



**CONSTRUCTION OF THE BASELINE FOR
THE BIOTRADE IMPACT ASSESSMENT SYSTEM
-PERU BT IAS-**

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Accronyms

ADEX	Exporters Association of Perú
AIDER	Association for the Research and the Rural Development
ANPs	Natural Protected Areas
APROTMACA	Maca Producer and Processors Association
APROMACA-E	Maca Ecologic Producer Association
APROMACARJ	Maca Ecologic Producer Association Junín Region
APEPA	Aromatic Plants Ecologic Producers Association
APEAC	Ecologic Producers Association Aromas Cajamarquinos
APECO	Peruvian Association for Nature Conservation
AOP	Annual Operation Plan
BISAC	Interandean drinks SAC
BTFP	Biotrade Facilitation Programme
BT IAS	Biotrade Impact Assessment System
BTOs	Biotrade Ojectives
CAF	Andean Foment Corporation
CBD	Convention on Biological Diversity
CER	Ecoefficiency and Responsabiliy Center
CHM	Clearing House Mechanism
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CONAM	National Environmental Council
CONCYTEC	National Council for Science Technology and Technological Innovation
CUP	Control Union Perú
DGF y FS	Forestal and Wild Fauna General Direction
DIGESA	Environmental Health General Direction
ENDB	The National Strategy on Biological Diversity
GEF – CAF – PNUMA	Facilitation of funding for biodiversity-based businesses and support to market development activities in the Andean region
GORES	Regional Governments
GTZ	German Technical Cooperation Agency
HAPSSA	Sihuas Pachachin Aromatics Herbs SA
IABIN	Inter American Biodiversity Information Network
IIAP	Research institutions of the Peruvian Amazon
INDECOPI	National Institute for the Defense of Competition and intellectual Property Protection.
IMS	Information Management System
INIA	Agriculture Research National Institute
ISEAL	Association for social and environmental Alliance
MEA	Monitoring and Evaluation Activities
MINAM	National Environmental Ministry
MINAG	National Agriculture Ministry
MINCETUR	Ministry of Foreign Trade and Tourism
RREE	National External Relation Ministry
NBS	National Biotrade Strategy
NBP	National Biotrade Programme
NGO	Non governmental organism

PENUMA	United Nations Environment Programme
P&C	Principles and Criteria
PROCAB	Bombom Andean Crops Promoter
PRODUCE	Production Ministry
PROMPEX	Commission for Export Promotion
PROMPERU	Commission for the Promotion of Peru Export and Tourism
PRONATURALEZA	Peruvian Foundation for the Nature Conservation
SENASA	Agrarian Health National Service
SIAMAZONIA	Peruvian Amazon Information System
SIFORESTAL	Forest Information System
SINIA	Environmental Information National System
SIICEX	Foreign Trade Integrated Information System
SQF	Safe Quality Food
SUNAT	National Superintendency of Tax Administration
UEBT	Union for Ethical BioTrade
UNCTAD	United Nations Conference on Trade and Development

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1. Introduction

a. *The Biotrade National Program in Perú – NBP*

The Convention on Biological Diversity (CBD) was signed during the United Nations **Conference on Environment and Development** (UNCED), also known as the '**Rio Summit**', '**Rio Conference**' or '**Earth Summit**' held in Rio de Janeiro (1992), as a commitment of the Governments to protect biodiversity by promoting: a) its conservation b) the sustainable use of its components and c) the fair and equitable sharing of the benefits derived from the access and use of genetic resources. During the following year, Peru ratified its commitment with this Convention (Legislative Resolution 26181, published May 12, 1993)

Article 10 of the CBD refers to the "sustainable use of components of biological diversity components. Precisely, article 10 e) establishes that *"Each Contracting Party shall, as far as possible and as appropriate: (...) encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources"*.

The CBD is a mandatory Treaty for those countries that have signed and ratified it. For this reason, this is the highest hierarchy document concerning biodiversity, since it establishes the principles for the sustainable use of its components as well as actions leading to the compliance of the assumed commitments taken¹.

