ecosystems and incorporate the EbA approach.
- ✓ Strengthening of the Development Bank of Ecuador's Premio Verde and Buenas Prácticas competitive funding schemes to finance EbA projects.
- ✓ Awareness-raising and capacity-building among key actors, including decentralized autonomous government authorities, watershed council members, and academia, with the aim of fostering ownership of EbA-focused watershed management.
- ✓ Effective coordination between the Development Bank of Ecuador, decentralized autonomous governments, and sectorial ministries to integrate the EbA approach into financial policies and mechanisms.
- ✓ Vertical scaling of interventions and consolidation of institutional support that provides sustainable enabling conditions for the implementation of EbA measures at the national level.



ASSOCIATED EbA MEASURES



Conservation of ecosystems critical to water resources, with a watershed-based approach.



Sustainable management and use through efficient water management, sustainable forest management, and sustainable bamboo management, among others.

SUCCESS FACTORS FOR SCALING UP



Multi-level approach [adaptive governance]. Coordination between the Development Bank of Ecuador and Manabí's decentralized autonomous governments at their various levels enabled effective territorial implementation of actions and ensured the alignment of local projects with national climate policies.



Ownership [adaptive governance]. Raising awareness among key actors on territorial management mechanisms and the integration of the EbA approach fostered strong engagement and local ownership of the projects, strengthening their continuity. This process has been crucial to strengthening the Development Bank's institutional ownership of the approach. The Bank is a key actor that has facilitated vertical scaling by incorporating EbA guidelines and criteria into its financing schemes.



Planning [enabling conditions]. Participation in financial and territorial planning processes made it possible to incorporate local needs and EbA criteria into local government planning instruments and the Development Bank of Ecuador's financing instruments, supporting their relevance and effectiveness.



Long-term financing [enabling conditions]. Structuring bankable projects and strengthening competitive funding schemes such as Premio Verde and Buenas Prácticas were key to stimulating interest and generating sustainable and viable financing opportunities for the DAGs, enabling them to scale up their adaptation measures independently.



LESSONS LEARNED

- ✓ Incorporating the EbA approach into national financial mechanisms requires technical and strategic coordination with banks, sectoral ministries, and local actors to ensure institutionalization and vertical scaling.
- ✓ Technical assistance tools, such as watershed project management guides, are essential for supporting planning, replicating good practices, and aligning local projects with sustainability and adaptation criteria.
- ✓ Strengthening existing financial mechanisms enables good local practices to be effectively scaled on a national level, and promotes territorial resilience to climate change. Competitive funds are key financial mechanisms that, from the outset, can motivate local government authorities to invest effort in developing projects with sustainable approaches.
- ✓ Local actions can become replicable models and prompt new public policies when they are carefully planned and have institutional ownership and support.



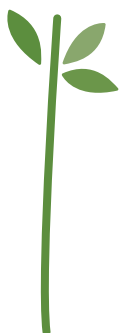
13. Municipal investment in EbA for climate change adaptation.

Departments and municipalities, Guatemala.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



National



Sub-national
(departmental and
municipal)

THEMATIC SECTORS:



Water and
sanitation



Ecosystems and
biodiversity



Infrastructure
and human
settlements



Poverty
eradication and
livelihoods



CONTEXT

Guatemala has national regulatory frameworks, policies, and plans aimed at improving territorial planning, strengthening adaptative capacity, and optimizing municipal budgets with a climate change approach. However, the lack of standardized information that the municipal teams receive hinders their effective application. Furthermore, a knowledge gap regarding climate change has been identified, limiting the implementation of key technical tools such as budget classifiers. This underlines the urgent need for municipalities to adopt proactive measures to incorporate EbA as a cost-effective approach to address the effects of climate change in their development strategies and to allocate resources to them, thereby strengthening local capacities to manage and reduce climate risks.



SCALING UP OBJECTIVE

Incorporate EbA measures into the planning and budgeting of the country's municipalities.

RESULTS

- ✓ Coordination of national institutions through a legal mandate to provide technical assistance to municipalities. This joint effort seeks to ensure effective incorporation of climate change adaptation and the EbA approach, both within territorial planning instruments and local operational budgets.
- ✓ Development of the Compendium for Integrating Climate Change into Municipal Planning and Budgeting.
- ✓ Influence within the national public investment system, generating new instruments that enable the inclusion of climate change adaptation measures in municipal budgets.
- ✓ Increased awareness among municipalities of their responsibilities and the investment opportunities within EbA measures.
- ✓ These results are expected to help the remaining 340 municipalities in the country allocate part of their budget to EbA measures, in order to help communities address the effects of climate change.

ASSOCIATED EbA MEASURES



Conservation of strategic ecosystems, primarily those linked to aquifer recharge zones, to ensure their capacity to provide water services for human consumption.



Restoration and reforestation of groundwater recharge zones.



Sustainable management and use of agrobiodiversity (supporting food and nutrition security), integrated fire management, and sustainable management of ecotourism sites, among others.



SUCCESS FACTORS FOR SCALING UP



Planning [enabling conditions]. Participatory development of a roadmap that identifies priorities, responsibilities, scaling potential, and the availability of resources required for its implementation.



Ownership [adaptive governance]. The process was led by the Ministry of Environment and Natural Resources (MARN), as the governing authority, and a working panel convened by the Ministry. This created a space to build interinstitutional trust-based relationships and strengthen competencies in line with each entity's mandate.



Multi-level approach [adaptive governance]. A multi-level working approach was encouraged, linking the organizations of the national technical panel with their departmental delegations and municipal teams to raise awareness, build capacities, and create the conditions for EbA measure investment.



Replication structures [capacity-building]. The consolidation of an institutional working agreement, supported by a technical manual, has been fundamental to sustaining the MARN-led process of providing counsel in the territories and influencing the national public investment system. This has made it possible to reach other territories outside the Program's intervention area.

LESSONS LEARNED



Designing a clear, accessible communication strategy adapted to the context of local governments is vital for disseminating good municipal practices. This exchange of knowledge not only facilitates the replication of interventions in other municipalities, but also drives the scaling up of the EbA approach at sub-national level.



Creating informative and educational spaces aimed at local governments is a determining factor for financial sustainability. These spaces encourage local authorities to allocate sufficient resources in their development plans and budgets, ensuring the continuity of EbA measures over time.

