Innovative answers and sustainable solutions for local development in Latin America

ANDEAN BIOTRADE

Innovative answers and sustainable solutions for local development in Latin America

CAF DEVELOPMENT BANK OF LATIN AMERICA
### WHAT DID WE DO?

**Period of Performance**
- 4 years

**Project Total**
- US$ 20.8 million

<table>
<thead>
<tr>
<th>Country</th>
<th>Pilot Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>100</td>
</tr>
<tr>
<td>Ecuador</td>
<td>51</td>
</tr>
<tr>
<td>Peru</td>
<td>65</td>
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#### Main impacts

<table>
<thead>
<tr>
<th>Environmental impacts:</th>
<th>Social impacts:</th>
<th>Economic impact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>282,569 hectares managed according to sustainability criteria.</td>
<td>More than 29,600 thousand beneficiaries with improved work conditions and quality of life.</td>
<td>65% Average increase in sales from the initiatives over 3 years.</td>
</tr>
<tr>
<td>US$310 million in biodiversity capital generated for the Green Economy.</td>
<td>More than 1,300 people trained in governance and biotrade business development.</td>
<td>46% Co-financing goal exceeded by</td>
</tr>
</tbody>
</table>

### HOW DID WE DO?

#### Methodological principles

- **Four key principles**
  1. INCLUSIVE DEVELOPMENT
  2. SYSTEMIC APPROACH
  3. CONTEXTUALIZED SOLUTIONS
  4. CAPACITY BUILDING

#### Four Themes

- Governance and enabling environment for biotrade
- Market access
- Access to business biotrade
- Sustainability in biotrade value chains

#### Three levels

- MACRO LEVEL
- MESO LEVEL
- MICRO LEVEL

#### Value chain approach

- Enabling environment for biotrade
  - Market access and information
  - Access to financing for biotrade
  - Community and biological resources
  - Producers
  - Processors
  - Traders

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**Andean Biotrade**

Innovative answers and sustainable solutions for local development in Latin America.
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CAF - development bank of Latin America - 2015

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This document was prepared by CAF as the Regional Executing Unit of the Project entitled, “Facilitation of financing for biodiversity-based businesses and support for market development activities in the Andean Region.” It describes the cooperative effort of the GEF and UNEP and the technical work over the five years by CAF and the national Executing Units: Colombian Biotrade Fund, CORPEI Ecuador and PROMPERU, as well as the Ministry of Environment of each country, and national partners.

The opinions expressed in this document are the exclusive responsibility of the authors and do not necessarily represent those of CAF, the GEF and/or the UNEP.
Acknowledgements

This report reflects the collaborative efforts and learnings generated during the implementation of the Andean Biotrade Project in Colombia, Ecuador and Peru, a cooperative effort of GEF, UNEP and CAF.

The relationships and synergy between multiple institutions, and the human capital of each, achieved the results presented here.

Thank you to our executive team, for their efforts: 

- Management Regional - CAF Jaime Cárdenas (2010-2014) 
- Management PNUMA Robert Erath 
- Management CAF René Gómez- García 
- Management Regional - CAF Hernando Palomino (2011-2013) 
- Management Regional - CAF Gustavo Urrea 
- CORPEI Giovanni Ginatta 
- CAF office in Ecuador Mauricio Velásquez 
- Promperu Luis Torres Paz 
- Cynthia Garcia 

We extend a thank you to all the organizations and people at the local, regional and national levels that supported and made this project a reality.

COLOMBIA


ECUADOR

Ministry of Environment, Ministry of Foreign Trade and Tourism, PerúBiodiverso Project PRD, German Agency for International Cooperation GIZ, National Commission on Biodiverse, Peruvian Institute of Natural Products IPPN, Exporters Association ADEX, Lima Chamber of Commerce, University of Luis de Montoya.

We also thank the 216 pilot programs in Colombia, Ecuador and Peru, and the 29,600 individuals along the value chain that believed in biotrade as an effective mechanism of change towards a "greening" of biodiversity-based economic activities and the creation of social wellbeing along the value chain.

Finally, we are grateful for the contributions made by Liliana Rodriguez and Alberto Cuba, and for the feedback from colleagues María Alejandra Chaux, María Isabel Proaño, Cynthia García Arcia and Dania Quirola Suárez.

PERÚ

Ministry of Environment, Ministry of Foreign Trade and Tourism, PerúBiodiverso Project PRD, German Agency for International Cooperation GIZ, National Commission on Biodiverse, Peruvian Institute of Natural Products IPPN, Exporters Association ADEX, Lima Chamber of Commerce, University of Luis de Montoya.
Acronyms

(GMP) Good Manufacturing Practices
(CAF) development bank of Latin America
(CBD) Convention on Biological Diversity
(CORPEI) Corporation for the Promotion of Exports and Investments
(CTNBC) National Technical Committee on Biodiversity and Competitiveness
(DACC) Direction of the Environment and Climate Change - CAF
(GEF) Global Environment Facility
(GIZ) German Agency for International Cooperation
(IFDAM) International Federation of Organic Agriculture Movements
(HAP) Peruvian Amazon Research Institute
(ISO) International Organization for Standardization
(MADS) Colombian Ministry of Environment and Sustainable Development
(MAE) Ecuador Ministry of Environment
(MINAM) Peruvian Ministry of Environment
(MINCETUR) Ministry of Foreign Trade and Tourism
(UNDP) United Nations Development Program
(UNEP) United Nations Environment Program
(PROMPERÚ) Peru Export and Tourism Promotion Board
(P&C) Biotrade Principles and Criteria
(SMEs) Small and medium enterprises
(SECO) Swiss State Secretariat for Economic Affairs
(UEBT) Union for Ethical Biotrade
(NEU) National Executing Unit
UNCTAD United Nations Conference on Trade and Development
Prologue

CAF - development bank of Latin America- the regional executing agency of the Andean Biotrade Project (“Facilitation of financing for biodiversity-based businesses and support of market development activities in the Andean Region”), led the planning, operations and strategic analysis during the project’s implementation.

CAF has worked alongside partner entities UNEP and GEF, and the National Executing Units (NEU) towards the application of biotrade as a model promoting sustainable development and regional integration in Colombia, Ecuador and Peru.

During the implementation phase, important approaches, principles and tools were designed, tested, and monitored. This fostered the valuable technical expertise that now exists in human capital and knowledge among project partners, as compiled and illustrated in this document.

The project’s performance, as shown by impact indicators, met and exceeded its goals, confirming the viability of the biotrade business model. We have verified in practice that the pairing of conservation and development in biotrade produces solid results that are appropriate to the social context of Latin America, where biodiversity conservation and growth are linked to social inclusion and income sustainability and distribution.

This report is the product of the experience gained during the five years of the GEF-CAF-UNEP Andean Biotrade Project, and provides a compilation of the lessons, results and tools developed. Good practices and lessons learned reveal key elements of the impact achieved in three main areas: (1) conservation of biodiversity; (2) economic inclusion; and (3) the competitiveness of initiatives committed to the biotrade business model.

Thus, with biotrade as a catalyst, it is possible that comparative advantages go further to create competitive advantages, and create the opportunities for economic inclusion, knowledge development and the incentives for innovation that are needed to propel a more inclusive productive change, towards the design, adoption and implementation of a new model of the Green Economy.

Ligia Castro de Doens
Division of Environment and Climate Change
CAF - development bank of Latin America-
Colombia is one of the most biodiverse places in the world in terms of mammals, birds, reptiles, amphibians and endemic species (Report on the state of biodiversity in Colombia 2006-2007. Alexander von Humboldt Biological Resources Research Institute, 2008). It possesses numerous ecosystems with excellent potential for development and the positioning of green business and biotrade. The latter offers a competitive opportunity for Colombia as a comparative advantage to develop business from this natural wealth, generating prosperity and development while contributing to the conservation of this diversity and the recovery and preservation of the traditions and customs of its people.

For this reason, Colombia began the first national biotrade program in the world in 1998 under the direction of the Alexander von Humboldt Institute (IAvH), supported by the former Ministry of Environment and the United Nations Conference on Trade and Development (UNCTAD).

In 2012, through the Ministry of Environment and Sustainable Development's Office of Green and Sustainable Business, and with the support of institutions such as the Colombia Biotrade Fund, the country decided to assess and revise the Colombian National Program for Sustainable Biotrade (PNBS), including a revised conceptual framework based on the ecosystem approach, adaptive management and the development of value chains through the shared management of natural resources, to transform Colombia into a country renowned for its competitiveness in sustainable products produced from its biodiversity.

Thus, the program became a strategy to utilize the comparative advantages of national biodiversity to facilitate the creation of sustainable businesses promoting equity and social justice. The main challenge of the PNBS is to generate wealth and opportunity (poverty reduction), particularly for the rural population, by contributing to biodiversity conservation through sustainable commercial use of resources.

To comply with the management framework of the PNBS, the program relied on the support of international cooperation projects that became the driving mechanism of this initiative. The most important was obtained thanks to the GEF-CAF-UNEP project, supported by the Ministry of Environment and Sustainable Development (MADS), and executed by the Colombia Biotrade Fund, for the "facilitation of financing for biodiversity-based business and support for market development activities in the Andean region 2010 - 2014".

Among the most important achievements of the Andean Biotrade Project was the development of tools that permitted communities to develop productive and sustainable projects, thus improving their quality of life.

Following the Andean Biotrade Project, the country continues to work to establish biotrade as a competitive advantage for Colombia by ensuring that tools and success stories are shared at institutional, regional and national levels such that biodiversity may be prioritized in political, institutional, economic and social agendas of the country resulting in activities in the short, medium and long term that strengthen and facilitate the competitive development of various sectors of the national economy through the sustainable use of native biodiversity.

Pablo Vieira Samper
Vice Minister of the Environment
Ministry of the Environment and Sustainable Development Colombia
Ecuador’s Ministry of Environment has promoted the biotrade initiative for some time, and was able to consolidate its support in 2010 through the project “Facilitation of financing for biodiversity-based businesses and support of market development activities in the Andean Region – Andean Biotrade” which introduced biotrade at the national and institutional levels as an alternative to safeguard the rights of nature, promote environmental sustainability and encourage the transformation of the productive matrix.

The project has been instrumental in the development of tools, proposals and initiatives focused on the management and use of goods and services derived from native biodiversity according to criteria of environmental, social and economic sustainability. This has generated experiences and lessons learned that will contribute to the institutionalization of biotrade in Ecuador through the Ministry of Environment.

At the moment, the main achievements of project initiatives in Ecuador have focused on strengthening sustainable management of species and ecosystems according to the biotrade principles and criteria, improving and increasing access to domestic and international markets, and the strengthening of entrepreneurial skills in the context of value chains. Notably, within initiatives supported by the project, about 85,000 hectares are managed according to the biotrade principles and criteria.

The National Plan for Good Living (2013 – 2017) recognizes the Ministry of Environment’s initiative, through the Biotrade Project, for having benefited more than 13,000 people through support to initiatives and businesses with products derived from the sustainable use of biodiversity. At the same time, the Plan establishes the country’s commitment to implement a regulatory framework for the development of bio-knowledge, innovation, productive enterprises and biotrade, in addition to supporting the national biotrade program through the national and international promotion of bio-knowledge products and services, ensuring the benefits of their use and marketing for communities and ecosystems.

In this context, the Ministry of the Environment, through the National Policy on the Governance of Natural Heritage for the Society of Good Living (2013 – 2017), established by Ministerial Decision No. 131, the “National Incentive Program for the Conservation of Natural Heritage,” which seeks to integrate incentive initiatives into a single national program seeking comprehensive intervention and promoting improved living standards for inhabitants adhering to Good Living (sp. Buen vivir), which is a key component of biotrade.

The results achieved in Ecuador are clear examples of teamwork between public and private institutions, in the close collaboration of CORPEI as a national executing unit and CAF - development bank of Latin America- as a regional executing partner. This has allowed biotrade in Ecuador to become part of national and institutional policy.

Lorena Tapia Nuñez
Minister of Environment
Ministry of Environment Ecuador
Project Presentation

Conserving and using biodiversity sustainably, in order for it to become an engine of development for diverse countries such as ours, is a major concern of the Ministry of Environment. However, taking action represents a serious commitment that through the use of our natural capital we will maximize benefits for its stakeholders and managers.

The biotrade business model makes the commitment to preserve biodiversity feasible by eliminating myths and putting an innovative spin on the business through the distribution of profits generated.

In Peru, the National Program for the Promotion of Trade is a valuable platform in which the private sector joins the public sector to ensure that biotrade is properly implemented. With support from the Global Environment Facility (GEF), the United Nations Environment Programme (UNEP) and CAF - development bank of Latin America, the Andean Biotrade Project was born, in evidence of the coordination and synergy towards common goals for the country and the Andean region.

Throughout the Andean Biotrade project - from formulation through implementation and execution - we can convey our satisfaction with the results, which are reflected in the various success stories and lessons learned contained in this document.

This merely furthers the Ministry of Environment’s commitment to continue investing in the biotrade model as a tool for biodiversity conservation, from the perspective that everyone benefits along the various value chains that our native biodiversity offers us.

Manuel Pulgar – Vidal Otálora
Ministro del Ambiente
Ministerio del Ambiente - Perú
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PROJECT NAME
“Facilitation of financing for biodiversity-based businesses and support of market development activities in the Andean Region”

PERIOD OF PERFORMANCE
Operative: March 2010 – December 2014
Administrative: March 2010 – December 2015

STRATEGY OBJECTIVES:
Contribute to the conservation and sustainable use of biodiversity in the Andean region by providing alternative biotrade-based livelihoods for local and marginalized communities.

GENERAL OBJECTIVES:
Support and strengthen biotrade at the local, national and regional levels as a strategy for the conservation and sustainable use of biodiversity.

AREA OF INTERVENTION AND NATIONAL EXECUTING PARTNERS
Colombia (Biotrade Fund)
Ecuador (CORPEI)
Peru (PROMPERU)

TEAM
René Gómez-García
Green Business Unit Coordinator - CAF
Federico Vignati
Regional Coordinator for the Andean Biotrade Project
Marisela Vega
Consultant, Green Business Unit - CAF
Alberto Cuba
Intern, Peruvian Environment-CAF, 2014

FINANCIAL INDICATORS
GEF Contribution
US$ 6,414,021
CAF Contribution
US$ 1,891,180
Co-financing
US$ 8,359,244
In-kind Co-financing
US$ 4,167,126

PROJECT TOTAL:
US$ 20,831,571

Impact Indicators:
282,569 hectares managed with sustainable practices.
29,600 persons with improved work conditions and incomes.
65% average increase in sales between 2011 and 2014
Executive summary

Since the adoption of the Convention on Biological Diversity (CBD) in 1992 it has been shown that biodiversity and natural resources are strategic elements for the development of countries, especially the disadvantaged countries, most of which paradoxically possess the greatest concentrations of biodiversity on the planet. Today, the notion of conserving biodiversity goes far beyond a strategy to ensure basic provisions for the populations of developing countries.

With approximately 40% of the planet’s biodiversity concentrated in Latin America and the Caribbean, 25% in the Andean Region, the value enhancement of biodiversity and its conservation is associated with two major concerns of the international political agenda: mitigating climate change and food security.

Furthermore, the use of biodiversity is the direct basis of livelihoods for more than 100 million people in the Andean region and its surroundings. Also, 75% of households in the region depend directly on biodiversity to meet their basic needs for food and water and to preserve their culture. Despite this dependence, the growth of populations and economies have increased pressure on natural resources unsustainably. The loss of biodiversity and deterioration of ecosystemic services is mainly related to the degradation of natural ecosystems and their conversion to production systems, as occurs with an estimated 4 million ha/year of tropical forest in South America. Currently, an estimated 1,750,000 ha/year are deforested in the Amazon region of the countries of the Andean Community, demonstrating the need for strategies for the use and conservation of the natural resources that contribute to the social and economic well-being of local populations.

In recent decades, in addressing the problems influencing the loss of biodiversity, there has been trend towards productive activities that share a common dependency on and concern for the conservation of biodiversity. This grouping of activities, associated with commitments to sustainability and inclusion, four fundamental key principles were defined, called biotrade.

According to UNCTAD, the biotrade sector reported worldwide sales in 2012 of $4.2 billion and reached more than 30,000 first tier suppliers in the value chain, covering 19.3 million hectares managed according to sustainability practices.

4. Our Andean Amazon: use of biodiversity (Online) http://www.comunidadaddina.org/amazonia/biodiversidad.htm
5. Biotrade is defined as “activities of harvesting, production, processing and marketing of goods and services derived from biodiversity (species, genetic resources, ecosystems) under the criteria of environmental, social and economic sustainability. (UNCTAD, 1996)
6. UNCTAD Biotrade side-event at the UNFCCC COP 20, Exploring synergies between BioTrade and REDD+ for climate change mitigation and adaptation, December 15th-20 2014, Peru Auditorium/Pabellon Peru

It is in this context that GEF, UNEP and CAF joined forces for the formulation and development of the project, “Facilitation of financing for biodiversity-based businesses and support of market development activities in the Andean Region” - the Andean Biotrade project, from 2010-2014. It was a multi-country initiative, with an initial budget of over US$ 14 million from GEF, CAF and partner funds, with UNEP as the primary implementing agency and CAF the executing agency at the regional level.

At the national level, there were three national executing units: the Colombia Biotrade Fund in Colombia, CORPEI in Ecuador, and PROMPERU in Peru, which, under the Ministry of Environment in each country, and through coordination with stakeholders, had the goal of supporting and strengthening biotrade as a strategy for conservation and the sustainable use of biodiversity.

Taking into account the need to articulate effective development processes and commitments to sustainability and inclusion, four fundamental key principles were defined for implementation:
Within this approach, three productive sectors were prioritized, characterized by extensive dependence on biodiversity for their competitiveness, and in which good conservation practices were being progressively implemented.

It was within these three sectors, primarily, that 216 pilot initiatives strengthened their respective value chains, obtaining significant results through biotrade practices and preserving ecosystems while generating social wellbeing through the redistribution of wealth. Among the major impacts of the Andean Biotrade project are:

1. Inclusive Development:
   Coordination of the value chains and generating equitable relationships between links, encouraging economic inclusion.

2. Contextualized solutions:
   Adaptation to the dynamic environmental and socio-economic characteristics of biotrade.

3. Systemic approach:
   Implementation of activities at the macro, meso and micro levels.

4. Capacity building:
   Providing training and technical assistance to enhance individual and collective skills to reinforce dialogue platforms and multisectoral collaboration.

Environmental impacts:
- 282,569 hectares managed according to sustainability criteria.
- US $310 million in biodiversity capital generated for the Green Economy.

Social impacts:
- 29,600 thousand beneficiaries with improved work conditions and quality of life.
- More than 1,300 people trained in governance and biotrade business development.
- More than 100 professionals trained as partners for the scalability of the project.

Economic impact:
- 65% average increase in sales from the initiatives over 3 years.
- Co-financing goal exceeded by 46%.
- More than 137 businesses with access to financial services.

The project focused its efforts on 7 major components to ensure the effectiveness of the project, based on a thorough and systematic analysis using participatory and systemic methodologies with participants including the Ministries of Environment of Colombia, Ecuador and Peru, the NEU and other stakeholders. The components were grouped into four key themes, each of which obtained specific results:

<table>
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<tr>
<th>Component</th>
<th>Themes</th>
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<tbody>
<tr>
<td>1. Food</td>
<td>1. Governance and enabling environment for biotrade</td>
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<tr>
<td>2. Pharmaceuticals and cosmetics</td>
<td>2. Market access</td>
</tr>
<tr>
<td>3. Sustainable tourism</td>
<td>3. Access to financing for biotrade</td>
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Theme 1. Governance and enabling business environment

Cross-cutting component throughout implementation as a key element for the systemization of detailed information in III d and e, and communicated through different media spaces.

Refer to the policy strengthening component. It is directed by two strategic objectives:

1. Review of regulatory framework and generation of appropriate proposals for biotrade;
2. Strengthening of dialogue and coordination between different levels of government, civil society and the private sector. Some of the principle results were:

21 supporting studies impacting new public policies and biotrade regulations.

14 technical papers to reduce barriers to key markets.

1359 professionals trained in public administration of biotrade.
Theme 2. Market access for biotrade products and services

Refers to components of access to markets and information about products and markets. The project sought to:

1. build supplier capacity by adding value through innovative and quality practices.
2. advise on good business practices through the strengthening of relationships.
3. disseminate market intelligence.
4. develop demand through participation in specialized commercial platforms. In implementation, these activities achieved:

- 12 market analyses
- 21 biotrade sector analyses.
- 90 pilot programs in bio-business plans
- 65% growth in sales from the pilot program.
- 58 innovative products resulting from university-enterprise cooperation and applied scientific research.

Theme 3. Access to financial tools and services

The project achieved access to finance for business initiatives, making public and private investment feasible in key aspects of the value chain, through:

1. the creation of adapted and targeted financial instruments.
2. knowledge creation regarding the potential for biotrade in the financial sector.
3. the dissemination and sharing of information for access to finance by business initiatives.

- 12 new financing lines/schemes for biotrade products
- 173 people from the financial sector trained in the risks and opportunities of biotrade
- 137 businesses trained to access financial services and instruments. Of these, 33 signed up for new financial services.
- US$ 6 million in direct investment, through project-business partnerships.

Theme 4. Sustainability in the Value Chains

In looking to define management practices that stimulate competitiveness in the biotrade value chains selected by the project, activities were defined to:

1. promote the sustainable management of biodiversity.
2. strengthen productive and commercial skills regarding standards for sustainability and quality.
3. set up inclusive business models. Among the main results obtained were:

- 27 organizations in the region offering business development services for biotrade.
- 216 initiatives applying practices for good management and sustainable use of biodiversity.
- 43 initiatives with sustainability standards such as organic, fair trade, and sustainable tourism.
- Regional knowledge platform established www.biocomercioandino.org
The project contributed significantly to the promotion of biotrade in Latin America, as seen in the impacts and changes generated in public policy, access to markets, financing and the strengthening of value chains. It generated new skills in both public and private partners, and within civil society in Colombia, Ecuador and Peru, as the result of significant multisectoral collaboration. In addition, organizations that participated in the project through technical and management platforms at local, regional and national level allowed the coordination and efficiency necessary for the sustainability and scaling of the activities.

Thus, the Biotrade Fund, CORPEI and PROMPERÚ and cooperating entities GEF, UNEP and CAF, secured their role as partners in the promotion and administration of specific responses that made sustainable development feasible in the region, in line with global trends in agreements and negotiations to implement the Convention on Biological Diversity (CBD)

**New perspectives and challenges for biotrade**

Biotrade is gaining importance internationally as a catalyst for the conservation of biodiversity and the generation of social inclusion through trade dynamics.

The Conference of the Parties to the Convention on Biological Diversity (CBD) held its 12th meeting in October 2014, adopting 35 decisions as a roadmap for the implementation of the Strategic Plan for Biodiversity (2011-2020) and achievement of the Aichi biodiversity targets. Two of these decisions recognized the biotrade initiative as an important ally in achieving global conservation objectives.

Similarly, the Nagoya Protocol was ratified by 51 parties to the CBD including 6 CAF member countries. In this case, biotrade is relevant as a model that embodies the goals of the treaty, in the context of its seven principles of management.

Therefore, biotrade has positioned itself as an important management model, applicable to the business characteristics of Latin America, with ABP standing out as a primary example.