During the Third Ordinary Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP III – 1996), the United Nations Conference on Trade and Development – UNCTAD, presented the 'BioTrade Initiative' in order to support trade and investment in products and services derived from biodiversity in megadiverse countries according to the objectives of the CBD and promote in this way sustainable development.

Accordingly, several statutes and regulations on sustainable use and conservation of biological diversity as well on BioTrade have been issued at different levels:

At the regional level, Andean Decision 523 approved the Regional Biodiversity Strategy for the Tropical Andean Countries (2002). Such Decision provides for the strengthening and promotion of sub-regional trade and investment; capacity building to add scientific and technological value as a competitive factor in support of conservation and sustainable use of biodiversity. (Objective I. Line of Action No. 5).

This Line of Action considers that it is essential to promote and assure the conditions (legal and institutional framework, policies, information and research, human resources, etc.) that will enable the Member Countries to take advantage of the opportunities offered by domestic and international markets to biodiversity products and services, provided their trade and supply has sustainable use and/or conservation as underlying prerequisites.

¹ Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (CBD, 2004).

At the national level, article 68 of the Political Constitution of Peru (1993), establishes that the Peruvian Government “is obliged to promote the conservation of biological diversity and of the protected natural areas”. Biological diversity and its components are considered ‘national heritage’ by the General Law of the Environment (Law 26811 published October 15th, 2005). Specific regulations on conservation and sustainable use of biological diversity are also established at the sectoral level (agriculture, fisheries, forestry, among other).

On the other hand, the Nineteenth (19th) State Policy on Sustainable Development and Environmental Management establishes that environmental investment and technology transfer for the generation of industrial activities, sustainable use of forest resources, biotechnology activities, BioTrade and tourism will be encouraged.

Also, article 87 of the Regulations on the Conservation and Sustainable use of Biological Diversity (Supreme Decree 068-2001-PCM, published June 21st, 2001), defines BioTrade as “the activity that promotes investment and trade through the sustainable use of native resources (...) , supporting in this way local economy (...)”, which contributes to generate conditions to overcome poverty².

The National Strategy on Biological Diversity (ENDB)³, approved by Supreme Decree N° 102-2001-PCM (published September 4th, 2001) contemplates the “*Incorporation of Sustainable Use of Biological Diversity into Productive Sectors*” (Strategic Line No. 2). Strategic Objective 2.11 orders the “*Establishment of a National BioTrade Program*” with the aim to “*promote the sustainable use of biodiversity with economic, social and biological sustainability criteria, establishing a way of progress and improvement to Peru and an incentive to conservation*”.

Accordingly, the National Council of the Environment (CONAM)⁴ established two Technical Groups⁵, responsible for elaborating the BioTrade National Program and to execute it, correspondingly.

In this sense, the National Biotrade Program (NBP) is established in Peru in November, 2004 through Executive Council Decree 21-2004-CONAM/CD. Such Program is understood as an operational tool of the ENDB and as the set of strategic lines and actions which objectives are to impulse and support the generation and consolidation of biobusinesses in Peru. Said businesses are based on native biodiversity to encourage its conservation by applying environmental, economic and social sustainability criteria, in accordance with the ENDB and the CBD.

² Free Translation.

³ For its Spanish acronym.

⁴ Through Law Decree 1013 CONAM was extinguished and became the Ministry of the Environment (July 2008).

⁵ In accordance with the First Transitory Disposition of Law 27104 (XXX) and through Presidential Resolution 048-99-CONAM-PCD and Executive Board Decree N°005-2005-CONAM/CD

a. Evolution and Organization

In Peru, the BioTrade Promotion National Program has been under responsibility of different institutions and has gone through several stages:

- Designing Stage (2001-2003): Taking UNCTAD's BioTrade Initiative methodology as a reference⁶, the Program was represented at this stage by two institutions: PROMPEX⁷ (as technical focal point) and CONAM (as political focal point). During this stage, the BioTrade Peru Committee was established with the aim to design the BioTrade National Program.
- Implementation Stage (2003 to 2007): During this stage, the co-representation of PROMPEX and CONAM prevailed until the BioTrade National Commission was established in 2005 as a technical group attached to CONAM. However, both the political and technical roles within the NBP under CONAM and PROMPEX continued.