SCALING UP EXPERIENCE BRIEFS



CATEGORY:



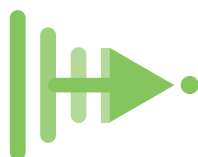
**Replication of good
ecosystem-based
production practices**



14. Crop diversification for climate resilience.

Choacruz Avocado Growers' Cooperative (Cooperativa de aguacateros Choacruz R.L), Guatemala.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(Municipality of San José de Poaquíl,
Chimaltenango)

THEMATIC SECTORS:



**Food and
agriculture**



**Ecosystems
and biodiversity**



**Poverty
eradication and
livelihoods**



CONTEXT

Maize is one of the most important food crops in Chimaltenango. A large part of the crop's production relies exclusively on rainfall, resulting in high vulnerability to changes in precipitation patterns. In San José Poaquíl, the climate situation has translated into a significant reduction in crop yield and quality, and even the complete loss of harvests. These circumstances jeopardize the food security of food producing families, reduce their income, and encourage migration away from rural communities.

Compounding this are practices such as single-crop farming, intensive tillage, burning, and the excessive use of agrochemicals that have degraded production soil and rendered them even less resilient to droughts and torrential rains. In this context, there is a need to diversify production systems and promote soil and water conservation practices that strengthen the resilience of agricultural landscapes and communities.



SCALING UP OBJECTIVE

Replicate crop diversification and soil and water conservation practices through capacity-building in youth-led producer cooperatives.

RESULTS

- ✓ The Choacruz Avocado Growers' Cooperative, made up of 19 producers (11 men and 8 women, 80 per cent of whom are young people), was strengthened through training on production diversification and sustainable soil management. This process was complemented by the provision of avocado plants to establish five hectares of cultivation at the cooperative level.
- ✓ Young producers implemented agroforestry systems with both perennial crops (avocados, apples, and peaches) and annual crops (varieties of white, yellow, black or blue, and red maize). This approach generated valuable evidence on the optimal combinations that balance short-cycle crops with long-duration fruit trees and strengthened the producers' production and financial planning.
- ✓ The creation of strategic links with microfinancing institutions was facilitated and knowledge exchange between peers was promoted, consolidating local capacities to sustainably manage agroecosystems.
- ✓ Producers from the same municipality, in particular those from neighbouring communities that are not associated with the Choacruz Cooperative, have replicated EbA practices after participating in the exchanges and witnessing their results.
- ✓ Producers have invested their own resources to improve diversified production systems, strengthening the continuity and sustainability of the measures.
- ✓ In the medium term, a scaled adoption of these practices is projected, contributing to reducing dependence on single-crop farming, improving soil fertility and moisture retention, and strengthening family incomes and overall food security.

ASSOCIATED EbA MEASURES



Sustainable management and use through crop diversification, implementation of agroforestry systems, use of organic fertilizers, incorporating crop residue to protect the soil surface and conserve moisture, and minimum tillage practices (complemented by water harvesting and storage systems for agricultural production).



SUCCESS FACTORS FOR SCALING UP



Ownership [adaptive governance]. Young producers have identified their own adaptation needs and opportunities. This sense of ownership can be seen in their sustained motivation and their own innovation and investment aimed at strengthening and maintaining diversified production systems.



Planning [enabling conditions]. The implemented actions were identified as part of the lines of work established in the Inter-municipal Climate Change Adaptation Plan of San José Poaquil and San Martín Jilotepeque, which has helped advance the replication process.



Replication structures [capacity-building]. The cooperative has functioned as an organizational platform that facilitates knowledge exchange, the collective adoption of sustainable practices, and their dissemination to other producers in the municipality.



Evidence [enabling conditions]. The joint and adaptive implementation of EbA measures has generated practical evidence on the benefits, challenges, and good practices that are shared among producers through learning exchanges and that directly influence their replication decisions.

LESSONS LEARNED



The local and interinstitutional participation spaces that adopt a gender and youth-based approach have shown strong potential for consolidating the scaling up of EbA measures in territories where subsistence crops are grown. However, land tenure continues to be a significant barrier to expanding these practices among women and young people.



Facilitating the link between actors, for example between cooperatives and financial organizations, is a powerful tool for generating trust and promoting access to loans for the implementation of EbA measures.



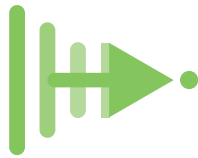
The use of audiovisual resources, such as short videos and documentaries created by the producers themselves, has been highlighted as an innovative opportunity to share knowledge, inspire other young people, and expand the reach of EbA measures in rural territories.



15. Institutional leadership for resilient agriculture.

Districts of Pital, Puerto Viejo and Horquetas.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national
(districts of Pital, Puerto Viejo
and Horquetas)

THEMATIC SECTORS:



**Food and
agriculture**



**Ecosystems
and biodiversity**



CONTEXT

Climate change is negatively impacting crops' phenology and yields, increasing the vulnerability of production systems that are already facing other problems such as soil degradation, increases in intensive pesticide use, and high production costs. Strengthening their resilience and competitiveness calls for a transition toward more sustainable agriculture.

A key component of this shift toward production systems better adapted to climate change is the production and use of bioinputs (plant- or animal-based products and processes used in agriculture or livestock farming to promote sustainability). In this context, regulations in some markets – such as the European Union standards linked to the Green Deal – are promoting reduced industrial pesticide use and the adoption of bioinputs. However, the implementation of these practices remains limited, mainly due to the lack of knowledge, technical capacities, and practical evidence among agriculture and livestock producers and technicians.



REPLICATION OF GOOD ECOSYSTEM-BASED PRODUCTION PRACTICES



SCALING UP OBJECTIVE

Promote the adoption of good agricultural and livestock practices that strengthen the sustainability and resilience of production systems.

RESULTS

- ✓ 105 producers received training on bioinput production and the implementation of sustainable horticultural plots in the Pital district and the community of Río Frío, with support from the Ministry of Agriculture and Livestock (MAG).
- ✓ Good production practices for sustainable soil management were replicated by extension service staff in two additional districts: Puerto Viejo and Horquetas.
- ✓ In the replication stage, strengthening the biofactory at the Centro Agrícola Cantonal para el Progreso de Sarapiquí (CACPROSA) was prioritized, alongside the provision of bioinput kits to local producers and the development of farm plans for the adoption of improved production practices.
- ✓ A technical guide on the production and use of bioinputs was developed by MAG extension service staff, who had been trained through the EbA LAC program's Training of Trainers process. The guide is used as an educational resource in the training processes that promote the replication of these practices.
- ✓ In the short term, the adoption of EbA measures is projected to expand to new districts, driven by rich knowledge exchange among producers and within the network of MAG extension service staff.

ASSOCIATED EbA MEASURES



Sustainable management and use of natural resources through good production practices in agriculture and sustainable soil management.

SUCCESS FACTORS FOR SCALING UP



Ownership [adaptive governance]. The Ministry of Agriculture and Livestock's commitment has been crucial to the intervention's success. Their technical staff played a leading role as multipliers, mobilizing institutional capacities and resources to lead training processes.