For all this, organizations with experience in biotrade face a two-sided challenge. On the one hand, to monitor the transformative capacity of biotrade to capture its impact on systemic change, in a time horizon often exceeds the project lifecycle, and on the other hand, to respond to international demand for systematized knowledge to allow for the replication of experiences in different regions of the world, including Latin America.

CAF prepared this project implementation report and the achievements and lessons learned detailed here in the context of recent biotrade dynamics and the commitment to properly manage the knowledge obtained over the four years of implementation.
Introduction

The United Nations Program for Environment (UNEP) defined the Convention on Biological Diversity (CBD) in 1992 in response to the increasing recognition of biological diversity as invaluable global good for the survival of mankind, and essential for economic and social development. It was the first international agreement to address issues related to the access and use of biologically diverse resources (or biodiversity), and had three main objectives:

1. the conservation of biodiversity,
2. the sustainable use of its components, and
3. the fair and equitable sharing of benefits derived from the utilization of genetic resources.

In the Andean region, Ecuador and Peru (in 1993) and Colombia (1994), ratified the CBD, incorporating the theme of biodiversity into public policy and institutional structures. National bodies were formed to address aspects of biodiversity management and conservation, focusing on institutional strengthening and policy development activities in work environments focused on the comprehensive and inter-sectoral management of biodiversity and its sustainable use and programs promoting its fair use in the social sphere - economically equitable and environmentally sustainable.

Thus, biotrade emerged as a strategy of broad social transformation and the conservation of ecosystems and resources that contribute to CBD’s strategic plan (2011-2020) and to the Aichi targets, in which countries commit to protect biodiversity and improve its benefits to the people.

It’s in this context that the Andean Biotrade Project emerged as a pioneer initiative in the Andean region - Colombia, Ecuador and Peru - to support and strengthen biotrade in local, national and regional levels as a strategy for the conservation and sustainable use of biodiversity. The project included the participation of international organizations such as the Global Environment Facility (GEF), the United Nations Environment Programme (UNEP) and CAF -development bank of Latin America-; and national organizations such as the Biotrade Fund, the Corporation for the Promotion of Exports and Investments (CORPEI), and the Peru Export and Tourism Promotion Board (PROMPERU), partnering with the Ministry of Environment in each country.

This report presents the experiences, results and lessons learned through the project’s implementation from 2010-2014. The first section presents general aspects including background and project development, the dynamics and characteristics of biotrade in Latin America and the specific intervention logic.

The second section describes the experiences, detailing the results obtained by the project in terms of:

a. Impacts and changes achieved according to project indicators, and lessons learned in each area of implementation
b. Implementation experiences and accounts of the pilot programs
c. Capacity building of project partners
d. Details of the tools developed for value chain activities and their location online
e. The knowledge products generated, including market research, policies and regulations, and videos, and their online availability.

Finally, the third section presents the lessons learned during the preparation and implementation of the project, and main conclusions.
Section 1.
General Information
> BIODIVERSITY IN LATIN AMERICA

The tropical Andes are considered the “global epicenter of biodiversity,” ranking first in the world in the diversity and endemism of vascular plants, birds, amphibians and vertebrates. The Andean countries account for 25% of the biological diversity on the planet and are among the 17 most biodiverse countries in the world.

This so-called “mega-diversity” is possible thanks to the confluence of geographic and climatic factors that favor a variety of biomes, ecosystems and habitats. Unsurprisingly, this diversity forms a large part of the cultural and social identity that characterizes the countries of the region, as well as the livelihoods of its people.

It is estimated that 75% of households in the Andean region depend directly on biodiversity to meet their basic needs for food and water, as well as to preserve their culture. Likewise, it is estimated that about one quarter of the rural population in Latin America and the Caribbean live on less than US$ 2 a day. Thus, the poorest members of society are those who depend the most on goods and services provided by ecosystems and biodiversity, and where food security is particularly significant, as a factor that influences both malnutrition and large-scale migration to urban areas. This degradation and the loss of biodiversity and ecosystemic services directly affect this sector of the population, generating increased poverty.

Despite this dependency, growing populations and economies have increased the pressure on natural resources unsustainably. The loss of biodiversity and deterioration of ecosystemic services is mainly associated with the degradation of natural ecosystems and their conversion to production systems, as occurs with an estimated 4 million ha/year of tropical forest in South America. Currently, it is estimated that more than 1,750,000 ha/year are deforested in the Amazon region of the Andean Community, demonstrating the need for strategies on the use and conservation of natural resources that are socially and economically valuable to local populations.

10. Regional Strategy for Biodiversity, Decision 523
11. Andean Environmental Agenda 2012-2016
12. Value proposition: Promotion of financing tools for biodiversity conservation, CAF 2014
> BIOTRADE: AN ALTERNATIVE FOR THE SUSTAINABLE USE OF BIODIVERSITY

In 1996, during the third meeting of the Conference of the Parties to the CBD, the United Nations Conference on Trade and Development (UNCTAD) developed the Biotrade Initiative to contribute directly to the three objectives of the CBD. In it, biotrade was defined as activities of collection, production, transformation, and commercialization of goods and services derived from native biodiversity (genetic resources, species and ecosystems) under the criteria of environmental, social and economic sustainability15.

This implies not only principles and parameters to promote the sustainable use of biodiversity through the use of good business practices, but also the methods of approach. Among these are: the value chain model that seeks coordination among stakeholders, the implementation of good practices related to both the use and conservation of the resources and the equitable distribution of benefits along the chain; adaptive management that identifies impacts on species and ecosystems and supports continuous improvement of organizational production and management practices; and the ecosystem approach that considers the environmental, social and economic aspects of a territory comprehensively, and the interactions between production systems that can influence the use of resources.

The 7 principles of biotrade fall within these three approaches:

15. Biotrade initiative (online): http://www.biotrade.org/aboutINTRO.asp
The Andean Biotrade Project found a favorable working environment in the region. With support from UNCTAD, Colombia, Ecuador and Peru have developed an intergovernmental platform to ensure the conservation of biodiversity through biotrade. In doing so, they developed the National Biotrade Programs to develop and promote the sustainable use of native resources.

In Colombia, the National Biotrade Program launched in 1998 as a global pilot program supported by UNCTAD, the Ministry of Environment and Sustainable Development (MADS) and the Alexander von Humboldt Institute. The program has evolved under the management of the National Technical Committee on Biodiversity and Competitiveness (CTNBC). In 2001, Ecuador launched its program as an initiative of the Ministry of Environment (MAE) and UNCTAD. The coordination of the program is the responsibility of the Corporation for the Promotion of Exports and Investments (CORRIPE) in strategic partnership with the NGO EcoCiencia. Peru’s program was launched in 2003 and started with nine institutions in the public and private sectors, with the Ministry of Foreign Trade and Tourism (MINCETUR) heading the National Commission on Biotrade, whose Technical Secretariat is the Peru Export and Tourism Promotion Board (PROMPERU) and the Research Institute of the Peruvian Amazon (IIAP)\(^\text{16}\).

In parallel, the interest to support and encourage the development of initiatives associated with biotrade in Latin America has been growing in recognition of the negative impacts that a lack of sustainable management of biodiversity has on social stability and on factors affecting sustained economic growth over time.

Among the main actors with a shared view on finding long-term solutions related to biotrade have been the GEF, UNEP, UNCTAD, the UN Development Programme (UNDP), the Ministries of Environment of Ecuador, Colombia and Peru, the Finnish Agency for Cooperation, the Government of the Netherlands, the German Agency for International Cooperation (GIZ), the Swiss Cooperation (SECO), and CAF, among others. They all have recognized biotrade as a key tool in the pursuit of equitable economic growth that offers an innovative alternative for biodiversity conservation and a broader, more inclusive perspective of added value, creating substantial contributions to strengthen biotrade.

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> INSTITUTIONAL STRUCTURE OF BIOTRADE IN THE ANDEAN COUNTRIES
> THE MARKET FOR BIOTRADE IN THE REGION

Biotrade programs in Latin America have focused on the development and strengthening of value chains for value-added products and services. Through specific activities, value chain actors have been able to insert themselves into growing markets that demand products and services based on biodiversity, environmental practices and responsible social services.\(^\text{16}\)

According to the latest trends, the market for biotrade products and services is growing with an increased consumer preference for healthy, natural, organic and fair trade products. In 2009, the “Core Consumer Environmental Survey” indicated that approximately 34% of consumers are more likely to buy products that are environmentally responsible.\(^\text{17}\)

Similarly, according to the barometer of biodiversity produced by the Union for Ethical Biotrade (UEBT)^17\(^\text{18}\), 87% of consumers surveyed expect companies to have policies in place with respect to biodiversity. 77% of respondents say they pay attention to where the ingredients of cosmetic products originate. Finally, an average of 76% pay close attention to environmental and ethical labels when buying cosmetics.\(^\text{19}\)

Accordingly, sales of biodiversity products have increased. According to UNCTAD\(^\text{18}\), total sales (domestic and exported) of products derived from biodiversity in the Andean countries accounted for US$ 223.4 million in 2007 and US$ 238.7 million in 2008. With a trend of 15% growth a year, this would suggest sales of US$480 million in 2013 and US$ 502 million in 2014.\(^\text{18}\)

However, if one includes companies in Latin America and other regions, the sales of UEBT members\(^\text{18}\) represented US$ 2 billion in 2008. This has made public and private investment, and regional and international cooperation more viable. For these reasons, it is argued that development based on the biotrade model has gained importance in the economic agenda of Latin America - to develop and vitalize fair and inclusive economic activities and to promote conservation of the biodiversity capital that supports it.

87% of consumers surveyed expect companies to have policies in place with respect to biodiversity.

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17. Biodiversity barometer UEBT, Union for Ethical BioTrade (On line) http://ethicalbiotrade.org/dl/barometer/UEBT_Biodiversity_Barometer_2014_SPA.pdf
18. CAF estimate based on an annual growth rate of 15% from market references 2007-2008 by UNCTAD
19. UEBT members include businesses in Latin America and other countries that are involved in natural ingredients and are committed to the implementation of the biotrade principles and criteria.
> THE ANDEAN BIOTRADE PROJECT AND ITS CONTRIBUTION TO MANAGEMENT OF BIOTRADE IN THE REGION

Despite favorable trends in consumer preferences for biotrade, access to niche markets in developed countries is hampered by rules of trade and asymmetrical national policies that negatively impact the competitiveness and sustainability of value chains.

Furthermore, access to finance for business initiatives working with products of biodiversity in the region, which have particular qualities and are often poorly understood by traditional financial institutions, continued to be a limiting factor for the competitiveness of companies by limiting potential investments.

The Andean Biotrade Project focused on influencing these issues in Colombia, Ecuador and Peru by creating incentives for the private sector, including changes in public policy, facilitating access to markets, sharing information on products and services, facilitating access to financing and capacity building, thereby encouraging companies to implement more sustainable management practices, creating opportunities for economic inclusion, and funding the development of knowledge and innovation needed to spur regional production towards a green economy.
II. THE PROJECT

> ORIGIN OF THE ANDEAN BIOTRADE PROJECT

The Andean Biotrade Project was the result of a long development process that began in 2004 with the formulation and negotiation of the first logical framework, through work led by CAF with the participation of the Ministries of Environment of Colombia, Ecuador and Peru, and the support of GEF and UNEP, through its Regional Office for Latin America and the Caribbean.

Work during the preparatory phase from 2004 to 2007 further defined the proposal, including the preparation of studies and research that resulted in base indicators for the project’s areas of implementation, within the context of each country. Consultancies also took place during this time to define operational processes.

In 2008, the three countries began work towards the project’s final proposal, which was submitted to GEF in the first quarter of 2009 and approved in the third quarter of 2009, with active participation from the Ministries of Environment.

Project implementation began in March 2010, after six years of preparation. CAF established management bodies including a Management Committee and a Technical Secretariat. In the same period, the relationship between UNEP-GEF and CAF was formalized with the signing of the Project Cooperation Agreement, and the agreement between CAF and the National Executing Units (NEU) – namely the Biotrade Fund in Colombia, CORPEI Ecuador and PROMPERU in Peru – was signed at the end of 2010.

Following a long learning process, and after finalizing the transfer of funds to the NEUs, project implementation took place between 2010-2014. Despite the prolonged initiation, the Andean Biotrade Project not only managed to achieve the all planned indicators but far surpassed them.
The Andean Biotrade Project counted on the participation of various partners at different levels

### 1. Implementing Unit

The project was financed by GEF, a mechanism of international cooperation that offers resources to achieve global environmental benefits in priority areas.

Implementation was the responsibility of UNEP, who was responsible for the administration of GEF funds and their transfer to the regional implementing unit, in accordance with its institutional mandate to assist countries in the implementation of appropriate environmental policies to foster sustainable development.

### 2. Regional executing unit

CAF was the executing agency for the project at the regional level and was responsible for the administration of the resources provided by UNEP, the supervision of the technical program, the administration of the NEU budget, and leading planning, operations and evaluations in order to define a strategic vision, and guide problem solving and decision making.

CAF also assumed the regional coordination of the project, with contributions from technical cooperation to finance the entire project management component.

The project was implemented in Colombia, Ecuador and Peru, with the collaboration of national governments through the active participation of the Ministries of Environment of each country:

- Ministry of Environment and Sustainable Development, Colombia (MADS)
- Ministry of the Environment, Ecuador (MAE)
- Ministry of the Environment, Peru (MINAM)

The three participating countries made far-reaching commitments to better opportunities for biotrade, to enhance its prospects, and apply principles of sustainable use to political strategies and legal frameworks alongside the creation of opportunities and income generation for local populations.

The project had one NEU in each country to manage the operational, financial and technical implementation of the activities. The NEUs had previous experience strengthening biotrade within their countries and made important contributions to processes, new skills development and tools.

- The Biotrade Fund in Colombia, now Biotrade Corporation Colombia
- Corporation for the Promotion of Exports and Investments in Ecuador – CORPEI
- Peru Export and Tourism Promotion Board - PROMPERU

With the support of:

- Corfo
- Ministerio del Ambiente
- Ministerio del Ambiente

**IMPLEMENATATION AND FINANCING**

Project activities were implemented between 2010 and 2014. The initial budget was US$ 14.3 million, which included funds from GEF and cash and in-kind financing from CAF and NEU management.

The GEF funds, which amounted to US$ 6.4 million, were distributed to Colombia (37.9%), Ecuador (31%) and Peru (31.1%).

During project implementation, co-financing exceeded expected levels by about 46%. Thanks to the efforts deployed by the UEN to raise additional funds, in collaboration with CAF, a total co-financing of US$ 14.4 million was achieved, presented a final value of US$ 20.8 million.

**US$ 1.8 millions**

**US$ 8.3 millions**

**TOTAL US$ 20.8 millions**

**US$ 6.8 millions**

**US$ 4.1 millions**
**> OBJECTIVES AND COMPONENTS**

The goal of the project was to contribute to the conservation and sustainable use of biodiversity in the Andean region by introducing alternative economically sustainable livelihoods, starting with inclusive business models of biotrade in disadvantaged local communities.

To fulfill this goal, the project set the objective to support and strengthen biotrade at the local, national and regional levels as a strategy for the conservation and sustainable use of biodiversity. At each level, a set of activities were defined to focus on systemic change.

Seven specific objectives were also identified, each of which corresponded to a project component, addressing seven thematic areas:

- **Component 1.** Supporting government institutions in the development and streamlining of proposals and political and regulatory instruments supporting biotrade.

- **Component 2.** Increasing access to markets, including market and product research, sustainable management plans, market and quality strategies.

- **Component 3.** Building business skills, including incubation programs, business and management plans and support to associations, to increase understanding of biotrade.

- **Component 4.** Improving the acquisition of and access to information about products and markets, including market information networks, the non-virtual dissemination of data, and the generation and processing of information on the priority areas of the project.

- **Component 5.** Leveraging of financial resources to drive biotrade initiatives, through the creation of financial instruments and awareness-raising about opportunities in the sector, as well the dissemination of information regarding the availability of financial assistance to initiatives.

- **Component 6.** Provide support and technical assistance to selected biotrade pilot programs according to the selection and evaluation criteria established.

- **Component 7.** Develop and implement strategies to systematize and disseminate information and opportunities for replication of project impacts.

**> PROJECT COVERAGE**

The Andean Biotrade Project was implemented in three countries simultaneously: Colombia, Ecuador and Peru. Each country selected commercial biotrade initiatives that were supported directly as pilot programs in order to improve their business management sustainably according to biotrade principles. This allowed for a broad representation of the intervention through activities in diverse ecosystems and regions in the three countries.

- Colombia: 100 Pilot projects
- Ecuador: 51 Pilot projects
- Peru: 65 Pilot projects

The Andean Biotrade Project was designed to contribute to the conservation and sustainable use of biodiversity in the Andean region by introducing alternative economically sustainable livelihoods, starting with inclusive business models of biotrade in disadvantaged local communities.
1. Principles

During project implementation, four key factors were identified for the successful implementation of activities promoting biotrade in the region:

A. Inclusive development

Biotrade involves work according to the value chain model, which implies coordination between the various links for the competitiveness of the chain itself. Experience shows that it is essential to strengthen business relationships along the value chain to foster dialogue and negotiations that may result in formal contracts, seeking inclusion and the fair distribution of the benefits at every link. The inclusive business models represent an opportunity for “profit sharing”, encouraging higher levels of production quality and substantial improvements in the ability for biotrade to leverage equity.

B. Systemic approach

Individual actions are not sufficiently inclusive to contribute significantly to the challenges associated with biodiversity conservation. A comprehensive approach is needed that addresses production and business capacity simultaneously, according to the availability of resources within local communities as well as aspects of the policy framework that promote and facilitate access to markets should be accompanied by concrete actions such as capacity building and supply development that consolidate dialogue and multisectorial collaboration.

C. Contextualized solutions

Given the diversity of resources, communities, businesses, markets, government entities and other stakeholders along different biotrade value chains and sectors in the Andean Region, specific intervention strategies are needed that are tailored to each territory or value chain.

The project worked jointly with partners and stakeholders in defining...
solutions that were adapted to the context of each country, resulting in the implementation of effective and environmentally, socially and economically sustainable activities to address the deterioration of biodiversity and sustainable development.

**D. Capacity Building**

Because value chains involve multiple actors that must respond to changing conditions, the ability to react appropriately to a given scenario is essential. For this reason, the project addressed skills transfer and the capacity building of partners, contributors, and beneficiaries as a key element. Working systematically, the project was able to establish connections between stakeholders and, through consultancies, to monitor short and medium term activities to strengthen individual and collective skills to understand and overcome obstacles arising from different levels in the development of biotrade.

### 2. Themes

The Andean Biotrade Project defined seven working components that, for purposes of systematization, were grouped into four main themes of implementation. This was done based on the commitment of partners to sustainable development and regional integration.

#### Theme 1. Governance and enabling environment for business

The policy and regulatory environment directly affect business dynamics, favoring or hindering the sustainability of value chains. Therefore, one of the important issues in the promotion of biotrade is governance and enabling environment for business, in response to policy strengthening.

For the Andean Biotrade Project, this theme was addressed in two strategic objectives: the building of a proper regulatory framework for this economic activity, and the strengthening of dialogue and coordination, horizontally and vertically among different levels of government, civil society, and the private sector.

Within this framework, the project sought to influence aspects at the macro level that affect biotrade use, working through political dialogue and decision making to create a better business environment.

At the micro level, it aimed to build capacity and institutionalize biotrade management principles.

#### Theme 2. Market access for biotrade products and services

For biotrade initiatives in the region, access to finance is a huge challenge because the financial sector is generally unfamiliar with the dynamics and potential of products derived from native biodiversity and the assumed uncertainty and risk is reflected in the rates and requirements of loans, limiting competitive access to credit.

For the Andean Biotrade Project, activities generating financial alternatives were a priority in seeking to influence:

- a. Strengthening of commercial relations along the value chain.
- b. Advisory on good business practices
- c. Dissemination of market intelligence
- d. Participation in specialized commercial platforms

#### Cross-cutting component throughout implementation as a key element for the systemization of detailed information in III d and e, and communicated through the different media channels

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<tr>
<th>Component</th>
<th>Theme</th>
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<td>Policy Strengthening</td>
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<td>Market access</td>
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<td>3</td>
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<td>Pilot programs for biodiversity businesses</td>
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<td>7</td>
<td>Develop and disseminate strategies for the systemization and dissemination of information</td>
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Theme 3. Access to financial tools and services

For biotrade initiatives in the region, access to finance is a huge challenge because the financial sector is generally unfamiliar with the dynamics and potential of products derived from native biodiversity and the assumed uncertainty and risk is reflected in the rates and requirements of loans, limiting competitive access to credit.

For the Andean Biotrade Project, activities generating financial alternatives were a priority in seeking to:

a. The creation of financial instruments adapted to biotrade products.
b. Improved knowledge within the financial sector of the characteristics and potential of biotrade products.
c. Dissemination of the possibilities to access finance for businesses.

In addressing market access and financing, the project sought to act at the meso level by generating information on products and markets and strengthening the financial alternatives for biotrade initiatives.

Theme 4. Sustainability of the value chains

Improving the sustainability of value chains is one of the main strategies in the effective promotion of biotrade in the region. Accordingly, the project defined management practices to stimulate competitiveness and sustainability, including activities to:

a. Promote the sustainable use of biodiversity
b. Strengthen productive capacities according to standards of quality and sustainability
c. Establish models that improve the competitiveness of transactions through inclusive business.

This area involved interventions at the micro level of the project, working directly with pilot programs, alongside entrepreneurial initiatives interested in developing biotrade as a management model, supporting the implementation of competitive, sustainable practices.

Based on the intervention methodology, the project and its partners sought to promote the development of value chains as effective mechanisms for the conservation of resources and the reduction of poverty through various activities that produced concrete and replicable results, for use within and outside of the Andean Region.

To promote the replicability and sustainability of the intervention, as in component 7, the project defined communication and knowledge sharing strategies through different platforms and events throughout the project, as described below.
Section 2. Experiences
Through interventions in three countries, the Andean Biotrade Project achieved results at the macro level in the form of policies and business environment, at the meso level strengthening governance for access to markets and financing, and at the micro level through the pilot programs.

In this manner, a multiplier effect was generated, producing additional results directly impacting market development and the consolidation of the biotrade business model in the food, pharmaceutical, cosmetic and sustainable tourism sectors, thus encouraging systemic change. Five types of results were obtained:

a. Impacts and systemic change:

The indicators, goals and planned results according to project structure. Describes the results obtained by theme and components and key impact indicators and analyzes the change generated.

b. Pilot experiences:

Describes the results of regionally-supported pilot program activities, analyzed by sector. It also offers a brief description of the capacity building activities conducted and how the results helped to increase compliance with biotrade principles.

c. Successes in capacity building:

Describes the main skills that the project strengthened and developed on individual and collective levels, building management capacity and multi-sectorial collaboration, among others.

d. Tools developed:

Presents the tools generated and used successfully during implementation that could be applied in other activities of a similar nature in the region.

e. Knowledge and network products:

Gives a brief description of the main knowledge products developed and their availability. It also gives a short description of the network established.
As presented above, the results achieved in each area are presented below:

**A. IMPACTS AND SYSTEMIC CHANGE**

In Colombia, Ecuador and Peru, the Andean Biotrade Project supported the promotion of biotrade activities through advocacy for standards and policies, and the development of tools and regional capacities in order to better manage the use and marketing of the resources, thus facilitating access to financial resources.