From 2008 to date, the NBP's governance has been under the Ministry of Foreign Commerce and Tourism (MINCETUR). This was formalized in July of 2010 through Supreme Decree 009-2010-MINCETUR which creates the BioTrade Promotion National Commission (hereinafter the Commission or National Commission), attached to said Ministry (Annex1). The Commission acts as a political support and technical guidance to the NBP in Peru. It is a multisectoral body, formed by 14 institutions (8 public institutions, 3 corporate organizations and 2 universities⁸).

Comentario [v1]: 2007

The Commission's main objective is to achieve the institutional consolidation of the NBP. Among its functions we highlight the following:

- Approve the Annual Operational Plan of the NBP.
- Ensure execution of activities and compliance of the Annual Operational Plan.
- Propose and approve modifications to the policies, strategies and lines of action related to BioTrade.
- Monitor the actions and activities entrusted to the executive institutions/organisms of projects developed in the NBP framework.
- Manage fund raising.
- Promote partnerships and cooperation for the development and evolution of the NBP.
- Share and promote BioTrade activities at the national and international level.

The highest instance within the Commission is the Directive Council which is chaired by MINCETUR. Both PROMPERU and IIAP serve as the Technical Secretariat, responsible for the coordination and operational implementation of the NBP.

Technical follow-up and implementation of an Assessment and Monitoring System are two things that cannot be left apart and must be included in specific Regulations for the

⁶ Methodology for the implementation of National BioTrade Programs (2002).

⁷ PROMPEX was extinguished in 2007 and became part of PROMPERU, entity responsible for promoting exports.

⁸ See Annex1.

Commission, yet to be approved. Also, the roles and functions of each member of the Commission need to be thoroughly analyzed in order to achieve an integrated strategy for the NBP.

b. National Biotrade Strategy (2007-2012)

Considering that the BioTrade Initiative in Peru involves a complex network of institutions (where not only public and private institutions participate but also other executing BioTrade projects)⁹ a National BioTrade Strategy (NBS) was established in 2007. The aim of the NBS is to guarantee a common view within the actors related to BioTrade and to establish strategic guidelines/indicators as a way to assure an appropriate thread in the implementation of a BioTrade Initiative in Peru (See Box 1).

The NBS provides for complementary actions at different levels for the strengthening of the prioritized chains of value¹⁰. Among the pending tasks to be carried out, we find the establishment of BioTrade as a State Policy and include it in the agenda of the public institutions that are related to it in one way or another. In this way, a favorable political environment will be guaranteed, which will allow the development of BioTrade in Peru.

It is important to mention that the NBS was elaborated taking into account the work done executed by the NBP (up to 2007). Therefore, the starting point was the prioritized chains selected by the BioTrade Facilitation Programme (BTFP)¹¹. The main objective of the NBS is to *“Improve competitiveness of the prioritized chains in a sustainable manner in order to offer potential markets high added value BioTrade products, in a way that better conditions for the chain participants are expressed and contribution to biodiversity conservation is made”*¹².

In that regard, the starting point for the analysis and the approach of the NBS strategies were the lessons learned from programs and projects implemented by the BTFP in Peru, which will be addressed later.

⁹ Supported by the International Cooperation.

¹⁰ Value chains are relationships established between actors involved directly and indirectly in a productive activity with the aim of adding value in each stage of the value chain. Prioritized chains included natural ingredients and products, sustainable aquaculture and ecotourism.