Replication structures [capacity-building]. The MAG's agricultural extension structures, strengthened by the Training of Trainers program, enabled extension service staff to function as multipliers, replicating and adapting the practices in new territories.



Networks [capacity-building]. Coordination with the organic producers network and with Coopepiña expanded the reach of the initiative, providing legitimacy, prior experience, and the ability to mobilize support.



Guides and manuals [capacity-building]. The bioinput guide consolidated learning and facilitated the dissemination of practical knowledge among producers and extension service staff.

LESSONS LEARNED



The regulations of export markets and consumption patterns act as catalysts for the adoption of sustainable practices and demonstrate how these practices can generate economic opportunities, tangible competitive advantages, and greater efficiency in the use of resources, thereby strengthening long-term resilience.



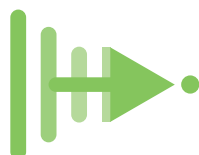
Sharing evidence on the benefits of sustainable management practices reinforces the credibility of the message, particularly when it comes from producers who have had positive results themselves, driving the adoption and replication of these practices.



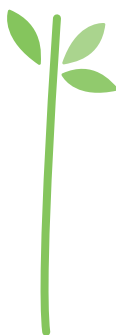
16. Recognizing traditional knowledge in landscape management.

Maya K'iche' knowledge, Guatemala

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Municipalities of Santa Cruz del Quiché, San Bartolomé Jocotenango and San Andrés Sajcabajá).

THEMATIC SECTORS:



Cultural
heritage



Food and
agriculture



Water and
sanitation



Ecosystems and
biodiversity



CONTEXT

The department of Quiché faces climate change impacts such as highly variable precipitation patterns and temperatures. In recent years, this has resulted in both periods of extreme rainfall leading to floods and landslides, as well as prolonged periods of drought that severely affect local livelihoods ([Departamento de Quiché, 2023](#)).

Added to this are challenges such as deforestation, forest fires, and soil erosion that further weaken the resilience of ecosystems and rural communities. In this context, the replication of agroforestry systems that integrate traditional knowledge and conservation measures in groundwater recharge zones is a great way to strengthen adaptation in Quiché.



SCALING UP OBJECTIVE

Expand the adoption of agroforestry systems and sustainable management systems to reach a greater number of beneficiaries. This scaling prioritizes soil conservation and the protection of water resources in critical groundwater recharge zones.

RESULTS

- ✓ 981 people from rural communities implemented agroforestry systems (AFS), soil conservation practices, and water resource management practices in water recharge zones.
- ✓ 1,123 people strengthened their capacities on sustainable AFS management and soil conservation practices such as using vegetation cover, living barriers, and water infiltration terraces.
- ✓ Agroforestry systems were established that combine forest species (pine, fir, alder, and cypress) with fruit trees (apple, peach, and plum), selected according to local needs and the recommendations of the Municipal Rural Extension Agencies (AMER) of the Ministry of Agriculture, Livestock and Food (MAGA).
- ✓ Coordination was achieved between municipal departments, community leaders, the Water for People organization, the National Forest Institute (INAB) and MAGA, which supported capacity-building.
- ✓ Traditional knowledge from the Maya K'iche' people was integrated into the design and implementation of the measures.
- ✓ In the medium term, the implemented EbA measures are expected to improve soil moisture retention, reduce erosion, and generate economic co-benefits through fruit and firewood production.

ASSOCIATED EbA MEASURES



Conservation of ecosystems in water resource recharge zones.



Sustainable management and use of ecosystems through school gardens, community plant nurseries, agroforestry systems, living barriers, water infiltration terraces, and sustainable forest management of Guatemalan fir plantations (*Abies guatemalensis*).



SUCCESS FACTORS FOR SCALING UP



Ownership [adaptive governance]. The communities demonstrated strong ownership by contributing their traditional knowledge, labor, and own financial resources to acquire additional trees. Likewise, the municipalities, through their municipal water and sanitation directorates (DIMAS), actively participated in coordination with other institutional and civil society actors, demonstrating commitment to the scaling process.



Guides and manuals [capacity-building]. The systematization of the Maya K'iche' people's ancestral knowledge and its integration into the EbA approach was a fundamental component, captured in the [*Good Practices Manual for Ecosystem-based Adaptation – the Perspective of the Maya K'iche' people*](#) (EbA LAC, 2024). Traditional soil and water conservation practices and forest and biodiversity management were integrated and strengthened within the scaling process. The intergenerational transmission of this knowledge has helped keep this cultural identity alive and strengthen the sustainability of the interventions.



Planning [enabling conditions]. The pre-existence of the Intermunicipal Climate Change Adaptation Plan was key to facilitating stakeholder mobilization and ensuring institutional recognition of the promoted practices and their replication. Furthermore, the municipal development and land-use plans (PDM-OTs) were important for identifying potential areas for the implementation of EbA measures.

LESSONS LEARNED



The school gardens and community plant nurseries are spaces with strong potential to promote the replication of agroforestry systems and conservation practices, while also contributing to the local rural economy. Integrating these spaces into the educational curriculum could expand the reach and improve the sustainability of the actions.



The sustainable management and harvesting of Guatemalan fir trees, a native species with high cultural and commercial value during the Christmas season, represented a strategic opportunity for communities seeking to implement EbA measures that generate short-term economic co-benefits while also supporting the conservation of native forests.



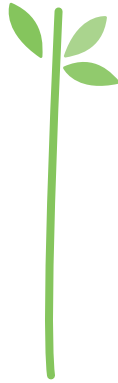
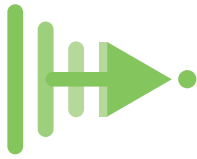
Working with young people is essential for the intergenerational transmission of ancestral knowledge. Cultural heritage endures over time when the worldview that values and cares for nature is passed down from grandparents to future generations.



17. Co-implementation and scaling up of EbA measures in rural production systems.

Agricultural producers in the province of Manabí, Ecuador

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



Sub-national

(Province of Manabí, cantons/municipalities of Chone, Tosagua, Junín and Bolívar (northern landscape) and Portoviejo, Santa Ana and Jipijapa (southern landscape)).

THEMATIC SECTORS:



Ecosystems
and biodiversity



Food and
agriculture



Poverty
eradication and
livelihoods



CONTEXT:

In the province of Manabí, rural production systems are mainly composed of producers who manage small- and medium-sized farms (from one hectare upward) using low-technology systems. Maize, banana, cacao, and coffee monocultures predominate, as well as extensive cattle farming on natural and cultivated pastures. This production model has contributed to soil degradation and to growing pressure on water resources.

These rural systems are highly vulnerable to droughts, floods, and other climate change hazards, underlining the urgent need to design adaptive strategies that integrate sustainable production, gender equality, and biodiversity conservation. In this context, the co-implementation of EbA measures at the farm level represents a viable strategy for strengthening climate resilience and promoting the sustainable management of rural landscapes in Manabí.