Positive changes resulted that facilitated the development and strengthening of value chains, through activities in four principle areas of prioritized work (a. governance; b. market access, c. financing and d. sustainability of value chains), thus obtaining eight change parameters for the conditions of biotrade development in the region that resulted in thousands of acres managed sustainably, and an increase in sales.

Given the above, from an all-inclusive perspective, the project far exceeded all the targets of its proposed activities.

The following were the main topics addressed and the principle parameters of change generated regionally.

Preliminary studies conducted by the project\(^2\), regarding the legal and institutional frameworks for biotrade in the region identified various related problems that limit the development of biotrade in the countries; among them are:

- Lack of knowledge about biotrade, reflected in inadequacies and inconsistencies in rules pertaining to biotrade, and the disparity of instruments resulting in ambiguity and contradictions.
- Deficiency in procedures and protocols; for example, to implement management plans or to receive certifications.
- Difficult access to incentives that establish different local frameworks, due to complex and costly procedures, limiting the application of standards and thus the legality of activities.

Based on the above, the project identified the need to promote an enabling environment nationally to advance biotrade through the design of guidelines, principles and operational protocols, integrated into national policies and legal frameworks. In this way, the ground was laid for the incorporation of biotrade in long-term development planning and budgetary procedures.

Thus, in addressing the strengthening of policies related to biotrade, the project conducted a series of activities related to the review of national proposals for institutional and legal frameworks, the generation of proposals to harmonize standards and safeguards among participating countries, and the development of training programs on related policies and regulations.

With the implementation of these activities, three primary change parameters were defined that promote the structuring and internalization of biotrade in the region through policies, programs, regulations and other initiatives that encourage a surge in investment and innovation by those along the value chain.

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21. Cabrera J. Identification of legal and regulatory reforms, to be proposed in the regional scope. CAF-GEF PDF/II. Project for the provision of financing for biodiversity businesses and support for market activities in the Andean Region. March 2006.
The Andean Biotrade Project contributed to the creation, updating and operationalization of the policy structure for biotrade in Colombia, Ecuador and Peru, directly influencing its institutionalization within existing policy frameworks, allowing for the continuity of activities that promote trade in native products produced sustainably. In this manner it was possible to establish clear and updated guidelines, and influence the governance of biotrade in these three countries.

In Colombia, the National Strategy for Green Business and Biotrade was outdated. During the project, adjustments were made to its strategic guidelines and operationalization. The project also contributed to the design of five regional plans for Green Business in the area.

In Ecuador, biotrade did not figure into any strategy of development. During implementation, the project was able to include the concept within the Strategic Development Plan – “Buen Vivir” (Good Living), resulting not only in its inclusion in the policies and activities of the Ministry of Environment, but also the allocation of funds to the Biotrade Initiatives Fund of US$ 3.5 million for projects for biotrade communities and value chains. Similarly, the project presented a proposal to the Ministry of Environment for the creation of an Interagency Committee on Biotrade responsible for the promotion of the industry. The project also presented a proposal to the Peruvian Ministry of Environment for the same purpose.

In Peru, the national structure in place and the Ministry of Environment was preparing to update the Strategy for the National Commission on Biotrade, so the project was able to influence specific aspects of the National Program for Biotrade.

The project provided input into national and international standards and regulations to promote and encourage the use of native resources in sustainable trade and its competitive market access, decreasing the inconsistencies in regulations associated with resources of native biodiversity.

### Change parameter 1. Increased institutionalization of biotrade in national public policies, defining clear and current guidelines inline with regional governance and integration.

Proposed adjustments were made to its strategic guidelines and operationalization. The project also contributed to the design of five regional plans for Green Business in the area.

In Ecuador, biotrade did not figure into any strategy of development. During implementation, the project was able to include the concept within the Strategic Development Plan – “Buen Vivir” (Good Living), resulting not only in its inclusion in the policies and activities of the Ministry of Environment, but also the allocation of funds to the Biotrade Initiatives Fund of US$ 3.5 million for projects for biotrade communities and value chains. Similarly, the project presented a proposal to the Ministry of Environment for the creation of an Interagency Committee on Biotrade responsible for the promotion of the industry. The project also presented a proposal to the Peruvian Ministry of Environment for the same purpose.

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The project provided input into national and international standards and regulations to promote and encourage the use of native resources in sustainable trade and its competitive market access, decreasing the inconsistencies in regulations associated with resources of native biodiversity.

### Change parameter 2. Tighter regional policy outlook for biotrade, making competitive access to the market feasible.

Colombia 7 documents. For example: Developed the section criteria and the institutional direction of Amazonian fruits and medicinal plants according to European Union regulations.

Ecuador 3 documents. Presented the proposal to amend CITES Appendices I and II regarding vicuña to permit its marketing. It was accepted by CITES.

Peru 4 documents. For example: Work in glass sacha inchi oil for three Peruvian businesses; obtaining approval to access the North American market.

### 14 documents developed to address tariff and non-tariff barriers

Colombia 11 documents. For example: Created three legal environmental guidebooks on biotrade (wildlife and sustainable fishing, timber and non-timber products, and ecotourism), which were sent to public entities, research institutes and other partners to know and comply with regulatory guidelines.

Ecuador 5 documents. For example: Developed a consultancy to formulate a regulatory proposal on the sustainable management of non-timber products.

Peru 5 documents. For example: Conducted an analysis of financial compensation established in Law 27811.
Fourteen technical documents were developed and delivered for international negotiations regarding tariff and non-tariff barriers at the regional level. The documents provided input for making decisions that result in concrete proposals for policy adjustment.

Likewise, 21 technical inputs were delivered to national regulatory institutions to improve regulatory processes for the use and exploitation of biodiversity in the three countries. In Peru, for example, an analysis was conducted of the financial compensation established under Law 27811 (establishing the protection of collective knowledge of indigenous people with respect to biological resources). The report was submitted to the National Commission on Biotrade for use in decision-making related to traditional knowledge.

Tighter regulations facilitate and promote biotrade as a model for the successful use of native biodiversity resources, with standards consistent with the temporal, social, and environmental aspects of the products, making their use and market access feasible.

Recognizing the importance of knowledge generation and capacity building in improving governance and creating a favorable business environment, more than 1,359 people from biotrade-related organizations were trained in the regulation and sustainable use of biodiversity, boosting decision-making skills in the region.

In Colombia, for example, 1,006 people were trained on regional, national, and international regulations, including representatives from Regional Autonomous Corporations, universities and officials from the Ministries of Environment and Sustainable Development, Agriculture and Rural Development, and Industry and Tourism.

As a result, public officials are more informed on the dynamics, characteristics, and potential of natural resource use according to biotrade parameters and have the technical knowledge to guide initiatives and make informed decisions regarding the procedures and requirements for their commercialization.

By strengthening the incorporation of biotrade in national public policy, inconsistencies were reduced in standards and regulations and public officials were trained, which contributed significantly to a conducive atmosphere in which businesses using native biodiversity resources can compete in different markets in a manner consistent with the sixth principle of biotrade, compliance with national and international law.

Change parameter 3. Response skills strengthened for the regulation and promotion of activities using native resources in biotrade, in the context of national standards and international regulations.

In Colombia 1006 professionals trained in:
- National Policy Guidelines.
- Specific actions for the management of regional environmental authorities on biotrade issues.

In Ecuador 189 professionals trained in:
- Biotrade principles and criteria.
- Related regulations and legislation.
- International agreements signed by Ecuador related to this business model.
- Management of wildlife in Ecuador.
- Procedures for obtaining permits and licenses.

In Peru 164 professionals trained in:
- Introduction to the biotrade concept.
- Fair and equitable distribution of benefits.
- Socio-economic sustainability.
- Practical exercises: Evaluation of the value chain and identification of biotrade initiatives.
Lessons Learned

The following lessons were learned in promoting policy strengthening to create a favorable business environment for biotrade:

With respect to the project:

• It is important to consider that although legal issues were addressed at the central government and most recommendations were incorporated into national policies, it is a challenge to establish effective mechanisms for their implementation at the local level, often requiring administrative procedures and complex and extensive permits. These requirements still pose a barrier to biotrade. For this reason, it is essential to involve local and regional actors in strategies and activities as a method of decentralization and capacity building, resulting in dialogue between local and national actors. Similarly, it is important to bring together public and private actors from different levels in order to streamline processes and generate synergies and strategic alliances.

• The training of governmental actors led to a better understanding of biotrade concepts and the need for their incorporation into practices employed for the conservation and sustainable use of biodiversity within ministerial initiatives. However, further work is needed to update and transfer knowledge and procedures from the central level to the local level in order to reduce potential barriers, also considering regular cycles of training.

• Experiences in the countries demonstrate a need to generate and strengthen opportunities for discussion and interagency strategic planning for the promotion of biotrade at the national level in order to address its challenges in the countries. The National Commission on Biotrade in Peru, for example, showed good results through coordinated activities.

For future activities:

• Processes involving interagency coordination to impact policy are slow. Thus, priority activities and their implementation strategies should be predefined from the start.

• The timely identification of barriers and incentives to biotrade are important in determining development policies and priority areas for future activities.

• The disclosure of policy and regulatory information related to biotrade activities is essential for companies. Thus, the development of reference materials in relevant languages and tailored to target audiences are a starting point in the dissemination and sharing of existing standards in the various categories of this economic activity.

• Support for pilot programs is important to access and evaluate needs and elevate them to decision-making bodies, creating a demand to set standards and requirements that permit successful access to markets.
An inadequate access to national and international markets was noted during project development, mainly due to:

- Limitations on production processes, resulting in small-scale, economically unsustainable production and insufficient volumes to meet market demand and quality standards.
- Lack of scientific information and technological processes, resulting in products of low value-added and commercial value.
- Lack and inaccessibility of market information (regarding supply, demand, prices and consumer preferences).

Given the above, and recognizing the market as a determining element of success for the viable use of biotrade resources in the region, the project sought to increase access to markets and the generation and accessibility of information regarding biotrade products and markets, creating programs to strengthen logistics and quality, marketing, research for innovation, and adding-value, among others. The information obtained was disseminated through knowledge networks in support of more informed decision-making regarding the market and products.

In the implementation of planned activities for increased market access, three parameters for change were defined.

Change parameter 4. Recognition of investment in applied research as a fundamental practice of innovation and the generation of added value, allowing competitive access to new markets.

About 40 companies in the region participated in the development of 58 products resulting from applied research. Thus, innovative processes were promoted within the biotrade work model to achieve more competitive value chains adapted to changing market requirements.

There were several impacts in going from the marketing of inputs to products of greater added-value, resulting in the transformation of the productive base:

- Collaboration between businesses and research centers
- The use of knowledge bases to overcome trade barriers
- Strengthening the registration of knowledge-based products and networks

In Colombia 24 products were developed. For example: Biocombustibles S.A. developed the 3,6,9 capsules from sacha Inchi, which were presented in the Incosmetic Fair in Germany in 2014.

In Ecuador 10 products were developed. For example: The Chankuap Foundation strengthened the cosmetic line IKIAM, applying “green chemistry” and “organic cosmetology.”

In Peru 24 products were developed. For example: The SHIWI S.A.C. Company developed 5 new products based in chestnut, which were presented in the Expoalimentaria and Mistura tradefairs in 2014, with projected sales of US$ 30,000 annually.
• trademarks and patents
• Investment in research and development
• Process innovation to increase competitiveness
• Experience in multisectoral collaboration.

This helped establish that the biotrade supply was suitably qualified, based on measurable criteria, to establish comparative advantages in the target market.

By participating in new marketing channels, businesses benefit from new knowledge of market dynamics and improved ability to respond to the changing requirements of demand, such as:
• Knowledge of trends and access requirements
• Cost benefit of investing in different channels
• Characteristics of competition
• Buyer profiles
• Multisectoral collaboration in the positioning of native products.

157 pilot programs participated in activities related to market promotion and access, such as commercial platforms, business conferences and internships, as successful strategies for entering new markets, achieving customer diversification and greater dissemination of products.

What trade fairs were attended?

<table>
<thead>
<tr>
<th>Fairs</th>
<th>COL</th>
<th>ECU</th>
<th>PER</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOFACH (2013, 2014)</td>
<td>1</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Incosmetic (2013, 2014)</td>
<td>8</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Expoalimentaria (2013, 2014)</td>
<td></td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Mistura (2013, 2014)</td>
<td>6</td>
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<td>13</td>
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<tr>
<td>Anuga (2013)</td>
<td>1</td>
<td></td>
<td>2</td>
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<tr>
<td>Other National Fairs</td>
<td>9</td>
<td>4</td>
<td>1</td>
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<tr>
<td>Other International Fairs</td>
<td>14</td>
<td>18</td>
<td>36</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>39</strong></td>
<td><strong>32</strong></td>
<td><strong>86</strong></td>
</tr>
</tbody>
</table>

Methods of information distribution

Programs learned to value and use market information to improve management and marketing decision-making. This gave credibility and strength to the project, creating an opening for new practices such as those suggested by the principles of biotrade.

Change parameter 6. Assessment of and access to information and use of market intelligence in informed decision making.

To establish effective methods to transmit information and articulate new players, 7 methods were defined for the distribution of biotrade information regionally.

These methods allowed the broadening of the project’s sphere of influence and communication, thus reinforcing learning processes and knowledge sharing.

More than 413,710 users of information systems were registered, strengthening networks and information systems for biotrade products.

The project also worked in the research and production of 12 market studies and their systemization, publication and dissemination. All studies are available on the regional platform www.biocomercioandino.org

Likewise, 21 sectoral analyses for biotrade were conducted that allowed the profiling of priority sectors in the country.
21 sector analyses of the biotrade market

In Colombia 12 sector analyses were developed, such as:
- The sector analysis for fine flavor cocoa.

In Ecuador 3 sector analyses were developed, such as:
- An updated profile of sustainable tourism, main features of tourism, and opportunities for the national sustainable tourism industry.

In Peru 6 sector analyses were developed, such as:
- Market study of naturally-based cosmetics for the American market.

Lessons Learned

Access to markets is the base catalyst for sustaining biotrade activities, encouraging the private sector to venture into the use of native biodiversity and sustainable practices for their management. Based on the above, some of the main lessons learned were:

With respect to the project

- Activities to strengthen access to markets for the pilot program through participation in trade fairs, market research, product development, process innovation, study trips and others, strengthened the ability of participating businesses to access national and international markets, contributing directly to the generation of business skills and increased competitiveness as reflected in increased sales.
  This aspect is one of the most important for biotrade businesses that are growing, opening new markets, and diversifying into new products. Without a commercial diagnostic, defined market strategies and profiles of potential clients, these businesses have trouble estimating market conditions that do not conform to their final product.

- Strong market weaknesses were identified in regional biotrade initiatives. Therefore, it is necessary to establish defined units in the countries to provide free advice on the basic needs of businesses such as obtaining licenses and certifications, registering trademarks, research and innovation, among others.
  This would help to strengthen corporate governance, as there are no opportunities to finance these types of activities for business growth, which in many cases forces businesses to remain in markets with limited gains.

For future activities

- Technological exchange missions are a good practice for initiatives that seek to enter new markets. They are ideal for micro and small enterprises that, through agreements with other institutions, can participate in exchanges and forums to identify new trends, technologies, and competitors.
  Businesses that are not prepared to exhibit in commercial platforms can participate, generating added-value in their management and business strategies.

- The creation of networks, dialogue, and exchanges between companies is relevant for the positioning of products on the market. It is important to identify topics of mutual interest that reinforce the interaction and synergy between companies and strengthen the network, allowing for sustainability over time. Moreover, companies value the existence of meeting spaces where they can meet and exchange experiences for feedback to improve their activities.

- For the development of innovative products, strategic alliances in which resources and expertise are enhanced, generate fast and efficient results that bring added-value to businesses.
The project determined that biotrade in the region faced enormous challenges accessing finance due to:

- Lack of financial alternatives aside from those offered by the banking sector.
- High interest rates that prevent producers from setting competitive prices and receiving an adequate profit margin on their products.
- The traditional financial sector has not created specific lines of financing for producers using native products.
- Economic constraints within biotrade companies make it difficult for producers to meet the requirements of the banking sector and required guarantees that are designed for the traditional market.

To address this through the leveraging of financial products, the project sought access to finance for business initiatives that enable private and public investment in key aspects of the value chain, promoting productive transformation of high value-added goods and services and innovation.

The project provided training for key actors in the financial sector about the risks and business opportunities in biotrade, linking 173 people from financial institutions and local development agencies who received training in biotrade tools. 87 in Colombia, 30 in Ecuador and 56 in Peru.

The work linking and providing training to financial institutions in the three countries created 12 lines of finance for biotrade initiatives (7 in Colombia, 2 in Ecuador, 3 in Peru), and financial instruments specifically adapted for access by biotrade initiatives.

Finally, companies were involved to share information on the access to financing available in the country, conducting trainings on the financial services and instruments available for biotrade initiatives, linking 137 companies (50 in Colombia, 17 in Ecuador and 70 in Peru). After the activities, 33 companies in the region enrolled in new financial services.

Thus, the project succeeded in establishing a regional, multisectoral vision of the importance of financial tools to leverage biotrade in Latin America, resulting in important changes:

- Conventional financing institutions familiar with the issues and business opportunities of biodiversity.
- The creation of a mutually beneficial link between the financial sector and the niche market.
- Business initiatives were informed about funding opportunities.

By partnering with the financial sector to provide and design lines of credit and financial instruments for biotrade initiatives, the project revitalized the market and stimulated the procurement of available resources, increasing access to financing. This parameter was achieved by:

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<table>
<thead>
<tr>
<th>Country</th>
<th>Organization</th>
<th>Direct credit</th>
<th>Line of credit</th>
<th>Factoring</th>
<th>Capital investment</th>
<th>Venture capital</th>
<th>Revolving funds</th>
<th>Collateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>COL</td>
<td>Agricultural Bank of Colombia</td>
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<td></td>
<td>Colombia Bank of Foreign Trade</td>
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<td>ECU</td>
<td>National Tourism Fund</td>
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<td>Biotrade Fund</td>
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<tr>
<td>ECU</td>
<td>CORPEI Capital</td>
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<td>PROCREDIT</td>
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<td>PER</td>
<td>Alterfin</td>
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<td></td>
<td>Root Capital</td>
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<td></td>
<td>Fenacrep</td>
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</tbody>
</table>
Impact generated:

Through the activities related to market access and financing for biotrade products and services and the results achieved (in innovation, marketing channels, access and use of information on markets/products, and the availability of financial tools), the pilot program initiatives showed increased sales during the project.

The 216 regional pilot programs showed sales growth of 65% from 2011 to 2014.

- **Colombia** had an average sales growth of 63.35%.
- **Ecuador** had an average sales growth of 41.49%.
- **Perú** had an average sales growth of 90%.

Lessons Learned

For the companies that participated in the project, access to finance was a critical issue restricting their competitiveness by limiting resources for innovation, process and infrastructure improvements, the implementation of standards, and the obtaining of permits, etc. With the activities, important contributions were achieved:

**With respect to the project:**

- The attributes most valued by companies that accessed this funding are the flexibility in procedures for credit ratings and payment terms that are adapted to their revenue streams by production cycle or season.

**For future interventions**

- Participating companies were weaknesses in accounting, limiting their access to finance. It is important to generate capacities in the companies for guarantee access to the financial sector.
- It is necessary to continue disseminating information on existing financial instruments for biotrade business activities and to continue building biotrade awareness within financial institutions.

• Traditional banks are ready to open lines of financing for biotrade initiatives; within broader products such as green banking.

- The project facilitated the creation of specific instruments and institutional arrangements that permit financial support for initiatives. The new lines of financing were structured to offer competitive credit in terms of interest rates, requirements, terms and guarantees but can be adapted to the needs of different types of biotrade businesses at different stages.
The development of properly coordinated and strengthened value chains is the basis for biodiversity conservation and successful poverty reduction, through inclusive business models and environmentally and socially ethical behavior.

During the preparatory phase of the project, constraints were identified that hindered the successful development of business initiatives in the region, indicating that businesses require training in the areas of management, accounting, trade, taxes, techniques and the market in order to have the skills to sustainability support biotrade.

The project designed activities to link with organizations that promote business development and provide capacity building and support for the implementation of biotrade principles in businesses.

In this manner, the pilot programs received technical assistance and support to consolidate business models that include the biotrade principles, achieving an important change parameter in capacity building in the region.

The Andean Biotrade Project sought to coordinate actors to strengthen business skills in the countries: 27 institutions in the region were enrolled to offer business development services for biotrade businesses.

As a result, 209 biotrade initiatives were launched in the market through incubation programs. Moreover, 442 initiatives were trained in business development (266 in Colombia, 42 in Ecuador and 134 in Peru), allowing for the internalization and reinforcement of concepts related to sustainability and biotrade, with important impacts in producing collaborative sectorial and multi-sectoral platforms to provide technical services based on these principles to businesses in the region.

Pilot projects also incorporated biotrade principles in their business management, defining parameters for sustainable behavior that translate into the conservation of ecosystems and the generation of work opportunities for local communities, producing a successful transformation of the productive base.

Which organizations offer support in the region?

**Peru**

1. IPNN - Peruvian Institute for Natural Products
2. Ceres Perú
3. Bcs Oikos
4. Imo Control
5. Valle Lamara
6. Control Unión Perú

**Ecuador**

1. FEDES-Foundation for Enterprise and Social Development (previously ADE) - Pharmaceuticals and cosmetics sector
2. RAINFOREST ALLIANCE - Sustainable tourism sector
3. UNOGAC - Union of Rural Cocoa Organizations - Cocoa sector

**Colombia**

1. Fundacion Natura
2. Corporation PRA
3. Corporation Plantita
4. Fundarnaya
5. Isagen
6. CAR Corpoamazonia
7. UNCTAD
8. CAR Corpocaldas
9. Patrimonio Natural
10. UNAD-BID-FOMIN
11. ANDI - National Association of Entrepreneurs
12. CAR for the defense of Bucaramanga Plateau
13. National Parks of Colombia
14. Juan N. Corpas
15. Proexport
Impact generated:

By implementing the biotrade principles, business initiatives working with products/services from native biodiversity incorporate parameters of environmental, social and economic sustainability that significantly contribute to the conservation of resources and poverty reduction in the supplying regions.

Pilot programs received training and support through the project directly benefiting more than 29,000 people with practices for fair and equitable benefit sharing and more than 280,000 hectares preserved under conservation practices and the sustainable use of resources.

216 companies implement biotrade as a management model directly benefiting 29,601 people. Including 282,569 hectares managed according to sustainability criteria with average P&C compliance of 79.50%.

<table>
<thead>
<tr>
<th>Category</th>
<th>Colombia</th>
<th>Ecuador</th>
<th>Peru</th>
<th>Regional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hectares</td>
<td>179,601</td>
<td>71,695</td>
<td>31,273.4</td>
<td>282,569</td>
</tr>
<tr>
<td>Persons benefited</td>
<td>5,844</td>
<td>12,963</td>
<td>10,794</td>
<td>29,601</td>
</tr>
<tr>
<td>P&amp;C Final average</td>
<td>80.10%</td>
<td>85%</td>
<td>73.40%</td>
<td>79.50%</td>
</tr>
</tbody>
</table>
What was learned?