¹¹ The BTFP is UNCTAD's dedicated programme to trade promotion of biodiversity products and services. The BTFP's objective is to help enterprises that produce ingredients for cosmetics and pharmaceuticals to export their products to European markets. Among them, we find herbs, gums, essential oils, oleoresins and natural colours. The BTFP ran in Peru between 2003 and 2007.

¹² Personal Translation.

Box N°1: National BioTrade Strategy, specific objectives and indicators

Specific Objectives	Indicators
<i>Achieving a Political environment favorable to biotrade and Strengthening the institutional System</i>	<ul style="list-style-type: none"> • Number of Sectorial Policies • Number of actors applying biotrade P&C • Level of satisfaction of users and beneficiaries of the BNP.
<i>Increasing national and international trade of BioTrade products</i>	<ul style="list-style-type: none"> • Percentage of sales increased. • FOB value of Exports • Number of mechanisms to protect and promote biotrade products.
<i>Improving productive and organizational management skills in biotrade initiatives (to guarantee the development of a sustainable offer)</i>	<ul style="list-style-type: none"> • Number of certified enterprises under social and environmental criteria. • Percentage of Performance of the Cost/Productivity of the cultivated/collected areas. • Number of Management Plans / Business Plans • Number of Productive Associations • Number of Influence Areas (Crop/Collection) • Number of managed areas and conservation areas • Number of technical specifications (standards)
<i>Validating characteristics and properties of biotrade products (through technical and scientific support)</i>	<ul style="list-style-type: none"> • Number of technical charts/sheets • Number of technical - scientific studies. • Number of scientific publications. • Comparison of field Price and FOB Price.

c. Implementation

The official launch of the PNBP took place in 2003. Its activities started by selecting sectors with BioTrade potential. Then, the design of diagnoses for analyzing them followed. For this purpose, methodologies designed with economic, environmental and social sustainability criteria were implemented and validated. These were established as the foundation for the implementation of the BioTrade guidelines and principles. These activities were made possible thanks to the support of BTFP.

It is important to mention that the NBP does not receive economic resources from the public Treasury for its implementation. Therefore, institutions such as PROMPERU, IIAP, MINAM and MINCETUR have included BioTrade promotion activities in their Annual Plans. Such activities are linked to their own mandates¹³.

¹³ PROMPERU (Promoción Comercial, Información de Mercado de Exportaciones, Estadísticas de Exportación), IIAP (Base de datos de investigaciones de biodiversidad, Sistema de Información en biodiversidad de la amazonía), MINAM (formular y proponer normas de

As Technical Secretariat of the National Commission, PROMPERU has been responsible for planning and follow-up activities. To do so, an area called 'BioTrade Peru Programme' was created in 2003 as a way to represent its commitment to BioTrade. Its team has 2 technical professionals and 1 assistant. It is necessary to mention that at the beginning of the implementation, activities were more of a general and strategic nature. Nevertheless, in 2007 and with the implementation of the 'Perubiodiverso' project¹⁴, more concrete actions to support the strengthening of the prioritized chains began to take place¹⁵.

Currently, the implementation of the NBP is carried out by each one of the institutions that are members of the National Commission according to their own role and functions.

In this context, several projects have been and are being implemented for supporting BioTrade.

Box N°2 displays the three major projects (executed and to be implemented) for the 2003-2010 period in the framework of the NBP.

carácter nacional para el uso sostenible de la biodiversidad) y MINCETUR (formular y proponer normas para el comercio sostenible de la biodiversidad).

¹⁴ Described in v).

¹⁵ Perubiodiverso Project prioritized 5 value chains from the natural ingredients and products sector: maca, yacon, camu camu, sachu inchi and tara and one chain from the ecotourism sector. Promotion activities for these value chains are made under the framework of 3 components: Markets, Supply and Demand criteria and Political and institutional issues.