SCALING UP OBJECTIVE

Replicate the co-implementation of EbA measures in farms and rural landscapes by strengthening community participation, consolidating multi-level coordination, and generating evidence.

RESULTS

- ✓ Co-implementation of 10 EbA measures in 25 communities, strengthening the resilience of 6,337 people (4,137 direct and 2,200 indirect beneficiaries), with 43 per cent of participants being women.
- ✓ A total of 7,751.7 hectares were reached, 3,432.8 hectares through direct intervention and 4,319 hectares as indirect impact areas, including scaling up areas.
- ✓ The measures with the greatest impact and sustainability at farm level were beekeeping, agroforestry systems, agrobiodiversity, and sustainable bamboo management.
- ✓ Local capacity-building through more than 40 field schools, complemented by practical workshops and experience exchange visits.
- ✓ Consolidation of a local supply network through the establishment of 10 plant nurseries (3 community and 7 institutional). This structure operates as a permanent mechanism for knowledge transfer and the production of high-quality plant material, ensuring availability of the seedlings required to expand agroforestry systems and restore ecosystems under the EbA approach.
- ✓ Generation of technical and socioeconomic evidence that supports the replication and sustainability of EbA measures in different contexts.
- ✓ Promotion of local ownership, women and youth leadership, and the strengthening of agricultural, ecological, and social resilience in the province of Manabí.
- ✓ More than 160 families replicated sustainable management, agroecology, and restoration practices thanks to a combination of technical training, community coordination, and financial support from savings banks.

ASSOCIATED EbA MEASURES



Conservation of biodiversity through signing farm-level conservation agreements.



Sustainable management and use of agrobiodiversity, agroforestry systems, silvopastoral systems, beekeeping, sustainable forest management and bamboo harvesting.



SUCCESS FACTORS FOR SCALING UP



Evidence [enabling conditions]. The generation of evidence directly from farms was the driving force behind scaling up; these tangible results made it possible to attract new actors and encourage their participation by demonstrating the effectiveness of EbA measures. To ensure data traceability, a monitoring system was implemented based on the ArcGIS Survey123 app (Esri, 2023), a tool that facilitates the real-time collection of georeferenced data. This information flow enabled local actors to report progress quickly and flexibly.



Replication structures [capacity-building]. The farmer field schools, workshops, exchange visits, and student involvement strengthened local capacities, contributing to the implementation of EbA measures at farm level. The community-based organizations facilitated the mobilization of participants, promoted collective learning, and consolidated replication structures that enabled successful practices to be shared with other families or in new communities, ensuring continuity of the interventions.



Multi-level approach [adaptive governance]. The implementation of EbA measures at farm level was made possible through the participation and coordination of various actors, including local organizations and public and private technical bodies. This collaboration made it possible to support the implementation of field practices, create learning and exchange spaces, and strengthen complimentary processes. Coordinated interaction among various actors contributed to the effectiveness and sustainability of the interventions, underlining that multisectoral cooperation is the very foundation for co-implementation.

LESSONS LEARNED



Actively involving communities ensures that EbA measures meet their true needs, strengthen local ownership, and facilitate replication in new areas, thereby consolidating sustainable structures and adaptive practices.



The implementation of participatory mechanisms and learning spaces adapted to local contexts enables good practices to be disseminated and replicable governance structures to be established. This approach ensures the interventions' long-term continuity and the scaling up of measures in various rural contexts.



The integration of technical and socioeconomic analyses with coordination between various levels of government and relevant actors strengthens trust among territorial stakeholders, supports informed decision-making, and facilitates the replication of EbA measures, enhancing their impact and sustainability against future challenges.

SCALING UP EXPERIENCE BRIEFS



CATEGORY:



**EbA information
systems and
technology**



18. Risk management and adaptation platform for the tourism sector.

General Superintendency of Insurance (SUGESE), the Costa Rican Tourism Institute (ICT), and private insurance companies such as ADISA/Internacional de Seguros, BN Seguros, Popular Seguros, and Sagicor. Costa Rica.

TYPE OF SCALING:



LEVEL OF GOVERNANCE:



National

THEMATIC SECTORS:



Adaptation
finance



Tourism



Ecosystems
and biodiversity



Water and
sanitation



Infrastructure
and human
settlements



CONTEXT

The tourism sector in the region faces significant vulnerability to hazards associated with climate change, as well as limited availability of practical tools for risk management and for planning adaptation measures. To address this challenge, the creation of virtual knowledge platforms emerges as an innovative tool for strengthening the resilience of micro-, small, and medium-sized hotel enterprises against climate change. The primary objective is to generate information that not only raises awareness on climate-related hazards, but also supports the development of financial risk transfer instruments, such as insurance, ensuring the continuity of tourism operations in the country.

This initiative was developed as a strategic collaboration between the General Superintendency of Insurance (SUGESE), the Costa Rican Tourism Institute (ICT), and a group of private insurance companies that includes ADISA/Internacional de Seguros, BN Seguros, Popular Seguros, and Sagicor.



It is precisely the need for a platform capable of generating key information for the development and effective promotion of risk management tools, such as climate insurance, that led to the conception of an initiative aimed at the tourism sector, through a collaboration between the General Superintendency of Insurance (SUGESE), the Costa Rican Institute of Tourism (ICT) and a group of private insurers including ADISA/Internacional de Seguros, BN Seguros, Popular Seguros and Sagicor.



SCALING UP OBJECTIVE

Strengthen the tourism sector's capacity to respond to the risks of climate change by integrating the implementation of ecosystem-based adaptation (EbA) measures and the use of insurance mechanisms to increase resilience.

RESULTS



The [Fu-Turismo](#) platform was developed as a strategic tool through the participation of key actors such as SUGESE, the ICT, and the national insurance sector, with ADISA playing a prominent role.



The platform incorporates training modules, tools for climate risk self-assessment, calculation, and visualization, as well as the ability to create action plans to tackle the adverse impacts of climate change and to monitor the adaptation measures to be implemented.



Pilot tests were carried out in hotels across different areas of the country, gathering positive feedback from users.



It includes thematic guides on the climate risks affecting areas that are strategic for the tourism sector.



ASSOCIATED EbA MEASURES



Restoration of ecosystems through the rehabilitation of nearby wetlands and rivers to ensure the availability of water, as well as the reforestation of degraded areas to reestablish vegetation cover.



Sustainable management and use of the environment through methods such as:

- The implementation of hanging gardens, green roofs, living walls, pergolas with climbing plants, and tree planting to create shade and regulate temperature.
- Designing gardens with native plant species that promote pollinators and biodiversity.
- Installing rain gardens or bioswales for better water and landscape management.
- Creating vegetation-lined pathways to improve thermal comfort.
- The use of living fences or natural barriers to prevent soil erosion.