The strengthening of value chains is indispensable in the promotion of biotrade as a valid and successful management model in Latin America, contributing to the conservation of resources while generating social welfare. The project produced the following lessons learned:

With regard to the project

- Medium to long term time frames are required to generate sustainability in the value chains. The amount of time that the project spent on the value chains and priority sectors was in some cases insufficient to resolve specific and common issues. The project required a lot of time to define selection criteria and subsequent implementation processes. In future efforts, this should be considered during planning to optimize efforts within the implementation period.

- Tools designed to strengthen the capacities of companies, such as bio-business plans or assessments of biotrade principles and criteria, must be accompanied by implementation processes tailored to a company’s needs. The tools themselves do not strengthen businesses. A work plan and ongoing support are needed for effective internalization and implementation, beginning with individual and collective capacity building, and direct investment.

For future initiatives

- Private-public partnerships and networks are fundamental in working with companies. They offer the possibility of partnering with entities that address specific business needs, generating sustainability for initiatives following project completion.

- Identifying and prioritizing areas of intervention by region, according to common national parameters, can prove a good strategy for implementing activities in pilot programs as it generates collective participation and regional synergy.

216 companies in the food, pharmaceutics and cosmetics, and sustainable tourism sectors, as well as others such as animal breeding, crafts, gastronomy, etc. Were identified as pilot initiatives to address different areas to strengthen value chains, with a project investment of over US$ 3,000,000 at the regional level, and US$ 3,000,000 contributed by the pilot programs.

The Andean Biotrade Program chose to work towards the strengthening of business initiatives that utilize products/services from native biodiversity in the region and operate according to minimum standards of care, as a method to promote the implementation of biotrade principles within business management.

TOTAL 216 companies

24% Sustainable Tourism

8% Other

12% Pharmaceutics and cosmetics

57% Food Industry

Colombia
100 companies

Ecuador
51 companies

Peru
65 companies.

22. The minimum standards of care that were required by the business initiatives in the countries were:

- No genetically modified organisms were used
- No use of banned pesticides
- No use of invasive alien species
- No use of Cites I species
1. Main characteristics of the pilot businesses

The companies that took part in the pilot programs utilized a variety of species and products in their work, such as native cocoa (*Theobroma cacao*) in 29 regional pilots, or ecotourism and community tourism in 56 regional pilots, with a large representation of ecosystems and common value chains in the three countries, and potential for regional activities. The details of the main products/services addressed by the countries are as follows:

### Sector

#### Colombia
- **Food**
  - Cocoa, *Theobroma cacao*
  - Asai, *Euterpe oleracea*
- **Pharmaceuticals and cosmetics**
  - Sacha inchi, *Plukenetia volubilis*
- **Sustainable tourism**
  - Ecotourism
  - Community tourism
- **Other**
  - Handicrafts from *Carludovica palmata palmata* and others

#### Ecuador
- **Food**
  - Cocoa, *Theobroma cacao*
  - Quinoa, *Chenopodium quinoa*
  - Uvilla, *Physalis peruviana*
- **Pharmaceuticals and cosmetics**
  - Palo Santo, *Bursera graveolens*
  - Ungurahua, *Genocarpus bataua*
- **Sustainable tourism**
  - Ecotourism
  - Community tourism
- **Other**
  - Alpaca fibers, *Lama pacos*, and others

#### Peru
- **Food**
  - Cocoa, *Theobroma cacao*
  - Quinoa, *Chenopodium quinoa*
  - Aguaymanto, *Physalis peruviana*
- **Pharmaceuticals and cosmetics**
  - Asai, *Euterpe oleracea*
  - Uña de gato, *Uncaria tormentosa*
- **Sustainable tourism**
  - Ecotourism
  - Community tourism
- **Other**
  - Gastronomy and others

### What regions were addressed within the countries?

<table>
<thead>
<tr>
<th>Country</th>
<th>Areas of Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>Coast (Atlantic and Pacific), Central, East, Amazonia</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Coast, Sierra, East, Galapagos</td>
</tr>
<tr>
<td>Perú</td>
<td>Coast, Sierra, Puna, Forest (high and low)</td>
</tr>
</tbody>
</table>

All of the pilot programs had representation of the Andean regions and ecosystems in the three countries, amounting to 282,569 ha of direct influence according to biodiversity parameters of conservation and sustainable use.
2. Implementation of biotrade principles

All the project initiatives were evaluated for their compliance with the principles of biotrade to establish a baseline for the strengths and weaknesses with respect to environmental, social and economic sustainability according to the seven principles of biotrade, which served as input for the development of activities. The pilot programs showed increased adherence to the principles, from 72.7% to 79.50%, or an average increase of 6.8% throughout the implementation of activities to strengthen environmental, social and economic sustainability in the countries according to ethical and equitable parameters along the value chain.

This level of compliance is representative, considering that the implementation of biotrade as a management model is a relatively new process that is gradual and all-inclusive in the long term, addressing environmental, social and economic aspects.

According to the first measurement, there was greater weakness in complying with environmental aspects (principle 1. Conservation and 2. Sustainable use of biodiversity) in areas such as knowledge of the composition and functioning of the relevant ecosystem, or the identification and mitigation of negative impacts, which is why capacity building in resource use was a primary focus of project activities at the regional level.

The principle of economic stability was the third lowest, following environmental aspects, with an average of 67% compliance.

The business initiatives that use biodiversity resources in the Andean Region have limited financing for investment in applied research, product development, access to commercial platforms, and for obtaining permits, licenses, etc. For this reason, work on these topics was prioritized by the project in order to increase the competitiveness of the businesses in accessing markets.

The principle that reported the highest performance in the region was number 7, clarity in land tenure, with 83% average compliance, showing an understanding with the land owners on legal tenure from negotiations and concessions for the use of protected areas, as in some of ecotourism activities.

According to the different sectors of intervention, sustainable tourism had the highest average compliance given that its activities imply the conservation of ecosystems and the involvement of local communities in a given economic activity. Thus, many of the principles of biotrade are incorporated per se. The sustainable tourism value chain thus has high potential to preserve, use and take advantage of areas of biodiversity and to generate social benefits for local communities of the region.

| Biodiversity conservation | 65% |
| Sustainable use of biodiversity | 51% |
| Distribution of benefits | 70% |
| Economic sustainability | 67% |
| Compliance with legislation | 79% |
| Respect for actors | 74% |
| Clarity on land tenure | 83% |

What was the average level of P&C compliance by sector?

- Food Industry: 72.20%
- Pharmaceuticals and Cosmetics: 77.35%
- Sustainable tourism: 81.44%
- Other sectors: 59.85%
3. The activities

The project identified key needs to strengthen value chains within the four sectors through the evaluation of biotrade principles and the definition of specific activities in three components of sustainability that fall under this economic activity:

### Environmental sustainability

Through the promotion of conservation principles and the sustainable use of biodiversity, the selected initiatives were able to effectively and rationally manage the species and ecosystems used, with an ecosystemic vision allowing them to implement adaptive management practices according to the changing dynamics of biodiversity products/services.

The project developed activities in support of environmentally sustainable practices. Among the most relevant were:

- Training on topics related to the sustainable use of resources: Generating technical capabilities through business initiatives that utilize biodiversity and its resources was essential to the implementation of sustainable practices.

  42 pilot programs in the region received assistance and technical support in the field.

  107 pilot programs in the region were trained.

According to these experiences, training in management and sustainable use is a topic of significant relevance, as direct users obtained new knowledge and skills to make more efficient use of resources.

- 42 pilot programs in the region received assistance and technical support in the field, related to the sustainable use of resources, with direct impact on hectares managed under sustainable practices. The support activities were fundamental to the strengthening and consolidation of local actors, generating specific contributions to sustainable environmental management and the development of protocols and techniques, as well as the creation of management plans as a planning and monitoring tool for regulating the use of resources.

Such was the case with the Sumak Mikuy Company in Ecuador, for which the development of a management plan for uvilla (Peruvian groundcherry, Physalis peruviana) and mortiño (Andean blueberry, Vaccinium floribundum) were necessary to ensure their supply while ensuring the sustainable use of the resources.

The company “Sumak Mikuy”, located in the province of Imbabura, Cotacachi, Ecuador, has been working since 2007 to recover, preserve and add value to traditional native Andean crops, as well as to recover the local knowledge of indigenous communities.

The company began during a project to capture and conserve native agro-biodiversity put forth by the Autonomous Institute for Agricultural Research to the Union of Peasant and Indigenous Organizations of Cotacachi (UNORCAC). UNORCAC is the majority shareholder of the microenterprise, so that profits generated are invested in the development of its communities.

It’s main products are the uvilla (Physalis peruviana) and the dried mortiño (Andean blueberry, Vaccinium floribundum), which are sold as a final product in snack packs, or as raw material to a company working in fair trade and organic production that adds a coating of chocolate to produce 50g boxes or 100g double boxes. The products are successfully marketed in both the domestic and international markets.

Currently the initiative benefits **346 families** that produce uvilla and collect mortiño to be processed at the Sumak Mikuy plant. The hectares managed according to biotrade principles and criteria by the company and communities **has reached 727.71 ha.**

The Andean Biotrade Project in Ecuador has strengthened the initiative through technical assistance to strengthen the productive process according to sustainable criteria, improving organic crops, developing new products, and strengthening marketing through the improvement and promotion of branding, equipment, and support to obtain export certifications.

One of the most important issues addressed was the development of the management plans for uvilla and mortiño to guide the sustainable use of these fruits, the delimitation of harvesting and gathering areas, as well as the identification of mitigation strategies for impacts on the ecosystem.

In parallel, technical assistance was provided to producers of organic and biodynamic agriculture, improving crop quality and production profitability.

According to Verónica Acosta, Manager of the company:

“The Andean Biotrade Project has been an important ally in supporting the most central processes of business development and growth, which otherwise would have been unobtainable. One of the company’s needs was to obtain the patent for the collection of wild mortiño that is found in the Ecological Reserve of Cotacachi – Cayapas. Thanks to the project, the Sustainable Use Plan was developed that will allow us to get this permission. This management plan guides the amounts, dates, places and methods of collection, based on the commitment of the company and communities for the sustainable management of these resources and the conservation of biodiversity in the area.”

**43** pilot programs in the region worked on the implementation of standards and sustainability practices.

Organic certification, environmental certification for tourism, and the creation of zoning maps were among the activities. The implementation of standards for certification was a successful strategy for differentiation and accessing niche markets while preserving the characteristics of the ecosystems and mitigating impacts to ensure its durability and quality in the long-term.

For example, according to the Association of Organic Agriculture (IFOAM), the global organic market was US$ 64 million in 2012, representing 6.8 million organic hectares in Latin America, with steady growth in recent years and great potential in new markets. This represents an opportunity for biotrade products, given the similarities in sustainable use practices that they promote.

Such is the case with the Avenida Trading Company in Peru, for whom obtaining organic certification allowed them access to new markets as part of a strategy to increase their competitiveness.

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Organic certification and capacity building of suppliers as a competitiveness strategy for Avendaño Trading

The Avendaño Trading Company is a family company dedicated to the primary processing and exportation of quinoa (Chenopodium quinoa) in Peru. It has two locations, one in Puno for scarifying, washing and drying processes, and another in Lima for selection and exportation.

The company has gone through a number of stages, starting as a small collector in 2005 and opening a department for exportation and quality in 2012. The support of the Andean Biotrade Project was crucial in this growth, as through the agreement they obtained HACCP certification, organic certification and have attended international trade fairs such as BIOFACH in Germany.

In order to sustain growth and meet demand, the company works with approximately 410 producers with 512 hectares of direct influence – organically certified – in the Puno areas of Illave, Ácora and Juli. Through the project, its suppliers have strengthened their productive and organizational skills through training and technical support in organic crop production, use of organic fertilizers and quality seeds, pest and disease control, harvest and post-harvest handling and strengthening of organizational management to increase competitiveness of producer associations. To do this, a permanent technical team provided advice in the field, and they worked closely with the Agrarian Agency of Collao and participated as key actors in the Technical Committee for quinoa.

In the words of the general manager, René Avendaño:

“The participation of the Andean Biotrade Project was very positive; they encouraged us to do more, and to improve quality and organization. Beforehand, we were not familiar with these international standards, and we now have organic certification and intend to use it to become more competitive.

Producers are also very happy, conveying their opinions through the engineers. We know about fair trade, and although we do not yet have the certification, we now train our partners and pay them a higher price than that of the market for their products.

Participating in the fairs was something very special as well. I had never participated in one outside of the country. Now it is clear to me that the market is very demanding and asks not just for HACCP but also for BRC, ISO and SQF. We have made a lot of contacts and have strengthened our business development capacity.”

Social Sustainability:

The equitable distribution of monetary and non-monetary benefits (such as access to information and capacity building), recognition of local knowledge, respect for the rights of actors and clarity in land tenure are among the most relevant aspects promoted in the creation and strengthening of value chains. As key practices for social sustainability, dialogue must be promoted, with negotiation and transparent access to information (such as market performance) and knowledge (processes, technologies, etc.).

Accordingly, the Andean Biotrade Project identified a number of activities in each country, the most significant of which were:

- Capacity building for suppliers and/or business partners on organizational, administrative and technical issues to develop skills to empower their role in the value chain. 108 pilot programs in the region received training in:
  - Organizational, corporate and individual strengthening.
  - Formalization and associativity.
  - Increased competitiveness for market access through topics such as quality, safety, marketing and commercialization.

Such is the case of Chaxras, a gastronomy Company in Peru that works to transfer knowledge to strengthen the management capabilities of its suppliers, developing its value chain.
Opting for gastronomic innovation through the use of wild native resources and value chain development

Chaxras is an eco-restaurant located in Pachacámac, the first ecological tourist district of Peru. The restaurant occupies nearly 300 of the 5,000 meters at its disposal and was designed to reflect an ecologically conscientious lifestyle. The atmosphere is rustic and its operation was designed to have minimal environmental impact, incorporating a lot of green space and using recycled materials from the surrounding areas.

In partnership with the Andean Biotrade Project, and with the support of the city of Pachacámac: Chaxras, they created and implemented the Umapacha project, a program whose main objective is to identify new native wild species of vegetation with culinary potential in the Pachacámac Valley in order to offer them at the tourist district of Peru. The restaurant

To do this, the project identified and worked with local supplier communities to develop their skills and transfer knowledge to increase their competitiveness for successful integration into new markets, by addressing issues such as quality and safety.

The project has benefited more than 30 supplier families with about 13 hectares. Likewise, it worked to establish an appropriate mechanism for general knowledge transfer and community education, developing strategies for communication and education. This included the creation of audiovisual material, a logo for the project, and a webpage as the main tool for information dissemination.

According to Eduardo Navarro, chef and owner of the restaurant, the activities of the Andean Biotrade Project were timely and relevant:

“We are happy with the Umapacha project. We had thought of doing this project for years but hadn’t pursued it after opening the restaurant, and hadn’t had sufficient time or adequate plans to develop it. So our participation in the project was perfect.

The impact of the Umapacha Project was that it allowed us to help the communities while locating varieties of species that we had never used or had stopped using at some point. Now, as we discover them, we are transferring knowledge in training our suppliers on quality and food handling. This type of activity would have been unmanageable for us, but we have been able to do it with the help of the project.”

8 pilot programs in the region received assistance and support for the implementation of benefit-sharing practices. Balanced negotiations, fair prices, contribution to local development and respect for traditional practices are some of the requirements for benefit sharing under biotrade parameters.

In the Chankuap Foundation in Ecuador, for example, a study was done on the distribution of benefits to Amazonian communities along the value chain for native species of the Amazon, which contributed to the strengthening and coordination of the actors in the value chain and resulted in sustainable market access.
The sustainable management of Amazonian biodiversity and adding value through local development

The final products for the local and international markets are syrups, essential oils, soaps, shampoo, etc., based on native species such as dangare de grado (Croton lechler), guayusa (Ilex guayusa), ishpink (Ocotea quixos), and ungurahua (Oenocarpus bataua).

The Andean Biotrade Project in Ecuador, with the support of the BioCAN program and in partnership with the Ministry of Environment, promotes the strengthening of the initiative through technical assistance to improve the use of native species and strategies for conservation, profit sharing and marketing.

Management plans by specie were also developed for sustainable use in six communities, and technical training was conducted on the sustainable management of the species, as part of the capacity building of local communities.

Economically, it worked in commercial strengthening through the updating of the distribution center and training technicians on compliance with good manufacturing practices (GMP) and organic certification, the development of cosmetic formulas in the organic line of IKIAM, participation in two international events to identify market trends, and the expansion of the processing capacity of the storage facility.

Currently, the Foundation, together with the communities, directly manages 108 hectares of forest according to biotrade principles and criteria. The direct beneficiaries of the initiative include 130 families working in collection and production and in certain cases a first level of added local value.

According to Adriana Sosa, Secretary General of the organization, “The project’s support added value to production with high quality standards for the marketing of natural cosmetics on the international market. This has strengthened the development of the local area, supporting producers of the area in principles of fair trade, biotrade principles, and social, economic and environmental sustainability. Production volumes and sales create profit and are important, but so is the conservation of natural resources that ensure the permanence of the environment and the Shuar and Achuar indigenous communities.”

Economic sustainability is one of the main issues in businesses of the region. In the project’s experience, there is a strong commercial weakness in businesses in terms of market access and competitive positioning. For this reason, the development of supply through research and product innovation to create added value is important and rarely addressed by business initiatives in the region. It is also important to address access and market positioning through defined business activities, such as promotional events and the adequate distribution of products.

Specific activities were defined and implemented in the three countries that contributed in a concrete manner to the economic sustainability of the companies. Among the most relevant were:

> Participation in commercial platforms and missions, as well as business conferences and internships. According to the project’s experience, these are among the most important activities for economic sustainability because they not only promote and sell products but also offer specific learning opportunities that allow companies to identify trends and new technologies, access requirements, potential partnerships, etc.

134 pilot programs participated in national and international promotional activities, directly contributing to skills development in planning and marketing strategies for the companies.

This is the case of Vhera Lucci in Colombia, a biocosmetics company for which the participation in the In Cosmetic fair in 2014 and the UEBT event were important in defining their business strategy.
Vhera Lucci is a company located in Bogota, Colombia, that is dedicated to the development and marketing of biocosmetic products. The company operates under the colcommerce (collaboration commerce) business model, through which it has created a value chain in the cosmetic sector; there are 15 companies under the leadership of Vhera Lucci, with operations in three countries. The company works to strengthen the link with ingredient suppliers in order to develop innovative biocosmetics that have a positive social impact and generate the sustainable use of biodiversity. Thus far it has developed a first portfolio of moisturizing body milks and perfume based on two ingredients of native biodiversity: Sacha Inchi (Plukenetia volubilis) and Uchuva (Physalis peruviana), which are marketed in department stores including Ripley and Saga Falabella. Under the Andean Biotrade Project, activities such as “Technological Registration” have enabled the introduction of a third ingredient, Acai (Euterpe oleracea), and the testing of a coordination model with academia and communities that supply the native ingredients.

Additionally, the participation in the In Cosmetics fair in 2014 (Hamburg, Germany) allowed them to approach companies that shared knowledge in bio-business strategies, management models for research, development and innovation (R+D+I) and opportunities to develop innovative products. Furthermore, the UEBT conference in April 2014, alongside exploration of the German and French markets, allowed them to connect with important actors throughout the value chain for biotrade in the cosmetic sector (consultants, advertising, manufacturers, suppliers and support institutions), which was decisive in adjusting and refocusing the product roadmap.

**In the words of Julián González Juri, General Manager of Vhera Lucci:**

“We thank the Andean Biotrade Project team for their leadership in the implementation of this project, which has become the starting point in the establishment of biotrade in Colombia. We must keep working together to overcome the market, regulatory and technical obstacles to achieve the development of our country based on its competitive advantage: biodiversity.”

29 pilots in the region participated in the implementation of quality/safety systems.

Standards such as the Hazard Analysis and Critical Control Points (HACCP), Good practices for manufacturing (BPM) and ISO standards were among the systems implemented, contributing directly to the competitiveness of the businesses and providing them access to more demanding markets.

76 pilots benefited from the definition of business strategies.

The companies participated in activities for brand development, corporate identity, packaging, website development and promotional strategies, among others. 90 pilots were supported in the development of bio-business plans. Concrete tools were developed in these activities that directly contribute to the development of business strategies, enabling the accurate planning of activities and practices to achieve economic success.

For example, the Encenillo Reserve in Colombia, a private ecotourism initiative, identified its business and marketing plan as a priority in its decision making roadmap.
The Encenillo Biological Reserve, an opportunity to conserve and use Andean biodiversity

The Encenillo Biological Reserve is an initiative for the conservation of the biodiversity in the upper-Andean forest of Encenillo lead by the Fundación Natura. The reserve is located in the town of Guasca (Cundinamarca), approximately one hour from Bogota; it currently has 206 ha, over half of which is mature forest, secondary forest, and subpáramo.

The reserve’s forests have been well preserved, and the area has a valuable architectural legacy from the extraction and processing of limestone that took place from ancient times until the end of the last century. Since 2007, the reserve has been open to public interested in touring and the interpretation of natural resources. To this end, the reserve has set aside an area accessed by a network of trails for visitors to explore the woods, admire the beauty of its flora and fauna and expand their knowledge of various topics of environmental interest. The economic contributions that visitors make contribute significantly to the maintenance and restoration of the reserve. During the first half of 2014, the reserve received 1,833 visitors, over two-thirds of them students.

The management of biodiversity conservation in a nature reserve involves an ongoing challenge to achieve sustainability. The administrative and commercial skills relevant to the management of the reserve must be developed. For this reason, the Andean Biotrade Project in Colombia choose to address the development of a business plan for the Encenillo Reserve, the planning of its marketing and sales, the development of tools for financial planning, the renovation of access and guiding fences, and participation in an exploratory mission for natural tourism in Ecuador. Through these activities, the project sought to develop skills for the economic sustainability of the reserve.

For Carlos Francisco Castillo, Director of the Encenillo Biological Reserve,

“The support received by the Andean Biotrade Project has significantly scaled up nature tourism management on the reserves of the Fundación Natura and, particularly on the Encenillo Reserve, through a focus on the product and service quality that benefits from the reserve’s potential to offer customer experiences, the product of a conscious and deliberate effort to provide quality.”

From the implementation of different management practices among the pilot businesses, the project sought to increase compliance with biotrade principles and the internalization of these concepts in a viable and successful model for initiatives that use native biodiversity resources according to sustainable practices.
C. ACHIEVEMENTS IN CAPACITY BUILDING

According to the United Nations Development Programme – UNDP (2009), strong capacity, locally generated and sustained, is essential to the success of any development enterprise. Without it, the integrity of development achievements can be compromised and progress can remain rootless and illusory, separated from the capacities that already exist and vulnerable to the increasingly severe and complex challenges facing the world today. With this in mind, the implementation of the Andean Biotrade Project addressed capacity development and strengthening as the central issue of CAF’s proposed methodology.