Box N°2: Projects designed and implemented in the NBP's framework

PROJECTS	BTFP I 2003-2007	Perubiodiverso I 2007-2010	PDF-B and PCD (GEFCAF) 2003-2010
EXECUTIVE BODY	UNCTAD/NBPs	PDRS/GTZ	PROMPERU
GENERAL OBJECTIVE	Facilitate sustainable trade of biodiversity products and services, through partnerships and collaboration between actors to assure sustainable management of biodiversity resources, development of value added products and adequate marketing.	Quality Life Improvement of the rural population through sustainable use of biodiversity	Contribute to the conservation and sustainable use of biodiversity through strategies that promote sustainable trade of goods and services derived from biodiversity seeking an equitable and fair benefit sharing.
PRIORITIZED PRODUCTS	<ul style="list-style-type: none"> • Ingredients and Natural Products: • Medicinal, cosmetic and nutraceutical plants • Tropical and ornamental/ fish for human consumption • Ecotourism 	<ul style="list-style-type: none"> • Ingredients and Natural Products: tara, maca, yacón, sacha inchi y camu Camu. • Ecotourism Pilot Project 	<ul style="list-style-type: none"> • Medicinal Plants: hercampuri, Pasuchaca, Chancapiedra, Muña, Sangre de grado, Molle, Chuchuwasi, Ratania. • Andean Grains: Quinoa, Purple Corn, Giant Maize (Cusco).
AREAS OF INTERVENTION	National level, with a value chain approach. (sector/company)	Cajamarca, San Martín, Loreto and Junín	According to the relevant identified population
LINES OF ACTION	<ol style="list-style-type: none"> 1. Promotion and Access to international markets 2. Development of BTFP methodologies 3. Implementation of the development estrategias for value chains. 	<ol style="list-style-type: none"> 1. Access to Markets 2. Competitive Supply 3. Institutional Framework 	<ol style="list-style-type: none"> 1. Facilitate development and rationalization of policies 2. Increase Access to markets 3. Contribute to industrial capacity building and contribution to biotrade understanding 4. Improvement of the acquisition and access of information on products and markets 5. Leverage of financial resources to support companies 6. Support pilot projects for biodiversity-based businesses.

Note: not all the activities stated here are implemented.

Source: Technical secretariat of the NBP

d. Monitoring and Evaluation

Although the annual planning of NBP's activities of the NBP is comprehensive and participative, it has been identified that an integrative NBP Monitoring and Evaluation Activities (MEA) is lacking at the national level. Planned activities are implemented and developed by each one of the institutions (as they have made a commitment to promote BioTrade) as part of their own institutional workplans. Therefore, monitoring and follow-up of these activities are carried out separate and independently by each one of them.

This occurs although the NBP did consider a follow-up and monitoring system (as established by the ENDB). Unfortunately, it could not be implemented most likely because the institutions lacked financial resources to do so¹⁶.

Despite the fact that, currently, such system does not exist, there is a record of progress of the NBP's implementation based on existing projects. In fact, Perubiodiverso project has a tracking and monitoring system for its activities based on the SMOI¹⁷ and conducted by PDRS/GTZ (as the executive unit of said project). Phase planning and impact are the foundation to such system, as presented in the project's sequence of impacts.

On the other hand, Perubiodiverso project also includes follow-up to the activities through mid-year decentralized and participatory workshops where representatives of the Managing Committee and selected partners attend. Additionally, semi-annual reports (including progress indicators and measures description) are prepared. It is expected that the lessons learned during the first phase of the project (which has just concluded) will be considered into account to improve planning tools and monitoring activities for the second phase, which will start during the fourth quarter of 2010, based on the logical framework presented in Box 3.