SUCCESS FACTORS FOR SCALING UP



Guides and manuals [capacity-building]. The Fu-Turismo platform integrates thematic guides in areas that are strategic for adaptation. In addition, the program provides training and documentation on climate change, adaptation, and EbA measures.



Ownership [adaptive governance]. Actors from the private insurance sector and key public sector institutions have taken ownership of the program's activities and have committed to the future management of the platform. This backing, which includes high-level decision-makers, ensures the operational and technical continuity of Fu-Turismo. Furthermore, the platform was subject to a participatory validation process with representatives from the tourism and hospitality sector, ensuring its future functionality.



Evidence [enabling conditions]. The platform enables users to access scientific information about climate risks and adaptation measures to address potential impacts, including EbA measures as part of a comprehensive strategy.



LESSONS LEARNED

- ✔ Involve the insurance sector from the initial planning stages. Doing this from the outset is essential, as it provides the technical knowledge, product offers, and networks required. This initial involvement makes it possible to design more viable solutions, facilitate the scaling of these solutions, and ensure the sustainability of proposed models.
- ✔ Adapt language to the target economic sector. It is fundamental to use terminology that is relevant and aligned with the economic sector in question. For the tourism sector, for example, this means integrating the impacts of climate change into the business model's risk-analysis logic. Likewise, clearly demonstrating the economic benefits of early adaptation action is key to facilitating ownership and implementation by sector actors.
- ✔ Developing modules and user profiles adapted to different actors, such as municipalities or communities, expands the tool's reach and strengthens the participation of new actors.



REGIONAL SUMMARY OF SUCCESS FACTORS

Although each country has its own institutional, environmental, and sociopolitical realities, the experiences of the EbA LAC program show that scaling up ecosystem-based adaptation does not follow a single path, but instead is the result of a combination of success factors and the dynamic interaction between them. These combinations vary according to the type of scaling, the thematic sector, the level of governance, and the category of EbA measure. Together, the experiences confirm that EbA is scaled up most effectively when **adaptive governance**, **capacity-building**, and **enabling conditions** are addressed as an integrated package with clear scaling objectives.

How does EbA scale up? Regional dynamics by type of scaling

Vertical scaling was one of the predominant methods in the region and is associated with public or private institutions that integrate EbA into policies, planning instruments, or financial mechanisms. The experiences of the EbA LAC program show that, for this type of scaling, **multi-level approach, planning, evidence, and long-term financing** are the predominant factors.

Strengthening platforms and institutional arrangements that enable coordination between ministries, sectoral agencies, and sub-national governments was key to avoiding institutional fragmentation and ensuring coherence in the adoption of EbA. Likewise, when **adequate enabling conditions** are consolidated, NbS approaches can be better integrated into strategic instruments with clear pathways for implementation.



Costa Rica: the integration of the EbA approach in the National Rural Territorial Development Plan ([Brief 1](#)) institutionalized EbA and gender-responsive criteria within a national planning instrument.

Horizontal scaling, in turn, was expressed primarily through the replication of restoration and sustainable management practices, driven by **ownership, networks, replication structures** and, in some cases, **guides and manuals**.

This type of scaling progresses rapidly in contexts where territorial leadership, active networks, and institutional replication structures are in place, but may encounter barriers to scaling if not linked with stable financial policies or mechanisms that support their continuity and expansion.



Guatemala: the experience of the Choacruz Avocado Growers' Cooperative ([Brief 14](#)) exemplifies the replication of sustainable soil management practices, crop diversification, and production restoration, as well as the role of producer cooperatives in supporting the ownership and multiplication of EbA measures.

The experiences of the EbA LAC program also show that **planning the combination of both vertical and horizontal scaling pathways from the outset** strengthens the scaling process. That is, coordinating local practices that generate evidence and social ownership with national or sub-national frameworks that formally integrate them into policies, programs, and budgets. This confirms that scaling up must be an **explicit goal**, and not an emergent or merely spontaneous outcome of the pilot projects.



Ecuador: coordination between the Development Bank of Ecuador (BdE) and decentralized autonomous governments ([Brief 12](#)) combined the integration of EbA financial criteria (vertical) with the development of watershed restoration and sustainable management projects (horizontal), expanding impact and sustainability.

What is scaled up? Trends by category of EbA measure

The four categories of EbA measures – **protection, conservation, restoration, and sustainable management and use** – rely on different combinations of success factors.

In the case of **protection and conservation**, scaling depends primarily on **multi-level approaches, planning, and ownership**. These measures are more effectively institutionalized when they are integrated into territorial planning and management instruments – such as municipal conservation areas, biological corridors, or other conservation designations – and when they are built upon participatory and inclusive processes that acknowledge and manage existing and potential conflicts (Crawford, 2025).

Ecuador: the experience of formulating development and land-use plans (PDOT) with EbA and gender-responsive approaches ([Brief 5](#)) demonstrates that it is possible to scale up protection and conservation measures through territorial planning.

Likewise, scaling up is facilitated when enabling regulatory frameworks and clear governance structures are in place.

When it comes to **restoration measures**, scaling up is characterized by greater requirements in initial investment, technical capacities, and regular maintenance. These measures seek to restore the functions of degraded ecosystems, and are highly dependent on **planning, evidence, and long-term financing**. For restoration to be effective on a wider scale, it is necessary to integrate it into the **planning** of instruments that simultaneously address all the structural causes of degradation, which tend to combine the effects of climate change with unsustainable ecosystem use and management patterns (deforestation, overgrazing, and disorganized agricultural expansion, among others) (Hou-Jones, Roe & Holland, 2023). When restoration has **financial mechanisms** – particularly those provided by the public sector – that recognize its benefits that accrue over time, is supported by **evidence** of its contributions to risk reduction and to the provision of other ecosystem services and to co-benefits, its scaling potential is greater at both local and landscape levels.

Sustainable management and use measures tend to be more dynamic in their replication and adoption by local actors, and present scaling pathways that are more evident in the short and medium term, combining ecological benefits with direct improvements to productivity and incomes. Here, ownership, replication structures, and access to financing are the decisive success factors. EbA is scaled up when practices such as agroforestry systems, sustainable soil management, or production diversification are integrated into production transformation strategies, rather than treated as one-off actions. Cooperatives, field schools, savings groups, and producers' associations function as platforms that promote these changes, while also facilitating financing that supports families' investment decisions and helps organizations to incorporate the EbA approach.

Costa Rica: good practices in sustainable soil management were replicated in new districts, showing how ownership, institutional replication structures, and technical support contribute to scaling up EbA measures in rural production systems ([Brief 15](#)).