In this approach, the project reinforced various collective and individual skills in its executing units and private and public partners that directly contribute to the responsiveness of actors to market opportunities, as well to incentives offered by the project. Some of the main skills developed during both preparation and implementation, are shown below:

A. Preparatory phase:
Ability to identify and select beneficiaries of biotrade initiatives.

The NEU used critical analysis to identify criteria and methodologies for the selection of initiatives that use native biodiversity resources to implement biotrade principles. They developed selection tools such as: (1) data collection sheets; (2) guidelines for the implementation of pilot programs; and (3) matrices to verify compliance with biotrade policies and criteria. Likewise, they developed skills to identify needs based on the verification of compliance with biotrade principles and the subsequent development of work plans to implement sustainability practices within business management. This permitted activities that resulted in systemic change.

B. Implementation phase:
Ability to conduct monitoring processes and technical assistance to build skills...

Project activities were aimed at strengthening the skills of biotrade stakeholders in each country as well as environmental, social and economic areas according to identified needs. Procedures and tools were developed and activities identified to contribute to sustainable practices and the creation of a favorable environment so that initiatives that use native products and services can develop and penetrate markets competitively.

The executing units and partners addressed skills for monitoring and capacity building according to the characteristics of biotrade in the countries, and equipped public and private managers with skills for decision making.

1. Identification and selection of beneficiaries
2. Coordination of multisectoral platforms
3. Support and technical assistance to strengthen skills
4. Formation of knowledge networks
5. Management of funds and access to financing
6. Identification and opening of markets
7. Advice for formulation of policy

Ability to form knowledge networks

Throughout its implementation, the Andean Biotrade Project generated a large quantity of information on the various activities that could be used in communication and dissemination strategies to reach various interested parties. For this reason, various communication mechanisms were defined and key partners identified, creating a knowledge network to facilitate the accessibility and exchange of information, creating dynamics that last beyond project implementation.

In this way, the executing units developed the capacity to organize knowledge networks to solve problems at different levels of biotrade activities.

Ability to manage fund and access financing for biotrade.

One of the most critical issues addressed by the project was access to financing for biotrade companies. To do this, NEU worked to develop skills for managing funds to improve financial aspects of the companies. A mapping was done to identify the main options for initiatives using native biodiversity resources in Colombia, Ecuador and Peru. At the same time, guidelines for the development of new sources of funding were developed that offered conditions adapted to the needs of the businesses.

In Colombia and Ecuador, CORPEI and the Biotrade Fund developed skills for the structuring, evaluation and monitoring of funds for biotrade companies.

Ability to identify and open markets through commercial strategies for biotrade products.

In order to establish appropriate channels for the sustainable value-added trade in products derived from native biodiversity, the project developed market studies and business plans and provided technical assistance for the design and implementation of business strategies by promoting practices such as research, product development, branding, etc. within business management. As a result, new skills were created, identifying the appropriate mechanisms to generate increased competitiveness of biotrade initiatives in accessing markets.

In this way, the executing units developed the capacity to organize knowledge networks to solve problems at different levels of biotrade activities.

Capacity is development:

Capacity development is about transformations that empower individuals, leaders, organizations and societies. If something does not lead to change that is generated, guided and sustained by those whom it is meant to benefit, then it cannot be said to have enhanced capacity, even if it has served a valid development purpose. UNDP, 2009

With the implementation in three countries, a unified vision of biotrade was promoted in the region, creating a critical mass of human resources with strengthened individual skills. Collective capacities were also developed, strengthening partnerships to maximize resources and the effectiveness of priority activities in favor of biotrade in the region.
The project addressed value chain strengthening in three stages:

A. Diagnostic phase

In order to analyze the status and trends of biotrade activities in the countries to prioritize and define the pilots and value chains to address, it was necessary to develop three types of key tools to:

1. Apply and select beneficiary companies: Refers to eligibility instruments for the selection of initiatives to be supported under the project according to specific criteria and project objectives. Each country developed the following tools:

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<th>Country</th>
<th>Tool</th>
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Tools that are developed and used successfully during implementation can subsequently be adopted by actors to further the promotion of biotrade in the region, to replicate results, and to develop coordinated actions within activities promoting biotrade.

According to the project methodology regarding inclusive development to strengthen biotrade value chains in the region, eight tools were developed during the different stages of the project, allowing 1) diagnostics for biotrade companies 2) capacity building, and 3) monitoring and evaluation of impacts.

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The tools developed for the application and selection of beneficiaries included enough information to establish a complete baseline. However, the tools presented here have a broad focus. It is suggested that parameters be established to direct the summoning of beneficiaries for the activity objective, selecting specific value chains, regions, and other priorities.

2. Analyze and define value chains: The tools developed were meant to identify the sector or value chains to be addressed in activities, according to national context and existing market. To do this, each implementing unit developed the following tools:

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The analysis of value chains is an important step in identifying and selecting initiatives that are consistent with the objectives of the activities. To do this, objective criteria were established with regard to the characteristics of the company and the environmental, social and economic contexts. Greater dispersion of initiatives across sectors, regions or value chains entails greater technical and logistical demands.

3. Generate a biotrade baseline for the businesses in each country: Methodologies to measure compliance with biotrade principles in the countries were developed in order to establish baseline characteristics of business management in the initiatives, to identify needs and design activities according to needs.

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<tr>
<th>Country</th>
<th>Tool</th>
<th>Online location</th>
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</thead>
<tbody>
<tr>
<td>Peru</td>
<td>Interactive assessment tool for biotrade in sustainable tourism.</td>
<td>Disponible únicamente en versión digital. Formato CD en Corpei y CAF</td>
</tr>
<tr>
<td>Peru</td>
<td>Manual to verify sustainable tourism activities within the P&amp;C.</td>
<td>Disponible únicamente en versión digital. Formato CD en Corpei y CAF</td>
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</tbody>
</table>
The matrix for verification of biotrade was a fundamental tool to measure the degree of incorporation of biotrade principles in the businesses that use native biodiversity. It can be used as a tool for monitoring and progress, with periodic measurements. It is important that the evaluation criteria used are consistent with all possible areas of work (such as agricultural, non-timber or ecotourism products). These aspects were included in the matrix for Ecuador.

### B. Phase of management and productive capacities

To strengthen and develop the skills of different actors along the value chains of each country, guidelines were developed in the form of manuals and training programs in order to define work patterns and strengthen knowledge of biotrade. Two types of guides and three training programs were developed.

#### 4. Guidelines for the implementation of biotrade: Intended to establish guidelines for the implementation of sustainable practices that contribute to the achievement of biotrade principles, and that can be used as a reference and incorporated into business initiatives. Through the development and dissemination of these guides, new knowledge and skills were developed, resulting in the application of sustainable practices:

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<tr>
<th>Country</th>
<th>Tool</th>
<th>Online location</th>
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<tbody>
<tr>
<td>Colombia</td>
<td>Good practice guidelines for the management of Sangre de Drago - Croton lechleri.</td>
<td>Physical version in all guides in CORPEI and CAF</td>
</tr>
<tr>
<td>Colombia</td>
<td>Good practice guidelines for the management of Ungurahua - Oenocarpus bataua.</td>
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<tr>
<td>Colombia</td>
<td>Good practice guidelines for the management of Ishpink - Ocotea quixos.</td>
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<tr>
<td>Colombia</td>
<td>Good practice guidelines for the management of Guayusa - Ilex guayusa.</td>
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<tr>
<td>Colombia</td>
<td>Equatorial palms: biology and sustainable use.</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Electronic tutorial on access to genetic resources</td>
<td>Web application will be included in the CHM and SIB portals being developed by MAE.</td>
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</table>
5. Guidelines for developing a bio-business plan: intended to establish guidelines for the preparation of plans and successful roadmaps for a bio-business idea to be sustainable and competitive. Each country developed:

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<th>Country</th>
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The models of bio-business plans prepared by the project include biotrade principles to incorporate into business management.

It’s a useful tool that should include a mechanism for efficient implementation as well as plans to periodically update it so that it can be used in decision-making for business initiatives.

6. Training programs in biotrade. In response to the focus on capacity building for improved decision making, to foster the adoption of biotrade as a model for resource use, and generate more favorable conditions to access financing for biotrade activities, the Andean Biotrade Project developed training programs specific to different actors. These plans were important in that they
established guidelines and framed subsequent activities, resulting in the impacts discussed. The programs for were designed for:

- **Financial institutions**
- **Public sector**
- **Private sector**

Each country designed training programs to generate knowledge according to the target audience:

### Colombia

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<tr>
<th>Country</th>
<th>Tool</th>
<th>Online U bication</th>
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<tbody>
<tr>
<td>Documents on discussion and joint construction: Principle of fair and equitable benefit sharing in areas other than the access to genetic resources and traditional knowledge, from the perspective of the biotrade value chain.</td>
<td><a href="http://biocomercioandino.org/wp-content/uploads/2015/04/Capc-publ_Distrib-beneficios-ambito-acceso-recursos-geneticos-y-con-tradicional.pdf">Link</a></td>
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### Ecuador

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<th>Country</th>
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<tr>
<td>Sectorial training plan for sustainable tourism initiatives and natural ingredients sector for pharmaceutics and cosmetics.</td>
<td><a href="http://www.biocomercioecuador.ec/recursos/biblioteca-biocomercio/PRODUCTOS-DEL-PROYECTO-BICOMERCIOANDINO-GEF-CAF/CURSO-2-BICOMERCIO/">Link</a></td>
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### Peru

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raining programs are effective mechanisms of knowledge transfer. The content developed in the countries was used positively, generating the interest of actors to implement and promote sustainability.

The language used should be considered according to the target audience and content, to ensure the consolidation of knowledge.

C. Phase of monitoring and evaluation

To determine the fulfillment of targets and impacts during activities in priority value chains, the project used a system of monitoring and evaluation that served as the guide for the countries to measure their progress by defining measurement parameters, optimal reporting periods and formats, impact indicators and monitoring, etc. The monitoring system aimed to:

- Identify progress and failures to achieve project objectives for each country and regional level.
- Provide feedback on the activities and management processes of the project.
- Detect changes in compliance with biotrade principles and criteria by the supported initiatives, and their influence on biodiversity conservation.

The manual for the monitoring and evaluation system is available here:


E. KNOWLEDGE PRODUCTS AND NETWORK

The project developed four types of knowledge products related to the generation of new knowledge and capacity building to consolidate biotrade among actors: (1) market studies, (2) videos, (3) legislative and regulatory studies, and (4) others.

1. Market studies: Market studies helped establish the feasibility and the conditions for businesses to access target markets, characterizing the demand to make it more competitive. It is a fundamental tool for the companies as it determines the characteristics and marketing channels most appropriate for product positioning. The following studies were carried out:

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All the tools developed and used by the national implementation units and their partners during the different phases of project implementation are available on the regional knowledge platform [www.biocomercioandino.org](http://www.biocomercioandino.org), so that they can be used, adapted and updated by biotrade partners in the region.
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<tr>
<th>Country</th>
<th>Tool</th>
<th>Online Ubication</th>
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</thead>
<tbody>
<tr>
<td>Peru</td>
<td>Yogurt Drinks and Smoothies and Natural.</td>
<td><a href="http://biocomercioandino.org/wp-content/uploads/2014/12/PRUEBAS-DE-JUGOS-OLEOSAS.pdf">Hard copy in PROMPERU and CAF</a></td>
</tr>
</tbody>
</table>
Market studies are important in defining business strategies consistent with business initiatives, and for decision making based on concrete information on market trends and data.

Dissemination strategies for the studies should be considered in order to benefit the largest quantity of initiatives possible, maximizing the impact of the studies.

2. Videos: It is effective to visually show the biotrade management model and create awareness of the positive impacts generated by the activities within the countries. The NEUs developed 15 videos: CAF, Colombia, Ecuador, and Peru.

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<tr>
<th>Country</th>
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<tbody>
<tr>
<td>Colombia</td>
<td>Instructional video 2013.</td>
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<td></td>
<td>Corpocaldas Video 2013.</td>
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<td></td>
<td>Colombia Biotrade Institutional Video - May 2014.</td>
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<td></td>
<td>Cocoa Video – 2014.</td>
<td></td>
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<tr>
<td>Ecuador</td>
<td>Video documentary of biotrade in Ecuador No. 1 that includes interviews with partners, beneficiaries and stakeholders of biotrade in Ecuador</td>
<td><a href="http://biocomercioandino.org/gestion-de-conocimiento/videos/#sthash.boyphCmh.HcA7ZVqX.dpbs">http://biocomercioandino.org/gestion-de-conocimiento/videos/#sthash.boyphCmh.HcA7ZVqX.dpbs</a></td>
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<tr>
<td></td>
<td>Video of biotrade in Ecuador for promotional use in fairs.</td>
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<tr>
<td></td>
<td>Video documentary of biotrade in Ecuador No. 2 that includes interviews with partners, beneficiaries and stakeholders of biotrade in Ecuador.</td>
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<td></td>
<td>Short view about biotrade in Ecuador.</td>
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<tr>
<td>Peru</td>
<td>Biotrade, an opportunity to transcend.</td>
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3. Policy and regulatory studies: Other technical documents were developed on aspects of policy and regulations to facilitate improved governance and a favorable business environment for business initiatives in the region. These were:

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Innovative answers and sustainable solutions for local development in Latin America.

Pilot programs

Annexes

Summary

Introduction

Biotrade in the Andean Region

The Project

Results

Impacts and systemic change

Pilot programs

Achievements in capacity development

Tools developed

Knowledge-based products and networks

Lessons learned and recommendations

Conclusions

Country Tool Online Ubication

Colombia

Development of the proposal for selection and institutional path of Amazonian fruit and medicinal plants, in the context of European Union regulations—novel food path.


Environmental legal guidance: Legal environmental guidelines for ecotourism in Colombia.


Legal environmental guidelines for the use of timber and non-timber forest products in Colombia.


Legal environmental guidelines for the use of wildlife and sustainable fisheries.


Identification of incentives and barriers to market development for biodiversity products and diagnosis of national and international regulations.


Proposals for legal and regulatory reforms that facilitate biotrade activities.


Ecuador

Proposed regulations for the sustainable management of non-timber forest products NTFP in Ecuador.


Proposed standards for the management and marketing of orchids in Ecuador.


Proposed standards for the management and marketing of toquilla straw in Ecuador.

In development. Soon available on the Ecuador project website.

Peru

Technical evaluation of compensation under Law 27811.

Hard copy in Promperú and CAF

Legal barriers for natural products and nutritional supplements.

Grass sacha inchi oil.

Novel food sacha inchi oil.

Technical document submitted by Peru to the WTO committee on photo and phyto sanitary measures for novel foods.

CODEX technical standard for lúcuma.

4. Other products: Other knowledge products of were developed, such as:

Country Tool Online Ubication

Andean Biotrade: value proposition

http://biocomercioandino.org/?s=Andean%20Biotrade

Andean Biotrade: fifteen success stories in Colombia, Ecuador and Peru.

http://biocomercioandino.org/gestion-de-conocimiento/publicaciones/#sthash.KET24Kyh.dpuf

Andean Biotrade: fifteen success stories in Colombia, Ecuador and Peru.

http://biocomercioandino.org/gestion-de-conocimiento/publicaciones/#sthash.KET24Kyh.dpuf

CAF

Andean Biotrade: fifteen success stories in Colombia, Ecuador and Peru.

http://biocomercioandino.org/gestion-de-conocimiento/publicaciones/#sthash.KET24Kyh.dpuf

Andean Biotrade: value proposition

https://drive.google.com/file/d/0B6m2VtucIAiqTmEzMDZteUlWUEU/view
<table>
<thead>
<tr>
<th>Country</th>
<th>Tool</th>
<th>Online Ubication</th>
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<td>CAF</td>
<td>Biodiversity: the heritage to discover in the Andean countries.</td>
<td><a href="http://biocomercioandino.org/gestion-de-conocimiento/publicaciones/#sthash.KET24Kyh.dpuf">http://biocomercioandino.org/gestion-de-conocimiento/publicaciones/#sthash.KET24Kyh.dpuf</a></td>
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<td>Database of commercial wildlife species</td>
<td><a href="http://www.biocomercioecuador.ec/recursos/base-de-datos-fauna">http://www.biocomercioecuador.ec/recursos/base-de-datos-fauna</a></td>
</tr>
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<td></td>
<td>Book, “History of the Kichwa Añangu Community”.</td>
<td>Disponibles versión digital formato CD en CORPEI y CAF</td>
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<tr>
<td></td>
<td>Book, “Taste my Ecuador”.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Book, “Underwater pictures”.</td>
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</tbody>
</table>
**The Network**

As regional implementer of the Andean Biotrade Project and the organization responsible for producing replicability strategies, CAF installed multi-sectoral platforms to reinforce dialogue at the macro, meso and micro levels, with 24 organizations in the region offering services in business development for biotrade.

The information systems installed by the project enabled more than 400,000 users who could access information related to the sustainable management of resources under biotrade parameters.

A LinkedIn network “Biocomercio Andino”, with more than 160 users, and a regional platform of main results published at www.biocomercioandino.org were installed as tools to provide sustainability of the knowledge and skills developed in human capital and in organizations, creating opportunities for discussion and the exchange of experiences that promote the development of biotrade in Latin America.

Each country developed a web platform where all the information developed during the projects available:

- **Colombia**

- **Ecuador**
  - [http://www.biocomercioecuador.ec/](http://www.biocomercioecuador.ec/)

- **Peru**
  - [http://www.biocomercioandino.pe/](http://www.biocomercioandino.pe/)

**Regional Platform**

http://www.biocomercioandino.org/

**Noticias**

- **15 May 2015**
  - El Ministerio de Ambiente del Perú unida a la celebración de la celebración del día 2015 Diversidad Biológica

- **13 Apr 2015**
  - Memoria Final del Proyecto Biotrade Andino - Colombia

- **13 Feb 2015**
  - Memoria Final del Proyecto Biotrade Andino - Peru
### Section 3. Lessons Learned
The Andean Biotrade Project assumed an important challenge given the parallel nature of its multisectoral and multi-country activities. It was a pioneering initiative in the region that faced and overcame challenges during implementation, yielding important results and key lessons learned for future activities committed to the sustainable use of biodiversity in the region.

In addition to lessons on project topics that are presented earlier, general lessons learned, recommendations, and good practices are detailed here according to preparatory and implementation phases, so that future projects can benefit from their effectiveness.
A. PREPARATORY PHASE

The preparatory phase involved the definition of different aspects for project implementation, each of which brought lessons learned and recommendations:

Structure

b) A shortened implementation period, considering the objectives. Future interventions should include an updated baseline for the context of implementation in order to maximize the efficiency of the intended impacts within the time available. For regional projects, it’s crucial to define cross-cutting regional activities that the NEUs can contribute to through national efforts, increasing their joint impact and opportunities to exchange knowledge/experiences. Similarly, the time required for the evaluation, approval and execution of agreements necessary for start-up and the initiation of activities must be considered, as it can limit the amount of time for effective implementation.

Methodology

The project had different implementation partners (public, private and public-private) in three different countries. Meanwhile, each NEU had different constraints for the implementation of the six components and the fulfillment of the objectives due to the nature of the institutions and resources available, something which should have been previously considered. To address this, it is essential:

- From project inception phase, consider required resources to reach the objectives, taking into account the execution times of activities, physical and human resources available, nature of implementing partners and possible contingencies.
- From the start of the project, consider having a full-time coordinator and an operational technical team, with previous experience in the topics to cover.
- Identify and mobilize strategic partners who can contribute and manage the implementation of some activities according to the specific areas of expertise of each institution.

Despite the above, the objectives were met and the KPIs exceeded, mainly thanks to the engagement of key actors in each of the thematic areas, and the establishment of an effective knowledge network for the promotion of biotrade across the countries, leveraging the capabilities and experience of each of the organizations enrolled in the project.

Likewise, the needs assessment and mapping of previous efforts to define the type of intervention and support that the project would provide, was effective to help structure the intervention logic. Further, this was conducted through engaging directly with the recipient companies and partner organizations, achieving greater ownership and participation in the implementation process.
A monitoring and evaluation framework is key to measuring the effectiveness of the intervention. It is important to consider:

- The system should be implemented from the start of the project. In the Andean Biotrade Project, the M&E system allowed the project to follow a plan of activities leading to the desired results and their respective indicators. Regular reporting tracked the progress of the implementation of activities and financial performance, allowing for identification of gaps in implementation and adjustments as needed.

- Must strengthen project management, defining a hand-over strategy to users, adding value to the beneficiaries.

- Must include user-friendly tools for the registration of disbursements.

- There is a need for operational and process manuals, which should be developed through the regional project coordinator, so that it can make decisions and provide guidance for implementation by the NEUs.

- Consideration should be given to having a solid baseline geared towards measuring impact, not just the performance of activities and outputs.

- Ideally, monitoring and evaluation instruments should be harmonized between partnering organizations, creating common platforms that avoid the duplication of efforts in gathering.

- Have a technical team dedicated to monitoring and evaluation of initiatives, generating capacity in the regions, for gathering information and assessing progress.

- Periodic meetings for strategic technical planning are important given the adaptive management that characterizes adaptive management approach that characterizes biotrade.

Suggestions for financial management

The following should be considered for planning and financial management:

- It must be flexible to the final allocation of activities, which may vary over the course of the execution.

- Budget allocations should respond to the expected scope considering all the technical and human resources aspects required for executions.

Establishing governance platforms

Governance platforms are important because they present opportunities for discussion and decision making regarding planned activities. The platforms are part of a broader process of capacity building in dialogue, collaboration, and partnering between actors. It is essential to:

- Empower local communities in governance processes to validate the proposal with stakeholders.

- Coordinate stakeholders. Early efforts in the preparatory phase of projects should consider finding and building alliances with partners to provide technical and financial support during project implementation. Within the coordination, regular sharing of progress status is important to promote the active participation of partners.
B. IMPLEMENTATION PHASE

The implementation phase involves the development of several important aspects concerning the coordination of available resources to implement the management plan envisioned during planning. It covers topics such as:

**Administrative management**

This is significant because it determines the effectiveness and efficiency in the management of resources, impacting the successful implementation of work and meeting deadlines and commitments. For this, it is important:

- Have an appropriate personnel structure with consistency throughout implementation.
- It’s important that the NUI know and put into practice the processes and procedures defined in administrative manuals, through operational implementation manuals.
- Consider the nature of the funding agency and its inner workings to ensure that procedures and formalities are consistent with implementation timelines. The NEU of Peru (PROMPERU) had slower periods of performance than other NEUs due to procedurally heavy national procurement policies. Nonetheless, PROMPERU achieved all the objectives and goals successfully due in large part to the flexibility and support of the organization overseeing the project’s processes and requirements.

**Technical management of pilot programs**

As biotrade is the marketing of products and services of native biodiversity, it is critical to include of private initiatives in coordination efforts. In the project’s case, the pilot programs allowed for the measurement and analysis of impacts generated through the work on market access, financing and information, making it an appropriate mechanism to determine the contributions of the activities. In working with 216 businesses in 3 countries, the following recommendations should be considered for pilot programs in biotrade:

- Manage the selection and integration of new pilot projects as a part of the scalability strategy of the project, applying tools and accumulated knowledge among the selected initiatives.
- Have monitoring and support processes during implementation, given that the achievement of objectives and overcoming of difficulties depends on them.
- Apply a strategic vision, whether through formation of clusters, knowledge or technical networks, to select pilot initiatives that integrate into the project, keeping in mind that the greater the dispersion of initiatives, the more financial, administrative and technical resources are required.
- Define criteria for the selection of pilot programs that are in line with activities, such as regions, value chains, links, commercial importance, etc.
- Consider the cost of field visits and monitoring of the initiatives.
- Encourage the development of experience exchange opportunities between initiatives during implementation in areas of interest for the value chains.
- Identify mechanisms to qualitatively capture impact, capturing not only the expected impacts of the project but also the changes.
- produced in intervention areas related to the incorporation of new knowledge, impact on associative processes, social cohesion, improvements in the quality of life, etc., that are not included in the quantitative data from the project.
- In the analysis of biotrade, the P&C tool is efficient in measuring impacts. However, it must be adjusted to be versatile in measuring initiatives that work with different sources of raw material (collection, animal breeding, farming), services and link levels within the value chain.
- Quantitative performance indicators should be considered for activities, components, impact and others to identify changes in the distribution of income along the value chain, looking for evidence of a more fair and equitable distribution.
- Integrating other indicators that demonstrate other qualitative changes facilitated by the project in complementary areas that can convey the influence of the project in the context of systemic change. Highlighted aspects may include aspects related to gender, health, education, social capital, human capital, access to financial services, etc.

### Knowledge management

Considering the different stages of the project and activities, the project generated tools, studies, publications, videos, knowledge networks and other critical information to raise awareness among stakeholders of key issues facing biotrade as well as for the scalability and replicability of the project in the beneficiary countries.

This knowledge is the basis for developing new capacity in biotrade actors in the region, which should lead to the transformation of the productive base. Regarding knowledge management, it is pertinent to consider:

- Have mechanisms of communication in place that facilitate the continual dissemination of tools, good practices and results achieved during project implementation from the beginning.
- Establish effective systems of knowledge transfer in line with the interests of the different target audiences (academic, business, credit, government, donors). Strengthen participative processes for the development and strengthening of capacities beyond formal training that contribute to the internalization of concepts and practices.

### Encourage the active participation of the users of information generated. The more that businesses are involved in the development of knowledge products, the greater the impact and the utility of the resulting instruments and products.

- Enhance visibility of the joint work between the participating countries to amplify the impacts and results at a regional level.
- Make an effort to develop bilingual communication materials, encouraging the exchange of knowledge outside the region, permitting new partnerships and learning opportunities.
- Define a communications strategy in line with the project objectives and implemented from the beginning of the project.
- Allocate a specific budget in line with expected outcomes.
- Consider using different communication mechanisms that permit work with different audiences (academic, business, credit, governmental, donor) to implement synergic strategies for sustainable development.

- Integrating other indicators that demonstrate other qualitative changes facilitated by the project in complementary areas that can convey the influence of the project in the context of systemic change. Highlighted aspects may include aspects related to gender, health, education, social capital, human capital, access to financial services, etc.
The Andean Biotrade Project achieved successful leveraging, exceeding 46% in cofinancing contributions from the NEUs, partner organizations and beneficiary pilot programs. This was achieved by taking into account the contributions of different sources. The following must be considered:

- The model of cofinancing with pilot programs generates increased commitment and interest of the companies in fulfilling their commitments and implementing strengthening activities, thus being a successful model.

Because some leveraged resources have restrictions on use by financing source, it is prudent to consider leveraging with several organizations that can participate in and fund the development of the different activities proposed.

Capacity building was key to the project, as one of the main principles of intervention, developing individual and collective skills to overcome obstacles presented at the macro, meso and micro levels, as well as among the NEUs themselves.

The knowledge generated, the training and advice offered by the project through the NEUS were essential for the capacity building of beneficiaries and had transformative effect.

It is worth mentioning the following:

- The creation of partnerships between NEU and organizations with specific expertise in key areas of biotrade, to ensure quality in the training and technical support services offered.

- Encouraging dialogue platforms and multisectoral collaboration by sector as a key element to strengthen social capital, identifying obstacles in the sector and a shared search for solutions.

- Review and discussion of results of studies in market intelligence and sector analyses among the stakeholders, for internalization of the knowledge for planning and decision making.

- Adoption of a skills development perspective that goes beyond trainings and workshops, offering support based on a commitment to internalize good practices for biotrade.
V. Conclusions

Considering the results and lessons derived from the implementation of the Andean Biotrade Project over 4 years, from a systemic point of view, the following was concluded:

- Biotrade is a valid model for sustainable development in Latin America. The implementation of the project validates the efficiency of biotrade as a coherent model for adapting to climate change, the current global priority, and effective for sustainable development, given the impacts achieved in biodiversity conservation and the 282,569 hectares managed under sustainability criteria.

- Similarly, projecting the potential of biotrade to generate social benefits through the inclusion and connection of community initiatives with more competitive enterprises promotes better administrative and operational management practices and generating new dynamics in local development.

- The 216 pilot initiatives that has a 65% average increase in sales, lined 29,500 people directly to their supply chains, improving their quality of life through the development of new knowledge and skills, promoting partnerships, increased income, etc. This demonstrates the effect of biotrade on the distribution of wealth as well as its direct contribution to the transformation of the productive.

- The project made a significant contribution to the promotion of biotrade in the Andean region, serving as an important reference for Latin America in the impacts and changes generated in public policy, access to markets and financing, and strengthening of value chains. New skills were developed within public and private partners in Colombia, Ecuador, and Peru, that through a multiplier effect will give continuity to the processes initiated, continuing the promotion of biotrade in the region.
The project concluded as an initiative for US$ 20.8 million dollars, having exceeded the initial target for cofinancing by 46%. This achievement is supported, in addition to the skills of the implementers, in the recognition that biotrade won in the agenda of the countries that participated in the project as well as its partners in international development, verifying unique and effective qualities in biotrade for the conservation and sustainable use of biodiversity. With this perspective, organizations from the international community were mobilized and integrated, from government, civil society and other cofinancing partners.

Strategic partnerships were key to achieving the objectives efficiently and effectively. Partners made it possible to expand the coverage of the project, allowing support to 216 initiatives. Partnerships were established with private and public actors, local governments, academic institutions and other agencies for the technical cooperation and co-financing activities of biotrade. Through relationships with partners, the project contributed to the diffusion and internalization of the biotrade concept, achieving inclusion in political agendas, training institutions, the formation of networks of consultants, and management of businesses and communities in the region.

Pilot programs were strengthened in countries who implemented biotrade as a management model that offers competitive advantages through the adoption of sustainable practices that resulted in better sales performance (+65%) and dynamics of sustainable resource use and local development in Colombia, Ecuador and Peru.

The project contributed to increased awareness and knowledge of sustainability tools, administrative and commercial aspects among others, generating new skills within the business initiatives (see www.biocomboandino.org). However, national and local organizations are still required to provide basic support services for companies interested in implementing new practices such as certifications of quality and sustainability, among others. More research, information, and support for the development of higher value-added supply and access to new markets is also required.

Innovation is the key to generating value and increased competitiveness in biotrade products in the region. In the meantime, differential elements must be strengthened, seeking market opportunities through applied research, as carried out successfully in the development of Sacha Inchi capsules in Colombia, strengthening the cosmetic line of the Fundación Chankuap in Ecuador, or the development of new chestnut-based products by the Shiwi company in Peru, all examples of applied research. It is therefore necessary to devote efforts to research and innovation through public-private partnerships that encourage the registration of trademarks and patents, the addition of value, and consequently the increase and distribution of income received.

There was demonstrated interest and responsiveness of financial institutions to the challenge of developing solutions for financing biotrade. Nine institutions granted loans to 33 companies, enabling significant investments impacting the competitiveness of the businesses.

Given the recognition of the Biotrade initiative at the 12th meeting of the Parties to the Convention on Biological Diversity as an important partner in achieving objectives of global conservation and the Aichi targets, the challenge of implementing biotrade in a practical manner within the biotrade business models in Latin America remains valid. With the sustainable management and conservation of more than 282 thousand hectares, a contribution was made in favor of the conservation of biological resources in the countries, which contribute to the achievement of biodiversity goals in the countries.

Following the ratification of the Nagoya Protocol in 51 member countries of the CBD, biotrade became relevant as a model to implement aspects related to the fair and equitable sharing of benefits derived from the innovation, use and access to biological and genetic resources. The challenge in implementing the Nagoya Protocol in countries is still relevant, faced with the uncertainty that the issue represents for Peruvian companies. It is therefore a priority issue to cover.

Starting with social and economic transformation that biotrade proposed based on integrative variables of environmental and social sustainability, participants in the Andean Biotrade Project in Colombia, Ecuador and Peru, and cooperating entities GEF, UNEP and CAF, secured their role as partners in the promotion and delivery of concrete answers to the viability of sustainable development in Latin America. The legacy, an important knowledge capital, is embodied in community networks, businesses, and educational, multilateral and governmental professionals and institutions that experienced the transformative role of biotrade as a business model that promotes conservation and sustainable use of biodiversity.
The experiences and results in this report, are the result of the enterprising nature of the Andean men and women. Furthermore, they show the significant results achieved by the Andean Biotrade project over four years. These products, are in content and form paths of experiences, that we want to share with all stakeholders that seeks to practice sustainability.

During the implementation process, important approaches, principles and tools, whose effectiveness has been monitored in practice were designed. This has allowed for the formation of all the technical expertise that is available today in the form of valuable human capital and knowledge among project partners and allies, available and accessible through the regional platform: www.biocomercioandino.org

Project performance shown by impact indicators confirm the viability of the business model proposed by the biotrade. We have verified in practice, that the combination of conservation & development in biotrade is a strong and appropriate response for the Latin American social context, where biodiversity conservation and growth are coupled with social inclusion and the sustainability of income and economic savings.

Biotrade is therefore a model that is based on comparative advantage, in this particular case, the mega-biodiversity that is Latin America. By promoting investment in innovation, productivity growth and adequate regulation, it will be possible to develop new competitive advantages.

The global market for for products associated with biodiversity, which is roughly $ 290 billion, with an annual growth of 19% a year, is an important stimulus that gives economic sustainability to the efforts of the technical collaboration that CAF, GEF and UNEP offer with the Biotrade Andean Project.

It is from this movement that the grounds and forest, supported by a broader process of social transformation and integration variables, such as, knowledge, competitiveness, production, conservation, natural and social capital, savings, cause and effects of climate change and the need for an inclusive society that CAF acts as an ally to the public, private and civil society sectors in the promotion and operation of concrete answers committed to the sustainable development and regional integration, through biotrade.

René Gómez-García Palao
Green Business Unit Coordinator
VI. Annex

List of pilots by country and contacts - 148

Organizations and partners - 182

Technical Team - 190

Andean Biotrade Project and Aichi targets - 194
List of pilots by country and contacts

**COLOMBIA**

**Departamento Amazonas**

*ASOCIACIÓN DE MUJERES COMUNITARIAS DE TARAPACÁ - ASMUCOTAR*

- **Native Species Used:**
  - Camu camu
- **Main Products:**
  - Camu camu

**TANIMBOCA S.A.S.**

- **Native Species Used:**
  - Abarco (árbol maderable)
  - Cariniana pyriformis
- **Main Products:**
  - Guided tours
  - Jungle expeditions
  - River expeditions
- **Web / Mail contact:**
  - www.tanimboca.org

**Departamento Antioquia**

*AREWARO ECOLOGICAL AND CULTURAL TOURS IN COLOMBIA*

- **Main Products:**
  - Ecotourism
  - Guided tours
  - Environmental interpretation
- **Web / Mail contact:**
  - www.Ecotourismarewaro.com/web/

**ALSEC ALIMENTOS SECCOS S.A.**

- **Native Species Used:**
  - Abarco
  - Cariniana pyriformis
  - Abarco (árbol maderable)
  - Bixa orellana
  - Sacha Inchi
  - Plukenetia volubilis
  - acaí
  - Eugenia stipitata
  - bongó
  - Bongó patiní
  - chontaduro
  - Bactris gasipaes
  - miel coco
  - Cocoa cravo
  - Ararinda
  - Euterpe oleracea
  - Cencipucuro bataua
- **Main Products:**
  - Dried and freeze-dried acai
  - sachá
- **Web / Mail contact:**
  - alsec.com.co

**COLOMBIANA DE BIOCOMBUSTIBLES S.A.**

- **Native Species Used:**
  - Abarco
  - Ararinda
  - Euterpe oleracea
  - Bixa orellana
  - Sacha Inchi
  - Plukenetia volubilis
  - chía
  - Salvia haponica
  - mantismona
  - Petroselinum hybride
  - jatípoha
  - Jangoba curuba
  - Abarco
  - Cariniana pyriformis
  - Bactris gasipaes
  - Miel coco
  - Sacha Inchi
  - Bixá orellana

- **Main Products:**
  - Capsules of sachá
- **Web / Mail contact:**
  - www.colbio.com

**ECOFLORA AGRO**

- **Native Species Used:**
  - Planta ornamental
  - Swinglea glutinosa
- **Main products:**
  - Ecoswing
- **Web / Mail contact:**
  - www.ecofloragro.com/es

**ECOFLORA CARES**

- **Native Species Used:**
  - Jagua o huito
  - Genipa americana
  - acai
  - Eugenia stipitata
  - Murraya o Asai
  - Euterpe oleracea
- **Main Products:**
  - Açaí
  - Heart of Palm
- **Web / Mail contact:**
  - nepame.1@hotmail.com

**ORGANIC EVOLUTION S.A.S.**

- **Native Species Used:**
  - Achiote
  - Bixa orellana
- **Main products:**
  - Achiote coloring
- **Web / Mail contact:**
  - www.colororganics.co
**Andean Biotrade**

Innovative answers and sustainable solutions for local development in Latin America.

**Pilot programs**

**Summary Introduction Executive**

**Biotrade in the Andean Region**

**The Project Results Impacts and systemic change**

**Achievements in capacity development Tools developed Knowledge-based products and networks Lessons Learned and recommendations Conclusions Annexes**

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**Andean Amazonas**

**COOPERATIVA MULTACTIVA DE PRODUCCIÓN Y COMERCIALIZACIÓN AGROPECUARIA DE ARAUQUITA-COOPROCAR**

- **Native Species Used:**
  - Cacao *Theobroma cacao*

- **Main products:**
  - Cacao

- **Web / Mail contact:**
  - pbnaidi.com

**PEPITA FOOD PRODUCTS S.A.S**

- **Native Species Used:**
  - Asaí *Euterpe oleracea*

- **Main products:**
  - Fresh fruit

- **Web / Mail contact:**
  - www.pbnaidi.com

**TeCNACOL S.A**

- **Native Species Used:**
  - Asaí *Euterpe oleracea*

- **Main products:**
  - Cocoa

- **Web / Mail contact:**
  - www.tecnacol.com

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**Andean Atlántico**

**COOPERATIVA DEL GRUPO PARTICIPATIVO LOCAL DE REPELÓN PBÁ - COOPGRUPAR**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - pbarepelon@yahoo.es

---

**Andean Bolívar**

**ASOCIACIÓN DE PRODUCTORES DE CACAO DE LOS MONTES DE MARÍA - ASPOCAMM**

- **Native Species Used:**
  - Cocoa *Theobroma cacao*

- **Main products:**
  - Cocoa

- **Web / Mail contact:**
  - neymar-asprocamm-neymar.blogspot.com

---

**Andean Boyacá**

**AGRODIVERSIDAD DE TUBÉRCULOS ANIDOS**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

---

**Andean Cundinamarca**

**ASOCIACIÓN DE FRUTICULTORES DE LA PROVINCIA DE LENGUA - ASOFRULEN**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

---

**Andean Tolima**

**ASOCIACIÓN DE INNOVADORES EN PRODUCTOS ANCESTRALES DE BOYACÁ - ASIPABOY**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - luishelypacasira@hotmail.com

---

**Andean Santander**

**ASOCIACIÓN DE PRODUCTORES DE ARAÑAS - ASERPA**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - nigroetaluwh@hotmail.com

---

**Andean Tolima**

**ASOCIACIÓN DE FRUTICULTORES DE LA PROVINCIA DE LENGUA - ASOFRULEN**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

---

**Andean Vichada**

**ASOCIACIÓN DE FRUTICULTORES DEL RIO CHOCÓ - ASOFLOC**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

---

**Andean Atlántico**

**COOPERATIVA DEL GRUPO PARTICIPATIVO LOCAL DE REPELÓN PBÁ - COOPGRUPAR**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - pbarepelon@yahoo.es

---

**Andean Boyacá**

**AGRODIVERSIDAD DE TUBÉRCULOS ANIDOS**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

---

**Andean Santander**

**ASOCIACIÓN DE INNOVADORES EN PRODUCTOS ANCESTRALES DE BOYACÁ - ASIPABOY**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - luishelypacasira@hotmail.com

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**Andean Tolima**

**ASOCIACIÓN DE FRUTICULTORES DE LA PROVINCIA DE LENGUA - ASOFRULEN**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com

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**Andean Vichada**

**ASOCIACIÓN DE FRUTICULTORES DEL RIO CHOCÓ - ASOFLOC**

- **Native Species Used:**
  - NA

- **Main products:**
  - NA

- **Web / Mail contact:**
  - leonororjuela@gmail.com
ASOCIACIÓN DE PROSUMIDORES AGROECOLÓGICOS SECCIONAL SORACA - AGROSOLIDARIA

- Native Species Used: • Quinoa Chenopodium quinoa
- Main products: • Quinoa seed • Toasted seed • Raw flour • Toasted flour
- Web / Mail contact: • agrosolidaria@yahoo.es

MANAKIN NATURE TOURS

- Main products: • Ecotourism
- Web / Mail contact: • www.manakinnaturetours.com

NATURAR IGUAQUE

- Native Species Used: • Frayleón Espeletia spp.
- Main products: • Community ecotourism
- Web / Mail contact: • www.parquesnacionales.gov.co/PHN/portal/libreria/php/decide.php?patron=01.022907

Departament Caldas

FUNDACIÓN ECOLÓGICA GABRIEL ARANGO RESTREPO

- Main products: • Birdwatching • Specialty tours
- Web / Mail contact: • www.fundegar.com

FRUTAS DÖÑA CHUS

- Native Species Used: • Guayaba dulce Psidium guajava spp. • Guayaba agria Psidium guajava spp. • Mayacuya Passiflora edulis • Guanabana Annona muricata • Cacao Theobroma cacao
- Main products: • Fruit pulp • Dried fruits • Jams
- Web / Mail contact: • donachus@hotmail.com

CREARCOP - GUACAMAYAS

- Native Species Used: • Paja Blanca Calamagrostis effusa
- Main products: • Guacamaya handicrafts
- Web / Mail contact: • crearcorpltda@yahoo.com

Department Caquetá

ASOCIACIÓN DEPROSUMIDORES DE CAACAY ESPECIES MADERABLES DEL CAQUETÁ - ACAMAFRUT

- Native Species Used: • Cacao Theobroma cacao • Copoazu Theobroma grandiflorum • Uva caimarona Pourouma cecropiifolia • Guayaba dulce Psidium guajava spp. • Guayaba agria Psidium guajava spp. • Mayacuya Passiflora edulis
- Main products: • Chocolate de arazá • Smoked pepper • Araza coffee • Chocolate from copoaçú • Candy from araza • Sauces
- Web / Mail contact: • www.acamafrut.amawebs.com

CHAGRA MAGUARÉE

- Native Species Used: • cacao marcano Theobroma cacao • cacao copoazu Theobroma grandiflorum • cocora Solanum sessiflorum • ají amáncico Capsicum spp. • uva caimarona Pourouma cecropiifolia • yoco Paulinia yoco
- Main products: • Chocolate from copoaçú • Candy from araza • Sauces
- Web / Mail contact: • johana.cordoba07@yahoo.com.ar

ASOCIACIÓN DE PRESTADORES DE SERVICIOS ECO Y ETNOTURÍSTICOS TÍO TIGRE

- Especies nativas trabajadas: • Caguama Turtle Caretta caretta • Humpback whales Megaptera novaeangliae
- Principales Productos: • Ecotravel • Accommodation • Guided tours • Wildlife watching (Humpback whales)
- Contacto: • www.tiotigre-ecoturismo.com

ESTACIÓN BIOLÓGICA AMBIENTAL MICHITÁ

- Main products: • Guided tours
- Web / Mail contact: • evalezma06@gmail.com • georgek1co@yahoo.es

Departament Chocó

ASOCIACIÓN GRUPO DE RESCATE PLANTAS MEDICINALES

- Native Species Used: • Chocho Spondias sapota • Coroibunes
- Main products: • Soaps • Ointments • Medicinal syrups
- Web / Mail contact: • johana.cordoba07@yahoo.com.ar

ASOCIACIÓN DE PROSUMIDORES AGROECOLÓGICOS SECCIONAL SORACA - AGROSOLIDARIA

- Native Species Used: • Quinoa Chenopodium quinoa
- Main products: • Quinoa seed • Toasted seed • Raw flour • Toasted flour
- Web / Mail contact: • agrosolidaria@yahoo.es

CReARCOp - GuACAmAYAS

- Native Species Used: • Paja Blanca Calamagrostis effusa
- Main products: • Guacamaya handicrafts
- Web / Mail contact: • crearcorpltda@yahoo.com

Department Caquetá

ASOCIACIÓN DEPROSUMIDORES DE CAACAY ESPECIES MADERABLES DEL CAQUETÁ - ACAMAFRUT

- Native Species Used: • Cacao Theobroma cacao • Copoazu Theobroma grandiflorum • Uva caimarona Pourouma cecropiifolia • Guayaba dulce Psidium guajava spp. • Guayaba agria Psidium guajava spp. • Mayacuya Passiflora edulis
- Main products: • Chocolate de arazá • Smoked pepper • Araza coffee • Chocolate from copoaçú • Candy from araza • Sauces
- Web / Mail contact: • www.acamafrut.amawebs.com

CHAGRA MAGUARÉE

- Native Species Used: • cacao marcano Theobroma cacao • cacao copoazu Theobroma grandiflorum • cocora Solanum sessiflorum • ají amáncico Capsicum spp. • uva caimarona Pourouma cecropiifolia • yoco Paulinia yoco
- Main products: • Chocolate from copoaçú • Candy from araza • Sauces
- Web / Mail contact: • johana.cordoba07@yahoo.com.ar

ASOCIACIÓN DE PRESTADORES DE SERVICIOS ECO Y ETNOTURÍSTICOS TÍO TIGRE

- Especies nativas trabajadas: • Caguama Turtle Caretta caretta • Humpback whales Megaptera novaeangliae
- Principales Productos: • Ecotravel • Accommodation • Guided tours • Wildlife watching (Humpback whales)
- Contacto: • www.tiotigre-ecoturismo.com

ESTACIÓN BIOLÓGICA AMBIENTAL MICHITÁ

- Main products: • Guided tours
- Web / Mail contact: • evalezma06@gmail.com • georgek1co@yahoo.es
### ESTACIÓN SEPTIEMBRE

**Native Species Used:**
- Caguama Turtle
- Caretta caretta
- Humpback whales
- Megaptera novaeangliae

**Main products:**
- Ecotourism

**Web / Mail contact:**
- www.natura.org.co/general/estacion-septiembre.html

### MANO CAMBIADA

**Native Species Used:**
- Caguama Turtle
- Caretta caretta
- Humpback whales
- Megaptera novaeangliae

**Main products:**
- Ecotourism

### Departamento Córdoba

**ASOCIACIÓN DE COOPERATIVAS I ORGANIZACIONES DE TIERRALTA Y VALENCIA - ACTIVA G10**

**Native Species Used:**
- Cocoa
- Theobroma cacao

**Main products:**
- Cocoa

**Web / Mail contact:**
- coagropuertoescondido@gmail.com

### Departamento Cundinamarca

**ASOCIACIÓN CAMPESINA NO NACIONAL DE TRABAJADORES DE LA VEREDA ALIZAL - ASOAGROALIZAL**

**Native Species Used:**
- Papa criolla
- Solanum phureja

**Main products:**
- Fresh potato
- Potato seed

**Web / Mail contact:**
- asoagroalizal@gmail.com

### ASOCIACIÓN DE AGRICULTORES DE GRANADA - ASOAGRA

**Native Species Used:**
- Papa criolla
- Solanum phureja

**Main products:**
- Fresh potato
- Potato seed

**Web / Mail contact:**
- jasquiamysiva.30@gmail.com

### BIOPLAZA S.A.S.

**Native Species Used:**
- Coca
- Erythroxylum coca
- Quinoa
- Chenopodium quinoa
- Amaranto
- Amaranthus spp.
- Ortiga
- Urtica spp.