When the four categories of EbA measures are designed and combined in a complementary manner within one landscape, scaling up moves beyond simply increasing the number of hectares or plots it affects and begins to manifest in systemic changes in land management and the resilience of ecosystems and communities.

What trajectories does it follow? Trends by scaling category

The scaling up of EbA is channeled primarily through four **scaling categories**:



1. The integration of EbA measures into planning and management instruments



2. Increasing and sustaining investment in EbA



3. The replication of good production practices



4. The development of information systems and technology

Each category relies on a different combination of success factors and has a distinct role within scaling strategies.

1. Integration of EbA measures into planning and management instruments



The most common category within EbA LAC's scaling experiences is the integration of EbA into **institutional planning and management instruments**, both sectoral and sub-national. These experiences were driven primarily by a **multi-level approach, planning, and guides and manuals**.

These success factors are fundamental because the integration of EbA into planning and management instruments involves transforming the way in which the State and other institutions make decisions. **Planning** enables EbA to translate into objectives, goals, responsibilities, and concrete procedures; without clear planning, EbA runs the risk of being reduced to a generalized reference without any operational consequences. A **multi-level approach** promotes coherence between national, sub-national, and local levels; without this approach, decisions taken at the central level may not reflect the priorities and needs of the territories or have the institutional coordination required to implement them. **Guides and manuals** help technical teams understand how to apply the approach in practice; without these tools, the responsible teams lack the guidance required to adapt EbA to their specific contexts. Together, these factors enable EbA to move beyond purely aspirational language and become concrete operational objectives and criteria within public management.



Costa Rica: the incorporation of the EbA approach into the Canton of Pococí Climate Change Adaptation Plan ([Brief 2](#)) reflects this trajectory of integration within planning and management instruments. The combination of planning, methodological guides, and multi-level coordination enabled EbA to become a core organizing principle of climate planning in the canton.

2. Increasing and sustaining financing for EbA



The second most prominent category concerns experiences that strengthen **financing for EbA**, through public, private, and community mechanisms. This type of scaling is driven primarily by the **long-term financing, planning, and ownership** success factors.

Scaling up EbA involves moving from one-time project-specific financing to **sustainable investment schemes: long-term financing** makes it possible to support sustainable restoration, conservation, and management processes, whose results are measured over long periods of time; **planning** guides the allocation of resources to territories, sectors, or priority measures, avoiding fragmented or reactive investments; and **ownership** by financial institutions, public bodies, and community organizations facilitates EbA's integration into institutional regulations, tools, and priorities, sustaining and expanding financing flows over time.

To increase and sustain EbA investment in Latin America and the Caribbean (LAC), a strategic combination of **public, private, domestic, and international financing** is required, supported by mechanisms that recognize the climate-related benefits and socio-environmental co-benefits. This involves strengthening the role of public budgets, development banks, and climate funds to carry out direct investment and offer subsidies, concessional loans, and guarantees that reduce risk and make EbA actions possible, while simultaneously mobilizing private investment through green bonds, blended finance, payments for environmental services, climate insurance, and public-private alliances (United Nations Environment Programme Copenhagen Climate Centre, 2024).

When various financing sources and mechanisms are coordinated with **planning** and **evidence**, it creates a favorable environment that enables EbA to stop depending on one-off projects and begin to consolidate itself as a structural investment option for climate resilience in the region.

However, significant challenges remain: the lack of bankable projects, the fragmentation of multiple small investments, the difficulties in assessing the economic value of EbA's benefits and co-benefits, and the limited technical capacity to structure and operationalize financial instruments adapted to specific contexts. The experience of EbA LAC shows that seed capital continues to play a key role: it enables initial risks to be taken in innovative sectors or with non-traditional actors, demonstrates the technical and financial viability of EbA in practice, and subsequently leverages more stable public, private, and community financing flows.



Guatemala: *the experience of the National Forest Institute (INAB) (Brief 10) demonstrates how a Credit Guarantee Scheme for Forestry Activities can channel long-term resources toward the conservation and restoration of ecosystems for climate resilience, integrating EbA into the country's financing architecture.*

In both of these first two scaling categories, evidence stands out as a factor that must be strengthened in the LAC region. Very rarely does evidence for integration into planning instruments or financing mechanisms come from monitoring, evaluation, and learning (MEL) systems in the territories themselves; even with interventions on the ground, information tends to be fragmented, short-term and focused on activities rather than results, limiting its usefulness in guiding decision-making (Sowińska-Świerkosz & García, 2022). Moving toward MEL systems that link investment, results, and learning would contribute to consolidating EbA as a key approach, both in planning and investment.



Costa Rica: *the ACTIVA laboratory and the Development Banking System (Brief 8) illustrate the role of seed capital and of monitoring, evaluation, and learning (MEL) systems in scaling up EbA investment.*

3. Replication of good ecosystem-based production practices



This category stands out in rural territories where EbA is implemented through agroecological practices, production restoration, agroforestry systems, and sustainable water and soil management. The experiences demonstrate that replication is driven primarily by **ownership, replication structures, community networks, and guides and manuals**.

The replication of production practices involves **changing day-to-day decisions** on land use and production methods. **Community ownership** allows families to make EbA measures their own and adapt them to their realities; otherwise, these practices tend to be abandoned once external support comes to an end. **Community and institutional networks** facilitate the exchange of experiences between communities and organizations; without these networks, knowledge remains confined to just a few farms or territories. **Replication structures** (such as cooperatives, field schools, and grassroots organizations), leveraged by the Training of Trainers approach, function as platforms to expand reach to more actors and territories in an organized and sustained manner, enhancing the efficiency of the technical support. **Educational guides and materials** support the expansion of EbA practices without losing flexibility and are key to capacity-building in the territories.

Together, these factors allow EbA measures to move beyond being one-time experiences to become **replicable production models** that can be sustained and expanded over time.



Guatemala: the experience of the Choacruz Avocado Growers' Cooperative ([Brief 14](#)) exemplifies this replication trajectory. Through cooperative organization, technical support, and peer exchanges, the adoption of sustainable management practices, crop diversification, and production restoration was promoted.

4. EbA information systems and technology



In this category scaling up relies on **information platforms and digital tools** that support decision-making on climate risks and the prioritization of measures. In the EbA LAC program, this was driven primarily through **evidence, guides and manuals**, and **ownership**.

These success factors are essential because information systems and technology help **reduce uncertainty and improve the quality of decisions** in climate change contexts. To do so, they need accessible and reliable **evidence** on, for example, climate risks, costs, and EbA benefits and co-benefits, and must make this evidence available in an easily understandable format through technological solutions. **Guides and manuals** help translate this information into operational criteria and clear procedures for its use in policies, planning, and investment, while institutional and territorial **ownership** prevents the platforms from becoming project-specific products and promotes their incorporation into existing routines and processes. When these elements are coordinated, information systems become **strategic infrastructure** for identifying where and how to scale up EbA and who should be involved.