**Main products:**
- Coca tea
- Arepas de quinoa
- Instant quinoa shake
- Shampoo
- Fruver

**Web / Mail contact:**
- bioplaza.org

### C.I. THE BODY FUEL COMPANY S.A.

**Native Species Used:**
- Acerola
- Malpighia emarginata
- Camu camu
- Myrciaria dubia
- Asaí
- Euterpe oleracea

**Main products:**
- Drink with antioxidants

**Web / Mail contact:**
- www.thebodyfuelco.com

### Fundación Para El Desarrollo Alternativo y Sostenible E Integral Del Alto Sinú - IntegraSinú

**Native Species Used:**
- Dried cacao
- Theobroma cacao

**Main products:**
- Dried cacao

**Web / Mail contact:**
- ongintegrasinu@gmail.com

### Departamento Cundinamarca

**ASOCIACIÓN PLATANERA DE LA COMUNIDAD EL CONSEJO - APCC**

**Native Species Used:**
- N.A

**Main products:**
- N.A

**Contact:**
- hemaorac@hotmail.com

### CORPOCAMPO

**Native Species Used:**
- Palma Naidí o Asaí
- Euterpe oleracea

**Main products:**
- Asaí
- Sacha Inchi
- Hearts of Palm

**Web / Mail contact:**
- www.corpocampo.com

### CORPORACIÓN ECONEXIS / INSITU

**Native Species Used:**
- Cacao
- Theobroma cacao
- Café
- Coffea arabica
- Camarón
- Penaeus occidentalis

**Main products:**
- Cacao

**Web / Mail contact:**
- apomd_org@yahoo.es

### FARMaverde

**Native Species Used:**
- Maíz
- Zea mays
- Fitofarmacia

**Main products:**
- Corn
- Fitofarmacia

**Web / Mail contact:**
- farmaverde@gmail.com
**FUNDACIÓN LABORATORIO DE FARMACOLOGÍA VEGETAL - LABFARVE**

**Native Species Used:**
- Chía
- Ciprés robusto
- Algarroba
- Impatiens velechina
- Tocón
- Cenizo yute
- Ortega
- Soda app
- Vira-vira
- Achochote yogote

**Main products:**
- Tofu y sapo
- Pasífora drops
- Vira

**Web / Mail contact:**
- www.labfarve.com

**NEYBER**

**Native Species Used:**
- Cariño
- Lippia alba
- Seje
- Geissanga butaua
- Copoazu
- Thymus grandiflorum

**Main products:**
- Type all-essential oils
- Seje oil
- Copoazu Butter

**Web / Mail contact:**
- www.neyber.com

**RESERVA BIOLÓGICA ENCENILLO**

**Native Species Used:**
- Weinmania tomentosa

**Main products:**
- Ecotourism
- Environmental interpretation
- Hiking
- Birdwatching
- Camping

**Web / Mail contact:**
- www.natura.org.co/general/reserva-biologica-del-encenillo.html

**TIENDA DE PARQUES**

**Native Species Used:**
- Paja toquilla, iraca
- Carludovica palmata
- Werregue
- Astrocuryum standleyanum
- Pelo sangre
- Corimba gummifera
- Paja de paramo o paja blanca
- Calamagrostis effusa

**Main products:**
- Handicrafts

**Web / Mail contact:**

**VHERA LUCCI**

**Native Species Used:**
- Sacha inchi
- Plukenetia volubilis

**Main products:**
- Cosmetic ingredients

**Web / Mail contact:**
- www.vheralucci.com

**WALIWA**

**Native Species Used:**
- Cereza
- Juglaria regia

**Main products:**
- Products and natural ingredients of the cosmetic type based in natural species

**Web / Mail contact:**
- www.waliwa.com

**Departament Huila**

**ASOCIACIÓN DE OPERADORES TURÍSTICOS DE LA TATACOA**

**Native Species Used:**
- Oso de anteojo
- Tremarctos ornatus

**Main products:**
- Community ecotourism
- Environmental awareness
- Monitoring of wildlife

**Web / Mail contact:**
- gladis382011@hotmail.com

**COOPERATIVA DEL GRUPO PARTICIPATIVO LOCAL DE DIBULLA P.B.A. - COOPGRUPADI**

**Native Species Used:**
- Cacao
- Theobroma cacao

**Main products:**
- NA

**Web / Mail contact:**
- coogrupadi@yahoo.com

**AXIOLOGÍA GUAIARE**

**Native Species Used:**
- Industria cosmética / Farmacéutica

**Main products:**
- Liquid soap with rose extract
- Antibacterial gel from coffee
- Cacao facial mask

**Web / Mail contact:**
- axio-logia@gmail.com
Innovative answers and sustainable solutions for local development in Latin America.

## Pilot Programs

### Summary

- **Executive Summary**
- **Introduction**
- **Bioproduction in the Andean Region**
- **The Project**
- **Results**
- **Impacts and systemic change**
- **Pilot programs**
- **Achievements in capacity development**
- **Tools developed**
- **Knowledge-based products and networks**
- **Lessons learned and recommendations**
- **Conclusions**
- **Annexes**

### Andean Biotrade

**Andean Biotrade**

**Native Species Used:**
- Cacao
- Theobroma cacao

**Main products:**
- Cacao

**Web/Email contact:**
- jrestrepo@parquesnacionales.gov.co

### Departament Magdalena

**ASOCIACIÓN DE AUTORIDADES ARHUACAS DE LA SIERRA - ASOCCIT**

**Native Species Used:**
- Cacao

**Main products:**
- Cacao

**Web/Email contact:**
- jrestrepo@parquesnacionales.gov.co

### Departament Pasto

**QUILLASINGAS**

**Native Species Used:**
- Cacao

**Main products:**
- Cacao

**Web/Email contact:**
- jrestrepo@parquesnacionales.gov.co

### Departament Putumayo

**ACEITE DE MIL PESOS MEDICINA DE LA SELVA**

**Native Species Used:**
- Cacao

**Main products:**
- Cacao

**Web/Email contact:**
- felipearteaga@hotmail.com

### Departament Nariño

**AGROINCOLSA S.A.S**

**Native Species Used:**
- Sacha inchi

**Main products:**
- Oil

**Web/Email contact:**
- agroincolsa.sas@gmail.com

### Departament San Andres y Providencia

**ADESTYLE**

**Native Species Used:**
- Otros

**Main products:**
- Almohada semilla de ceiba

**Web/Email contact:**
- adestyle@hotmail.com

### Departament Risaralda

**FUNDACIÓN AMBIENTAL GRUPOS ECOLÓGICOS DE RISARALDA (FUNDAGER)**

**Native Species Used:**
- Cacao

**Main products:**
- Guayusa, alimentación y alojamiento

**Web/Email contact:**
- grupogiro@gmail.com

### Departament Putumayo

**GUÍAS ALIADOS PARA LA INTERPRETACIÓN AMBIENTAL - GAIA**

**Native Species Used:**
- Sacha inchi

**Main products:**
- Experiential education

**Web/Email contact:**
- lorejama1990@hotmail.com
**BLU LIFE**

Native Species Used:
- Turismo sostenible
- Corales, tortugas, peces coralínicos, barracudas, delfines

Main products:
- Snorkeling diving

Web / Mail contact:
- bluesnorkeling@gmail.com

**HILL FARM**

Main products:
- Breadfruit

Web / Mail contact:
- N.A

**ISLANDERS ART AND CRAFT**

Main products:
- Handicrafts

Web / Mail contact:
- asiss2007@hotmail.com

**ISLANDER ORGANIC STEW FRUIT**

Main products:
- Sweets
  - Preserved in syrup
- Homemade chili

Web / Mail contact:
- N.D

**CENTRO DE BUCEO SIRIUS**

Native Species Used:
- Turismo sostenible
  - Barrera coralina, tiburones de arrecife, tiburón nadita, cheima, tortuga, langosta, caracol pala

Main products:
- Snorkeling diving

Web / Mail contact:
- siriusdivehop@hotmail.com

**COOPERATIVA FISHING AND FAMILING**

Native Species Used:
- Industria Alimenticia
  - Pargo rojo, úrula, bonito, tiburón, langosta, caracol, serrata

Main products:
- Fresh

Web / Mail contact:
- homeisdeaz@yahoo.com

**FELIPE DIVING**

Native Species Used:
- Turismo sostenible
  - Tiburones, pargo, tortuga, corales, delfines

Main products:
- Snorkeling diving

Web / Mail contact:
- elpeirates@yahoo.com

**RESTAURANT CARIBBEAN PLACE**

Native Species Used:
- Industria Alimenticia
  - Cangrejo negro, pargo, aceite de coco, miel de ajo

Main products:
- Restaurant

Web / Mail contact:
- chefmar@hotmail.com

**SAN ANDRES DIVING AND FISHING**

Native Species Used:
- Turismo sostenible
  - Marlin, dorado, atún

Main products:
- Sport fishing

Web / Mail contact:
- sanandresfishing@gmail.com

**WEST VIEW**

Main products:
- Holiday center, offering hiking, animal watching and breeding, bathing in the sea, dances and food

Web / Mail contact:
- N.D

**ASOCIACIÓN DE PRODUCTORES DE NÁPOLES VENECIA**

Native Species Used:
- Ñame
  - Dioscorea spp.
- Yuca
  - Manihot esculenta

Main products:
- Ñame
  - Yucca

Web / Mail contact:
- arturo2010@yahoo.com

**ASOCIACIÓN DE PRODUCTORES DE YUCA DE LA SIRIA - ASOPROYUS**

Native Species Used:
- Yuca
  - Manihot esculenta

Main products:
- Dried Yuca

Web / Mail contact:
- asoproyus@yahoo.com

**ASOCIACIÓN DE PRODUCTORES DE MATEO PÉREZ - SAMPUY - ASOPROMAPES**

Native Species Used:
- Ñame
  - Dioscorea spp.
- Ñame
  - Dioscorea spp.
- Yuca
  - Manihot esculenta

Main products:
- Ñame
  - Yucca

Web / Mail contact:
- asopromapes@yahoo.com

**DEPARTAMENT SANTANDER**

**CACHALÚ BIOLOGICAL RESERVE**

Main products:
- Ecotourism

Web / Mail contact:
- www.natura.org.co/general/reserva-biologica-cachalu.html

**CORPORACIÓN BUEN AMBIENTE - CORIBAMBIENTE**

Main products:
- Ecotourism

Web / Mail contact:
- www.coriambiente.com

**DEPARTAMENT SANTANDER**

**ASOCIACIÓN DE PRODUCTORES DE BURLA DE CUCURU - ASOPROBU**

Native Species Used:
- Tulípera
- Corales

Main products:
- Tulípera

Web / Mail contact:
- asoproula@yahoo.com

**CACHALÚ BIOLOGICAL RESERVE**

Main products:
- Ecotourism

Web / Mail contact:
- www.natura.org.co/general/reserva-biologica-cachalu.html

**DEPARTAMENT SANTANDER**

**ASOCIACIÓN DE PRODUCTORES DE BURLA DE CUCURU - ASOPROBU**

Native Species Used:
- Tulípera
- Corales

Main products:
- Tulípera

Web / Mail contact:
- asoproula@yahoo.com

**CACHALÚ BIOLOGICAL RESERVE**

Main products:
- Ecotourism

Web / Mail contact:
- www.natura.org.co/general/reserva-biologica-cachalu.html

**DEPARTAMENT SANTANDER**
Departament Tolima

ASOCIACIÓN DE PRODUCTORES AGROECOLÓGICOS DE LA CUENCA DEL RÍO ANAIMA - APACRA

Native Species Used:
- Chachafruto o Balú
- Arracacha

Main products:
- Chachafruto biscuits
- Chachafruto cake and candies

Web / Mail contact:
- apacra@yahoo.es

ASOCIACIÓN AGROPECUARIA Y DE CHACHAFRUTEROS DEL MUNICIPIO DE TOLIMA - AGROCHAC

Native Species Used:
- Chachafruto o Balú

Main products:
- Chachafruto concentrate

Web / Mail contact:
- agrochac.org

MAPALINA

Main products:
- Ecotourism

Web / Mail contact:
- mapalina.com

Departament Valle

ASOCIACIÓN DE CAMPESINOS AGRO - ECOLÓGICOS DE LA ZONA DE AMORTIGUAMIENTO AL PARQUE NATURAL REGIONAL DEL DUENDE - ASODUENDE

Native Species Used:
- Guayaba
- Pitáyapa
- Solanum gmunense
- Guayaba

Main products:
- Jams
- Compostes
- Pulps
- Fresh fruit

Web / Mail contact:
- asoduende68@yahoo.es

List of pilots by country and contacts

Ecuador

Provinces
Carchi, Imbabura, Pichincha, Tungurahua, Chimborazo

AGRODIAGNOSTIC

Native Species Used:
- Trichoderma, Beauveria, Paecilomyces, Bacillus thuringiensis, Paecilomyces lilacinus

Main products:
- Biological material and native microorganisms for the agricultural sector

Web / Mail contact:
- www.agrodiagnostic.com.ec
- karla@agrodiagnostic.com.ec

province Chimborazo

FUNDAMYF (FUNDACIÓN MUJER Y FAMILIA) / RANDYMPAC

Native Species Used:
- Quinoa

Main products:
- Quinoa, in grains and processed (flour)

Web / Mail contact:
- www.fundamym.org
- gchavez@fundamym.org
- melina@fundamym.org

JAMBIKIWA (ASOCIACIÓN DE PRODUCTORES DE PLANTAS MEDICINALES DE CHIMBORAZO “JAMBIKIW”)

Native Species Used:
- Chapa Chupa, Caleaguala, Chancapiedra, Chuquiragua, Guayusa, Chilca, Matico, Sangrach, Valeriana, Liatérem, Lupinum Bogotense, phyllanthus niruri, lasiocephalus ovatus, chuquiragua jussieui, efe guayusa, bach<hr>arid chilca, ambrosia artiosperma, amaranthus hybridus, decusata muehlenbeckia tamnifolia, bohens andicola, mithostachys mollis, Plantago

Main products:
- Dried native plants for teas

Web / Mail contact:
- www.jambikiwa.com
- www.nativaecuador.org
- jambikiw@ecnet.ec
- jambikiwa@ch.pro.ec
## Province Cotopaxi y Pichincha
### SUSPÍRIO TALLER
- **Native Species Used:**
  - Alpaca
  - Chinchilla
  - Vaccinium myrtillus
- **Main products:**
  - Natural fibers such as alpaca
  - Natural dyes from the capulí, chilca and cochínilla trees
- **Web / Mail contact:**
  - info@suspirotaller.com
  - suspirotaller@gmail.com

## Province Guayas
### ASOCIACIÓN DE PRODUCTORES DE TENGUÉL
- **Native Species Used:**
  - Cacao
- **Main products:**
  - National fine or flavored cocoa beans
- **Web / Mail contact:**
  - freddy.cabello@unocace.com

## Province Guayas / Napo
### KAKAW EXPERIENCE
- **Native Species Used:**
  - Cacao
  - Theobroma Cacao
- **Main products:**
  - Cocoa
  - Cocoa butter
  - Cocoa-based cosmetics
  - Raw cocoa mask, raw cocoa massage, raw cocoa shower
- **Web / Mail contact:**
  - www.facebook.com/kakawexperience
  - jharias@kakawexperience.com

## Province Imbabura
### SUMAK MIKUY
- **Native Species Used:**
  - Uvilla
  - Theobroma Cacao
  - Mortiño
  - Vaccinium myrtillus
- **Main products:**
  - Uvilla organic and mortiño organic: fresh and dried
- **Web / Mail contact:**
  - www.sumakmikuy.com
  - veronicacosta@laposte.net
  - sumakmikuy@gmail.com

## Province Esmeraldas
### FUNDACIÓN EQUILIBRIO AZUL
- **Main products:**
  - Nature tourism
  - Conservation of coastal ecosystems and sea turtles
- **Web / Mail contact:**
  - www.equilibrioazul.org

## Province Galápagos
### RED MANGROVE’INN
- **Main products:**
  - Nature tourism
  - Tourism services (lodging, food)
- **Web / Mail contact:**
  - www.redmangrove.com
  - hnasal@redmangorales.com

## Province Los Ríos
### ILE
- **Native Species Used:**
  - Congona
  - Peperomia galioide
  - Ataco
  - Amaranthus hybridus
- **Main products:**
  - Congona
  - Ataco
- **Web / Mail contact:**
  - www.ile.com.ec
  - manoloesgo@ile.com.ec
  - mespinosa@ile.com.ec

## Province Loja
### ECAM-CORP. DE AGRICULTORES DEL CANTÓN MOCAHE
- **Native Species Used:**
  - Cacao
  - Theobroma Cacao
- **Main products:**
  - National fine or flavored cocoa beans
- **Web / Mail contact:**
  - bosc1971@hotmail.com
  - luisfernando_holguin@yahoo.com
Province Los Ríos / Bolivar

CORGRI CASE-CORP. AGRICOLA CACAO TEREA DEL CANTON ECHANDÍA

Native Species Used:
- Cacao Theobroma Cacao

Main products:
- National fine or flavored cocoa beans

Web / Mail contact:
- info@coragricace@hotmail.com

Province Manabí

SISACUMA

Native Species Used:
- Cacao Theobroma Cacao

Main products:
- Palo Santo essential oil

Web / Mail contact:
- www.sisacuma.com
- manorita@sisacuma.com
- mjpet1985@yahoo.com

Province Morona Santiago

CETCA

Native Species Used:
- Matico Aristeguietia glutinosa
- Llantén Plantago major
- Ungurahua Oenocarpus bataua

Main products:
- Dried native plants for teas
- Horchatas
- Ungurahua essential oil

Web / Mail contact:
- www.tedelecuador.com
- cetca@tedelecuador.com

Province Napo

CABAÑAS SAN ISIDRO

Main products:
- Birdwatching / Tourism services (Lodging, food, nature and community tourism, etc.)

Web / Mail contact:
- www.cabasanisanisidro.com
- info@cabasanisanisidro.com
- carmen@cabasanisanisidro.com

HUAO LODGE (WAPONI)

Main products:
- Nature tourism, community tourism, tourist services (Lodging, Food)

Web / Mail contact:
- www.huaorani.com
- manager@tropiceco.com

HUASQUILA LODGE

Main products:
- Nature tourism, community tourism, tourist services (Lodging, Food)

Web / Mail contact:
- www.huasquila.com
- jmaranon@huasquila.com

RUNA TARPUNA

Native Species Used:
- Guayusa Ilex guayusa

Main products:
- Té de guayusa / Infusiones y mezclas

Web / Mail contact:
- www.runa.org
- francisco@runa.org
<table>
<thead>
<tr>
<th>Province</th>
<th>Company Name</th>
<th>Main Products</th>
<th>Web / Mail contact</th>
<th>Native Species Used</th>
<th>Main Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orellana</td>
<td>CaraChupa Pakcha</td>
<td>• Nature tourism, · Community tourism, · Tourist services (Lodging, Food)</td>
<td>Web / Mail contact: <a href="http://www.goonellana.gob.ec">www.goonellana.gob.ec</a>, <a href="mailto:carachupapach@hotmail.com">carachupapach@hotmail.com</a></td>
<td>• Uña de Gato (Uncaria tormentosa), · Ungurahua (Oenocarpus bataua), · Chuchuweaisha (Maytenus macrocarpa)</td>
<td>• Syrups, · Dyes, · Teas, · Ointments</td>
</tr>
<tr>
<td></td>
<td>Comunidad Pasoshurco</td>
<td>• Nature tourism, · Community tourism, · Tourist services (Lodging, Food)</td>
<td>Web / Mail contact: <a href="http://www.goonellana.gob.ec">www.goonellana.gob.ec</a>, <a href="mailto:sinaishimanruri@hotmail.com">sinaishimanruri@hotmail.com</a></td>
<td>• Sangre de Drago (Croton lechleri), · Guayusa (Ilex guayusa)</td>
<td>· Sustainable tourism operation</td>
</tr>
<tr>
<td></td>
<td>Federacion Zapara</td>
<td>• Sustainable tourism operation</td>
<td>Web / Mail contact: <a href="mailto:info@trekecuador.com">info@trekecuador.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kapawi EcoLodge &amp; Reserve</td>
<td>• Community Tourism / Birding</td>
<td>Web / Mail contact: <a href="mailto:info@kapawi.com">info@kapawi.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NaPo Wildlife Center _ Albergue</td>
<td>• Community Tourism, · Community tourism, · Tourist services (Lodging, Food)</td>
<td>Web / Mail contact: <a href="mailto:info@napowildlifecenter.com">info@napowildlifecenter.com</a>, <a href="mailto:projects@napowildlifecenter.com">projects@napowildlifecenter.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secoya Lodge (Naposten)</td>
<td>• Nature tourism, · Community tourism, · Tourist services (Lodging, Food)</td>
<td>Web / Mail contact: <a href="mailto:manager@maipesquis.com">manager@maipesquis.com</a>, <a href="http://www.huaorani.com/secoya_lodge.html">www.huaorani.com/secoya_lodge.html</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trek - Tinkisias</td>
<td>• Sustainable tourism operation</td>
<td>Web / Mail contact: <a href="mailto:info@trekecuador.com">info@trekecuador.com</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FloraSana</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.florasana.org">www.florasana.org</a>, <a href="mailto:florasana@andinanet.net">florasana@andinanet.net</a></td>
<td>• Chenopodium Quinoa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inagrofa</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.chocoleyenda.com">www.chocoleyenda.com</a>, <a href="mailto:info@chocoleyenda.com">info@chocoleyenda.com</a></td>
<td>• Theobroma Cacao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dislub Ingapaca</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.ingaalpaca.com">www.ingaalpaca.com</a>, <a href="mailto:javier.herrera@loft.com.ec">javier.herrera@loft.com.ec</a></td>
<td>• Lama pacos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fundacion Botanica de los Andes</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.jardinbotanicoquito.com">www.jardinbotanicoquito.com</a>, <a href="mailto:cjijon@jardinbotanicoquito.com">cjijon@jardinbotanicoquito.com</a></td>
<td>• Cedrilinga cateniformis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iroko</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.puerta-madera.com">www.puerta-madera.com</a>, <a href="mailto:info@irokodoors.com">info@irokodoors.com</a></td>
<td>• Seique</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Floare</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.floareorchids.com">www.floareorchids.com</a>, <a href="mailto:info@floareorchids.com">info@floareorchids.com</a></td>
<td>• Orchids</td>
<td></td>
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</table>

**Province Pastaza**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Main Products</th>
<th>Web / Mail contact</th>
<th>Native Species Used</th>
<th>Main Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>FloraSana</td>
<td>• Nature tourism, · Community tourism, · Tourist services (Lodging, Food)</td>
<td>Web / Mail contact: <a href="http://www.florasana.org">www.florasana.org</a>, <a href="mailto:florasana@andinanet.net">florasana@andinanet.net</a></td>
<td>• Chenopodium Quinoa</td>
<td></td>
</tr>
</tbody>
</table>

**Province Pichincha**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Main Products</th>
<th>Web / Mail contact</th>
<th>Native Species Used</th>
<th>Main Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chochoyenda Cia. Ltda.</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="mailto:info@trekecuador.com">info@trekecuador.com</a></td>
<td>• Theobroma Cacao</td>
<td></td>
</tr>
<tr>
<td>Inagrofa</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.chocoleyenda.com">www.chocoleyenda.com</a>, <a href="mailto:info@chocoleyenda.com">info@chocoleyenda.com</a></td>
<td>• Quinua (Chenopodium Quinoa)</td>
<td></td>
</tr>
<tr>
<td>Dislub Ingapaca</td>
<td>• Textiles and garments with thread or wool from alpaca, · quilts stuffed with alpaca wool</td>
<td>Web / Mail contact: <a href="http://www.ingaalpaca.com">www.ingaalpaca.com</a>, <a href="mailto:javier.herrera@loft.com.ec">javier.herrera@loft.com.ec</a></td>
<td>• Seique</td>
<td></td>
</tr>
<tr>
<td>Iroko</td>
<td>• Nature tourism, · Community tourism</td>
<td>Web / Mail contact: <a href="http://www.puerta-madera.com">www.puerta-madera.com</a>, <a href="mailto:info@irokodoors.com">info@irokodoors.com</a></td>
<td>• Cedrilinga cateniformis</td>
<td></td>
</tr>
</tbody>
</table>
Provinces

Sucumbios

**TUCANOPY**
- **Main products:**
  - Nature tourism,
  - Tourist services (Lodging, Food)

**WAPONI NUNA (BOLICHE)**
- **Main products:**
  - Nature tourism,
  - Tourist services (Food)

**TERRA FÉRTIL**
- **Native Species Used:**
  - Uvilla
  - Physalis peruviana
- **Main products:**
  - National fine or flavored cocoa
  - Sacks of chocolate
  - Nibs de cocoa
  - Cocoa paste
  - Chocolate creme
  - Powdered chocolate
  - Coca husks

**TOLKITO S.A.**
- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa
- **Main products:**
  - Processed corn and quinoa

Santa Elena

**BIOELITE**
- **Main products:**
  - Diving tourism, diving instruction and equipment rental
  - Development of ecotourism and environmental projects

**JAMU LODGE (ECUADOR VERDE PAÍS CIA. LTDA.)**
- **Main products:**
  - Nature tourism,
  - Community tourism,
  - Tourism services (lodging, Food)

**SANI LODGE**
- **Main products:**
  - Nature tourism,
  - Tourism services (lodging, Food)

**WIKIRI**
- **Native Species Used:**
  - Ranas nativas
  - Ceratophrys stolzmanni
  - Gastrotheca picturata
  - Agalychnis spurrelli
  - Hypsiboas picturatus
  - Dendrobates sylvaticus
  - Grillo sp complejo assimilis
  - Tenebrio molitor
  - Scolytidae
- **Main products:**
  - Frogs and terrariums for the pet market

**Province**

**Province**
**List of pilots by country and contacts**

**PERU**

**Region: Ayacucho**

**SOLUCIONES AVANZADAS EN AGRONEGOCIOS WIRACOCHA DEL PERÚ SAC**

- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa

- **Main products:**
  - Quinoa grains
  - Quinoa flour
  - Quinoa flakes

- **Web / Mail contact:**
  - www.wiraccochapedperu.com.pe

**Region: Arequipa**

**ASOCIACIÓN DE PRODUCTORES DE CULTIVOS ORGANICOS DE LA PROVINCIA DE LA UNIÓN COTAHUASI - APCO**

- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa
  - Amañtaca
  - Amaranthus caudatus

- **Main products:**
  - Quinoa and amaranth grains

- **Web / Mail contact:**
  - presidenta.apco@gmail.com

**ASOCIACIÓN ESPECIALIZADA PARA EL DESARROLLO SOSTENIBLE AEDES**

- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa
  - Amañtaca
  - Amaranthus caudatus
  - Maíz morado Zia Mays L.

- **Main products:**
  - Quinoa grains

- **Web / Mail contact:**
  - jograymi20@hotmail.com

**Region: Cajamarca**

**CAJAMARCA TRAVEL SCRL**

- **Native Species Used:**
  - Turismo sostenible

- **Web / Mail contact:**
  - www.cajamarcatravel.com.pe

**VILLA ANDINA SAC**

- **Native Species Used:**
  - Aguaymanto
  - Physalis peruviana

- **Main products:**
  - Dried aguaymanto

- **Web / Mail contact:**
  - www.villaandina.com

**ASOCIACIÓN DE PRODUCTORES AGRÍCOLAS Y GANADEROS INTI RAYMI**

- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa

- **Main products:**
  - Quinoa grains

- **Web / Mail contact:**
  - jorgraymi20@hotmail.com

**ASOCIACIÓN DE PRODUCTORES DE TARA - APT**

- **Native Species Used:**
  - Quinoa
  - Chenopodium quinoa

- **Main products:**
  - Quinoa grains, pearls

- **Web / Mail contact:**
  - productorestayasanmarcos@gmail.com
  - victor.acco@gmail.com

**Region: Cusco**

**ALICOLOR SAC**

- **Native Species Used:**
  - Achiote
  - Bixa orellana L.

- **Main products:**
  - Achiote

- **Web / Mail contact:**
  - www.alicacolorsac.com/principal.htm

**ASOCIACIÓN REGIONAL DE PRODUCTORES AGROPECUARIOS CUSCO - HUANCARO (ARPAC)**

- **Native Species Used:**
  - Maíz Gigante

- **Main products:**
  - Giant white corn from Cusco

- **Web / Mail contact:**
  - arpac.huancaro@hotmail.com
  - e.ramos@avsf.org

**COOPERATIVA AGRARIA CAFETALERA CHACO HUAYANAY**

- **Native Species Used:**
  - Cacao
  - Theobroma cacao L.

- **Main products:**
  - Cocoa beans, pastes and other cacao derivatives

- **Web / Mail contact:**
  - cacahuayanay@hotmail.com

**COOPERATIVA AGRARIA CAFETALERA MARANURA LTDA**

- **Native Species Used:**
  - Cacao
  - Theobroma cacao L.

- **Main products:**
  - Cocoa beans

- **Web / Mail contact:**
  - gerencia@cafemaranura.com

**COOPERATIVA AGRARIA CAFETALERA MATEO PUMACAUCHA L**

- **Native Species Used:**
  - Cacao
  - Theobroma cacao L.

- **Main products:**
  - Cocoa beans

- **Web / Mail contact:**
  - cac.mateopumacaucha@hotmail.com
Andean Biotrade

Innovative answers and sustainable solutions for local development in Latin America.

Pilot programs

Summary Introduction Executive

Summary

Biotrade in the Andean Region

The Project

Results

Impacts and systemic change

Pilot programs Achievements in capacity development Tools developed Knowledge-based products and networks Lessons Learned and recommendations Conclusions

Annexes

PRODUCTOS ALIMENTARIOS MISKY SAC

Native Species Used:
- Cacao
- Theobroma cacao L.

Main products:
- Chocolate derivatives

Web / Mail contact:
- coopavre2010@yahoo.com.pe

PROYECTO PARQUE DE LA PAPA / ASSOCIATION FOR NATURE AND SUSTAINABLE DEVELOPMENT ANDES

Native Species Used:
- Sustainable tourism
- Community tourism

Main products:
- Potato

Web / Mail contact:
- www.parquegiralapapa.org

ULTIMATE VOYAGES EIRL

Native Species Used:
- Sustainable tourism
- Ecotourism

Main products:
- Ecotourism

Web / Mail contact:
- www.ultimatevoyages.com/aboutus.html

Region Huánuco

AGROINDUSTRIAS HUAYLLACAN SAC

Native Species Used:
- Aguaymanto
- Physalis peruviana
- Quinoa

Main products:
- Aguaymanto
- Quinoa

Web / Mail contact:
- http://wayayperu.com/es/

ASOCIACIÓN TECNOLÓGICA Y DESARROLLO - TECNIDES

Native Species Used:
- Papaya native
- Solanum tuberosum

Main products:
- Papaya Tumbay

Web / Mail contact:
- tecnides@hotmail.com

CENTRO DE INFORMACIÓN Y EDUCACIÓN PARA LA PREVENCIÓN DEL ABUSO DE DROGAS - CEDRO

Native Species Used:
- Cayce
- Cedro

Main products:
- Cayce

Web / Mail contact:
- www.cedro.org.pe

Region Junín

ASOCIACIÓN DE PRODUCTORES DE MACA DEL VALLE DEL MANTARO-APROMAC

Native Species Used:
- Maca
- Lepidium meyenii Walp
- Quinoa

Main products:
- Gelatinized maca
- Quinoa grain

Web / Mail contact:
- apromac@yahoo.es

COOPERATIVA AGRARIA ECOLÓGICA CACAO TERRE RIO ENE

Native Species Used:
- Cacao
- Theobroma cacao

Main products:
- Cacao beans

Web / Mail contact:
- coopavre2010@yahoo.com.pe

COOPERATIVA AGROPECUARIA DE SERVICIOS VALLE DEL CUNAS LTDA

Native Species Used:
- Maca
- Lepidium meyenii Walp

Main products:
- Gelatinized maca

Web / Mail contact:
- www.biocunas.com

CULTIVOS ORGÁNICOS DONA ROMILDA SRL

Native Species Used:
- Aguaymanto
- Physalis peruviana

Main products:
- Fresh and dried aguaymanto

Web / Mail contact:
- gabyfaura@yahoo.com

Region Huancavelica

FRUCTUS TERRUM S.A.

Native Species Used:
- Quinoa
- Chenopodium quinoa

Main products:
- Quinoa beans

Web / Mail contact:
- www.fructusterrum.com

CooPEratiVa SOL nACIente

Native Species Used:
- Cacao
- Theobroma cacao L.

Main products:
- Cocoa derivatives

Web / Mail contact:
- clivasa@yahoo.es

COOPERATIVA AGRARIA VALLE SAGRADO

Native Species Used:
- Maiz Gigante
- Zea Mayz

Main products:
- Snacks of giant white corn from Cusco

Web / Mail contact:
- ccvvsi@agrovas.com

LA CHOLITA FÁBRICA DE CHOCOLATES S.A.

Native Species Used:
- Cacao, chocolates
- Theobroma cacao L.

Main products:
- Chocolate

Web / Mail contact:
- www.chocolateslacholita.com

INKA TERRA ASOCIACIÓN

Native Species Used:
- Sustainable Tourism
- Ecotourism

Main products:
- Tea

Web / Mail contact:
- www.inkaterra.com

ASOCIACIÓN DE PRODUCTORES DE MACA DEL VALLE DEL MANTARO-APROMAC

Native Species Used:
- Maca
- Lepidium meyenii Walp
- Quinoa

Main products:
- Gelatinized maca
- Quinoa grain

Web / Mail contact:
- apromac@yahoo.es

COOPERATIVA AGRARIA ECOLÓGICA CACAO TERRE RIO ENE

Native Species Used:
- Cacao
- Theobroma cacao

Main products:
- Cacao beans

Web / Mail contact:
- coopavre2010@yahoo.com.pe

COOPERATIVA AGROPECUARIA DE SERVICIOS VALLE DEL CUNAS LTDA

Native Species Used:
- Maca
- Lepidium meyenii Walp

Main products:
- Gelatinized maca

Web / Mail contact:
- www.biocunas.com

CULTIVOS ORGÁNICOS DONA ROMILDA SRL

Native Species Used:
- Aguaymanto
- Physalis peruviana

Main products:
- Fresh and dried aguaymanto

Web / Mail contact:
- gabyfaura@yahoo.com
### Region Lima / Junín

**ECOANDINO SAC**

- **Native Species Used:**
  - Maracuyá: Passiflora edulis
  - Cocona: Solanum sessiliflorum
  - Sauco: Sambucus nigra
  - Guaranaba: Annona muricata L.
  - Papaya silvestre: Carica quercifolia

- **Main products:**
  - Juices and nectars
  - Jams
  - Dried products
  - Pulps

- **Web / Mail contact:**
  - ecoandino.com

- **Web / Mail contact:**

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### Region Lima / Amazonas

**OLIVOS DEL SUR SAC**

- **Native Species Used:**
  - Sacha Inchi: Plukenetia volubilis Linneo

- **Main products:**
  - Derivados de Sacha Inchi

- **Web / Mail contact:**
  - www.olivosdelsur.com

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### Region Lima / Arequipa

**WIBGUS S.A.C.**

- **Native Species Used:**
  - Quinoa: Chenopodium quinoa

- **Main products:**
  - Quinoa-based energy bars
  - Biscuits
  - Granola bars made with quinoa

- **Web / Mail contact:**
  - www.wibgus.com/es/

---

### Region Lima / Piura

**ALCARROBOS ORGÁNICOS DEL PERÚ SAC**

- **Native Species Used:**
  - Lucuma: Plukenetia lucuma

- **Main products:**
  - Powdered lucuma

- **Web / Mail contact:**
  - proyectos@alcarrobosorganicos.pe

- **Web / Mail contact:**
  - www.alcarrobosorganicos.pe

---

### Region Lima / Yauyos

**DINAMIKA BUSSINES SAC**

- **Native Species Used:**
  - Plantas medicinales: Averrhoa carabica, Addatum guion, Plukenetia volubilis Linneo, Moringa oleifera L., Chenopodium ambrosioides, Ursina Tomentosa

- **Main products:**
  - Filtering of medicinal plants

- **Web / Mail contact:**
  - www.unitalida.com/espanol/
**Region Loreto**

**INKA NATURA WORLD PERÚ EXPORT SAC**
- Native Species Used:
  - Amazonian fruits
  -Euphorbiaceae
  - Moraceae
  - Myrtaceae
- Main products:
  - Dyes, extracts from Amazonian fruits
- Web / Mail contact:
  - www.madreselva.pe
  - mail@madreselva.pe

**SANDOVAL LAKE LODGE S.A.**
- Native Species Used:
  - Castaña
- Main products:
  - Chestnut covered with organic chocolate
- Web / Mail contact:
  - www.sandovallakeodge.net

**INDUSTRIAS ALIMENTICIAS AMAZONICAS EIRL**
- Native Species Used:
  - Copiapao
  - Dillenia indica
  - Ocoña
  - Solarium sesquiflorum
  - Caraimbola
  - Aethiopa carambola
- Main products:
  - Nectar
  - Jam
  - Pulp
- Web / Mail contact:
  - manu@inkaterra.net

**MANU TAMBOPATATA TRAVEL SAC**
- Native Species Used:
  - Sustainable Tourism
  - Ecotourism
- Main products:
  - Ecotourism service packages at the National Park of Manu in Madre de Dios
- Web / Mail contact:
  - lady@manutambopatatravel.com
  - www.procesosagroindustriales.com

**MORIKUE SRL**
- Native Species Used:
  - Castaña
  - Bertholletia excelsa H.B.K.
- Main products:
  - Whole chestnuts
- Web / Mail contact:
  - morikue.srl@gmail.com

**ASOCIACIÓN DE PRODUCTORES DE MANGO DEL VALLE DEL ALTO PIURA - APROMALPI**
- Native Species Used:
  - Cacao
- Main products:
  - Cacao beans
- Web / Mail contact:
  - apromalpi@apromalpi.org.pe

**Region Madre de Dios**

**ACEITES Y DERIVADOS AMAZONICOS SAC**
- Native Species Used:
  - Aji
  - Capsicum sp.
- Main products:
  - Spicy salsa
- Web / Mail contact:
  - www.madreselva.pe

**COCOA CHOCOLATE APROCAP**
- Native Species Used:
  - Cacao
- Main products:
  - Cacao en grano
  - Cocoa powder
- Web / Mail contact:
  - aprocap@yahoo.es
  - gerardo5566@hotmail.com

**APROMALPI**
- Native Species Used:
  - Cacao
  - Theobroma cacao
- Main products:
  - Cacao in grano
- Web / Mail contact:
  - aprocap@yahoo.es
  - gerardo5566@hotmail.com

**Region Piura**

**ASOCIACIÓN DE PEQUEÑOS PRODUCTORES DE CACAO PIURA - APROCAP**
- Native Species Used:
  - Cacao
  - Theobroma cacao
- Main products:
  - Cacao in grano
- Web / Mail contact:
  - aprocap@yahoo.es
  - gerardo5566@hotmail.com

**AVENDANO TRADING COMPANY SAC**
- Native Species Used:
  - Quinoa
  - Chenopodium quinoa
- Main products:
  - Quinoa grains
- Web / Mail contact:
  - www.avendanocom.com

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### Annexes

**Summary**

**Executive Summary**

**Introduction**

**Biotrade in the Andean Region**

**The Project**

**Results**

**Impacts and systemic change**

**Pilot programs**

**Achievements in capacity development**

**Tools developed**

**Knowledge-based products and networks**

**Lessons Learned and recommendations**

**Conclusions**

**Annexes**
COOPERATIVA AGRO INDUSTRIAL CABANA LTDA

Native Species Used:
- Quinua: Chenopodium quinoa
- Cañihua: Chenopodium pallidicaule

Main products:
- Quinoa Grains
- Quinoa Flour
- Quinoa Flakes

Web / Mail contact:
- www.coopacabana.com

PERU WORLD WIDE SAC

Native Species Used:
- Quinua: Chenopodium quinoa

Main products:
- Quinoa Grains
- Quinoa Flour
- Quinoa Flakes

Web / Mail contact:
- www.peruworldwide.net

QUECHUA FOODS SAC

Native Species Used:
- Quinua: Chenopodium quinoa

Main products:
- Quinoa Grains and flour

Web / Mail contact:
- www.quechufoods.com

Region
San Martin

AGROINDUSTRIAS HORIZONTE VERDE S.A.C.

Native Species Used:
- Quinua: Chenopodium quinoa

Main products:
- Roasted seeds

Web / Mail contact:
- dorotea@agrohorizonteverde.com

AMAZON HEALTH PRODUCTS SAC

Native Species Used:
- Sacha Inchi: Plukenetia Volubilis L.

Main products:
- Extra Virgin Olive Oil
- Flour
- Natural and Salty Snacks

Web / Mail contact:
- www.amazonhp.com

INDUSTRIAS MAYO SAC

Native Species Used:
- Cacao: Theobroma cacao.

Main products:
- Roasted seeds

Web / Mail contact:
- dorotea@agrohorizonteverde.com

SHANANTINA SAC

Native Species Used:
- Sacha Inchi: Plukenetia Volubilis L.

Main products:
- Extra Virgin Olive Oil
- Flour, butter
- Salad snack, natural spicy and caramel

Web / Mail contact:
- www.shanantina.com
- shanantina@gmail.com

TAKIWASI

Native Species Used:
- Plantas medicinales: Plukenetia Volubilis L.

Main products:
- Dyes
- Medicinal extracts

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Annexes
Innovative answers and sustainable solutions for local development in Latin America.

Summary

Pilot programs

Biotrade in the Andean Region

The Project

Results

Impacts and systemic change

Achievements in capacity development

Tools developed

Knowledge-based products and networks

Lessons learned and recommendations

Conclusions

Annexes

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**d) Andean Biotrade Project and Aichi targets**

The Andean Biotrade Project helped achieve the Aichi biodiversity targets on a general level through the promotion of the biotrade principles, the implementation of which incorporates:

- **Reducing the loss of natural habitats**, promoting the conservation of ecosystem characteristics.
- **Preventing the extinction** of endangered species, the exclusion of the use of species listed in CITES, and promoting the application of the convention.
- **Maintaining the genetic diversity** of wild and domesticated species.
- **Respect for traditional knowledge, innovations and practices** for the use of biological diversity, promoting the fair and equitable distribution of benefits.

Also, in each of the project’s components, the following contributions were made to the Aichi targets:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Results</th>
<th>Products</th>
<th>Aichi Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPONENT 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Strengthening</td>
<td>Legal barriers in biotrade have improved as well inconsistencies in the regulation associated with biotrade have been eliminated.</td>
<td>1.1. Train public and private institutions on policies and regulations associated with biotrade.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.2. Develop inputs to support the review, adjustment and development of proposals for the legal and institutional framework nationwide.</td>
<td>1.3. Promote spaces that support international negotiation processes on biotrade issues</td>
<td></td>
</tr>
<tr>
<td><strong>COMPONENT 2</strong>: Access to Markets</td>
<td>Andean biotrade products have increased their access to the markets of Europe, the United States, and Japan.</td>
<td>2.1. Conduct market studies and research.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.2. Conduct biological research and product development (properties of use and application).</td>
<td>2.3. Develop sustainable management plans.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.4. Design and implement marketing strategies and product promotion.</td>
<td>2.5. Develop programs favoring quality and logistics.</td>
<td></td>
</tr>
<tr>
<td><strong>COMPONENT 3</strong>: Capacity building</td>
<td>Strengthened local capacity in the areas of: (i) Incubation, (ii) Management, (iii) Finance, trade and tax issues, (iv) Market and technical aspects. These skills are built into all levels from extraction to final market.</td>
<td>3.1. Strengthen incubation programs for biotrade initiatives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.2. Implement training and technical advice in developing business and other management plans for biotrade initiatives.</td>
<td>3.3. Provide technical advice for the creation and strengthening of biotrade initiatives and associations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4. Disseminate the concept of biotrade to producers and consumers.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### COMPONENT 4: Product and Market Information

<table>
<thead>
<tr>
<th>Objective</th>
<th>Results</th>
<th>Products</th>
<th>Aichi Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generated information is available for the actors in the value chains, for capacity strengthening.</td>
<td>4.1. Strengthen networks and information system on markets for biotrade products.</td>
<td>Generated information is available for the actors in the value chains, for capacity strengthening.</td>
<td>4.2. Disseminate information to producers through non-virtual media about products and markets.</td>
</tr>
</tbody>
</table>

### COMPONENT 5: Leverage financial resources for biotrade initiatives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Results</th>
<th>Products</th>
<th>Aichi Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to financing for biotrade initiatives was significantly increased.</td>
<td>5.1. Create and/or strengthen financial instruments directed at biotrade initiatives.</td>
<td>Access to financing for biotrade initiatives was significantly increased.</td>
<td>5.2. Training plan for financial institutions developed and implemented.</td>
</tr>
</tbody>
</table>

### COMPONENT 6: Pilot Programs

<table>
<thead>
<tr>
<th>Objective</th>
<th>Results</th>
<th>Products</th>
<th>Aichi Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 282,500 ha has worked on sustainability schemes, implementing principles of biotrade.</td>
<td>Identify, select, and provide technical assistance in the implementation of pilot programs to evaluate the feasibility of biotrade initiatives.</td>
<td>More than 282,500 ha has worked on sustainability schemes, implementing principles of biotrade.</td>
<td></td>
</tr>
</tbody>
</table>
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