Costa Rica: the Fu-Turismo platform ([Brief 18](#)) exemplifies how a climate information system for the tourism sector integrated data on climate hazards, vulnerability, and adaptation measures, and was later used by institutions in the insurance sector to inform investment and management decisions.

Simultaneously, the experience highlight significant challenges that persist: many tools are developed as project-specific products, with limited financing for updating and maintaining them; information is not always disaggregated at the scale required for territorial decision-making; and the systematic integration of EbA result data is still at an early stage.

Strengthening interoperability, data governance, and the connection to monitoring, evaluation, and learning (MEL) systems is key to ensuring these systems provide sustained support for scaling up EbA.

Where to scale up? Trends by thematic sector

The experiences of EbA LAC show that scaling up EbA was concentrated in certain particularly dynamic sectors: **ecosystems and biodiversity; food and agriculture; water and sanitation; and, increasingly, the infrastructure and human settlements sector**. This pattern is consistent with international evidence, which identifies water, agriculture, and conservation as the fields in which nature-based solutions have progressed most clearly, while the infrastructure sector remains at the initial stages of integration (Seddon et al., 2021).

Costa Rica: the experience of strengthening landscape-level resilience through biological corridors ([Brief 3](#)) provides multiple benefits to individuals and their communities. The conservation of ecosystem services and biodiversity stands out, including water protection, the resilience of agrifood systems, and the protection of infrastructure and human settlements against climate-related events.

In the **water and sanitation sector**, scaling up primarily took place through restoration and protection measures for groundwater recharge zones and riparian forests, driven by the combination of a **multi-level approach, planning, evidence, and ownership**. EbA is scaled up more robustly when its measures are integrated into **planning** and management instruments, such as watershed plans, land-use plans, and water security agendas, and when they are supported **by technical information** on risks, ecosystem services, and community benefits. The **multi-level approach** is key to ensuring that interventions do not remain isolated, by coordinating local governments, drinking water service providers, environmental authorities, and community actors. Institutional and social **ownership** strengthens EbA's capacity to influence decision-making on water management and investment.

Ecuador: the participatory management of conservation and water protection areas led by municipal governments ([Brief 6](#)) illustrates these dynamics. The joint designation of priority areas, local agreements for their management, and their coordination with water planning instruments link the protection of strategic ecosystems with water security.

In the **food and agriculture sector**, scaling up primarily took place through the replication of agroforestry systems, agroecological practices, and sustainable soil management. Here, **ownership, replication structures, networks, and access to financing** emerge as the decisive success factors. EbA successfully scales up when food producing families can see concrete benefits in productivity, reduced losses due to climate-related events, and increased incomes, which has been key to strengthening ownership. Simultaneously, interest has translated into action where **cooperatives, associations, field schools, or savings groups** are in place to

Ecuador: the experience of co-implementing and scaling up EbA measures in rural production systems in Manabí ([Brief 17](#)) demonstrates how working with agricultural producers, field schools, plant nurseries, and savings banks enabled the replication of sustainable soil management practices, agroforestry systems, and production restoration, strengthening the climate resilience and livelihoods of rural families.

facilitate dissemination, technical support, and peer exchange. Finally, facilitating access to financing through mechanisms such as savings groups, microloans, and seed capital for rural enterprises has been crucial in enabling EbA to expand and be sustained, rather than depend on short-term external projects.

In the **ecosystems and biodiversity sector**, scaling up focused on protection, conservation, ecological restoration, and landscape-level connectivity initiatives, supported by territorial ownership, networks, and a multi-level approach. The experiences show that EbA scales up more easily when it builds upon existing governance structures, such as protected area committees, and when conservation objectives are aligned with climate change adaptation, risk management, and rural development. This approach underlines the role of integrated landscape management in simultaneously addressing the biodiversity and climate crises (UNEP, 2022).

Guatemala: the experience of incorporating adaptation into conservation area planning in the municipality of Acatenango ([Brief 4](#)) demonstrates how, through the participatory updating of conservation area management plans and integration of climate risk criteria, the municipality can link conservation, vulnerability reduction, territorial planning, and tourism activity.

The **financial sector** will continue to be a key enabler for scaling up inasmuch as it integrates EbA criteria into its mechanisms, programs, lines of credit, and incentives, supported by **long-term financing, replication structures, and evidence**. To overcome the sector's yet limited and fragmented participation, it is necessary to address the persistent perception of high risk, the difficulties in monetizing the multiple benefits of EbA (often considered public goods) and

the temporal mismatch between the long-term benefits of NbS and expectations of short-term profitability. This requires proactively integrating EbA criteria into investment instruments such as blended finance, green bonds, and guarantee schemes to reduce investment risks and promote long-term sustainability (Biasin et al., 2024). This process must be supported by the generation, systematization, and dissemination of quantifiable and rigorous **evidence** on the economic effectiveness and efficiency of nature-based solutions compared with conventional alternatives. In this context, development banks and microfinance institutions have strong potential to function as **replication structures** for both financial schemes and the capacities required to integrate EbA into their operations.

Simultaneously, the **insurance and tourism** sectors emerge as areas with strong potential for scaling up EbA. However, they require greater sectoral **ownership** and a more systematic generation and dissemination of **evidence** to move from exploratory analyses to integration into their operations and business models ([Brief 18](#)).

Finally, the opportunities and challenges for scaling up EbA in sectors such as **poverty eradication and livelihoods, health and health services, and cultural heritage** continue to be comparatively under-studied in Latin America and the Caribbean. In the context of rapid urbanization and growing climate risks, these sectors represent a strategic area for future efforts.

The gender-responsive perspective and local and Indigenous knowledge: catalysts for scaling up

The adverse effects of climate change disproportionately affect women, young people, and Indigenous peoples due to structural gaps, for example, in access to land, credit, information, and decision-making spaces (Nucinkis & Michels, 2025).

EbA will only be effective and sustainable if it is also just and fair (Seddon et al., 2021). The experiences of the EbA LAC program show that when **gender** and **social inclusion** are properly integrated into the design and governance of EbA measures, rather than simply viewed as selection criteria for beneficiaries, several success factors for scaling up are strengthened, particularly **ownership, replication structures, and networks**. This translates into processes with greater social legitimacy, long-term continuity, and capacity for territorial expansion.

Ecuador: In rural communities in Manabí, the creation of savings banks primarily managed by women made it possible to link economic empowerment, the co-implementation of EbA measures, and horizontal scaling ([Brief 11](#)).

Local and Indigenous knowledge is equally fundamental to the effective scaling up of EbA. Not taking this knowledge into account increases the risk of generating or exacerbating tensions around socio-environmental conflicts (UNEP, 2022; Crawford, 2025). In territories where ecosystem management, sustainable agriculture, and restoration are ancestral practices, the integration

of this knowledge enables EbA measures to be adapted to sociocultural, environmental, and production realities, and strengthen local **ownership**. Its integration into planning instruments, manuals, and training processes builds bridges between science and traditional knowledge.

Guatemala: In Maya K'iche' territories, the integration of traditional knowledge into agroforestry systems, soil and water conservation practices, and sustainable forest management made it possible to design and implement culturally relevant EbA measures ([Brief 16](#)). This knowledge was systematized in a good practices manual and was linked to inter-municipal adaptation plans.

The experience of EbA LAC suggests that the gender-responsive perspective and local and Indigenous knowledge must be recognized as cross-cutting and catalyzing elements, and not as mere accessories to scaling up. When women, young people, and indigenous communities participate in and influence decision-making, lead replication structures (cooperatives, savings banks, territorial committees, etc.), and their knowledge is recognized and shared, EbA processes show greater resilience to political changes, greater capacity to mobilize resources, and more equitable distribution of benefits.



Challenges and opportunities: a diverse yet converging outlook

The experiences in Costa Rica, Ecuador, and Guatemala highlight **common challenges** for scaling up EbA, particularly around institutional fragmentation, the limited availability of sustained financing, and the need to strengthen information and monitoring systems.

Across the three countries, EbA scaling interventions generated valuable evidence, yet challenges linked to limited human and institutional capacities remain, as well as a lack of budgeting at various levels of governance, hindering the institutionalization of EbA in long-term planning processes. Gaps in sub-national technical capacities have also been identified, complicating coherent implementation across different levels of governance.

Likewise, social and gender inequality continues to be an obstacle to the equitable adoption of EbA practices, particularly in rural and Indigenous areas where climate vulnerability is greater. These challenges align with those highlighted in the international literature on NbS scaling, including the need for more robust enabling frameworks and financial mechanisms that recognize the numerous benefits of EbA (UNEP, 2022).

At the same time, **distinct opportunities** have been identified that can accelerate scaling up according to the conditions of each country. In **Ecuador**, the existence of innovative public financial institutions (such as the Bank of Ecuador) opens avenues for consolidating long-term financing lines that systematically integrate EbA.

In **Costa Rica**, the territorial governance structure represents a solid platform for the expansion of conservation and restoration measures at the landscape level, supported by a favorable regulatory environment and successful experiences from the development banking system.

In **Guatemala**, strong community cohesion, Indigenous governance systems, and ancestral knowledge generate favorable conditions for the replication of local measures, provided they have technical support and inclusive financing mechanisms. Taken together, although scaling up faces structural challenges, there are windows of opportunity with significant potential in each country.





G. CONCLUSIONS

Analyzing the 18 experiences of the EbA LAC program shows that scaling up Ecosystem-based Adaptation is a complex, multidimensional, and deeply contextual process that depends on the dynamic interaction between adaptive governance, capacity-building, and enabling conditions. Although the three countries (Costa Rica, Ecuador, and Guatemala) present institutional, environmental, and sociocultural differences, the experiences converge around common pathways: scaling up occurs when EbA **is integrated into existing structures, strengthens the capacities** of key actors, and has **sustainable financing sources** that enable its adoption beyond the project cycle.

The experiences show that effective scaling up is achieved when the EbA approach is institutionalized through **regulatory frameworks, planning instruments and financing systems**, and when it is replicated at the territorial level through **institutional structures and local networks**. Likewise, **local leadership and empowerment**, the full participation of women, young people, and Indigenous peoples, and the integration of traditional knowledge are key factors that increase the legitimacy, ownership, and continuity of scaling.

Taken together, these experiences confirm that EbA has significant potential to align climate change adaptation and biodiversity conservation agendas. However, they also highlight persistent gaps linked to unequal institutional capacities, insufficient financing, the weakness of information systems, and fragmentation between sectors and levels of governance. To move toward deeper and more sustained scaling, these gaps must be closed in the short and medium term.



RECOMMENDATIONS FOR SCALING UP EbA

1. Strengthen existing institutional and regulatory frameworks to consolidate scaling up EbA

National governments should explicitly integrate EbA in public policies, regulatory frameworks, and national, sub-national, and sectoral planning instruments. This includes updating technical guidelines, investment criteria, evaluation methodologies, and regulations linked to land use and natural resource management.

2. Promote inclusive, long-term financing mechanisms

It is necessary to consolidate financing mechanisms and instruments from both public and private sources that integrate EbA criteria, including green credit lines, non-reimbursable funds, public budgets, guarantee funds, and climate insurance, through alliances with development banks and financial and insurance institutions. To complement this, community financing schemes must also be strengthened, such as savings banks and revolving funds, which have been shown to drive the replication of practices at the local level.

3. Strengthen technical and institutional capacities at all levels of governance

Scaling up requires sustained capacities across ministries, sub-national governments, civil society organizations, multipliers, and communities. This means strengthening replication structures, institutionalizing training within ministries and sectoral organizations, Training of Trainers, learning networks, technical support platforms, and EbA training tools that are adapted to each context.

4. Promote intersectoral coordination through landscape- and watershed-based approaches

Territories must be managed as integrated geographic and socioecological systems. Strengthening watershed committees, biological corridors, protected areas, and territorial platforms that enable coordination between distinct thematic sectors – such as agriculture, water, biodiversity, tourism, and finance – is recommended.

5. Fully integrate the gender-responsive perspective, social inclusion, young people, and interculturality

Scaling up is more sustained when it includes those who face the greatest climate challenges. Incorporating the gender-responsive perspective and social inclusion into planning, financing, and monitoring, and ensuring the participation and influence of women, young people, and Indigenous peoples in decision-making spaces, is recommended.

6. Strengthen the generation, systematization, and communication of EbA evidence

Governments and organizations must promote monitoring, evaluation, and learning systems that record the benefits of EbA, including their contribution to climate resilience, biodiversity, and livelihoods. Evidence has proven to be a driving force in mobilizing financing and supporting policy decisions. Consolidating data platforms and their interoperability, modelling tools, participatory monitoring, and warning systems is recommended, enabling the planning of interventions based on impact and co-benefit evidence.

7. Promote multi-actor partnerships at multiple levels

Scaling up requires the coherent participation of State actors, communities, the private sector, academia, and civil society organizations, alongside the support of international organizations. Strengthening multi-level coordination platforms that ensure continuous dialogue and prevent institutional fragmentation is recommended.



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