Box 3. Perubiodiverso Project Logframe -2010-2012

Objectives, Results and Main activities	Objectively Verifiable Indicators (OVI)
<p><u>Development Objective</u></p> <p><u>Impact:</u></p> <p>The populations of selected rural areas improve their quality of life through sustainable use of biodiversity.</p>	<p><u>OVI-OS.1</u></p> <p>Income increase of small farmer's families in intervention areas.</p> <p>→15% increase of producers/primary collectors in selected/promoted crops</p> <p>→ 20% increase of the Price of added value and promoted crops sold by small farmers (field price v. retail price)</p> <p>→20% increase of profit margin for small farmers' families when selling promoted crops.</p>

¹⁶ An integrative Monitoring and Assessment System for a National Program implies specialized design and high maintenance costs. To date, none of the institutions involved in the BNP have been able to afford such costs.

¹⁷ Impact Monitoring System, developed by GTZ.

Objectives, Results and Main activities	Objectively Verifiable Indicators (OVI)
<p><u>Project Objective outcome:</u></p> <p>Biodiversity businesses incorporating biotrade P&C have increased.</p>	<p><u>IVO-OP.1.</u> (Markets Development)</p> <p>Biodiversity businesses include the biotrade approach and switch into new biotrade companies.</p> <ul style="list-style-type: none"> → Incentives designed for biotrade promotion. → 25 companies applying biotrade P&C (exporter and/or producer organizations) → Increase of biotrade exports value in 100% → 10 hotel and gastronomic companies acquire products from biotrade and producers' organizations. <p><u>IVO-OP.2.</u> (Competitiveness)</p> <p>Biotrade competitive products are offered</p> <ul style="list-style-type: none"> → 10 quality improved products → Offer Volume satisfies demand → Private investment in Research and Development Processes (R&D) <p><u>IVO-OP.3.</u> (Political Framework)</p> <p>Policies and Public Awareness on Biotrade issues</p> <ul style="list-style-type: none"> → 40% increase of financial resources assigned to public entities members of the BNP → Number of decision and policy makers that are aware of biotrade → 3 revised and updated laws/regulations promoting biodiversity trade

Another project designed in the framework of the NBP and that will be soon implemented is the GEF-CAF-PNUMA "Facilitation of funding for biodiversity-based businesses and support to market development activities in the Andean region" project (hereinafter, the GEF-CAF-PNUMA project). For the implementation of this project, there is already an Assessment and Monitoring System Manual, which poses three axes:

Initiative Record: the GEF-CAF-PNUMA Project generates impact when supporting BioTrade initiatives. This component aims to gather the information related to such initiatives using two tools: the Initiative Record Formant and the Regional Initiative database. The principal way to measure progress of the project will be by verifying compliance of the BioTrade (P & C).

1. *Regional Logic Framework:* given its regional nature, the GEF-CAF-PNUMA Project needs tools to measure progress at this level. These include the Monitoring and Impact Indicators Form and the Initiative Records Compilation from all countries. (See Annex2).
2. *Country Operational Plan:* each country lays out the regional objectives at the national level in an Annual Operational Plan (AOP), where activities are established in order to accomplish the monitoring and impact indicators.

Aside from the tools described above, the MEA includes a series of reports to be submitted (biannually, annually, mid-term and at the end of the project) to GEF, CAF and PNUMA. Both GEF and PNUMA have monitoring forms that will be used by this system.

The MEA will be operated by the National Executing Units of the countries participating in the Project. In the case of Peru, PROMPERU will be responsible to coordinate the system.

Although projects described in iv) are the main reference of BioTrade activities in Peru, it is accurate to emphasize that the institutions members of the National Commission, also have their own internal monitoring systems, which assesses progress and impacts for indicators relating to its areas of intervention.

Comentario [v2]: Sería recomendable listar la institución y sus indicadores para hacer el match con los de UNCTAD

We have been able to identify that there are four member institutions of the National Commission that currently have biodiversity information systems that can be used for implementing a MEA. In fact, these institutions are generating and gathering relevant and up-to-date information as follows:

- **Peruvian Amazon Information System – SIAMAZONIA**

SIAMAZONIA is the center of reference for handling information on biological diversity and environmental aspects regarding the Peruvian Amazon. The purpose of the system is to raise the level of knowledge and communication on these issues and thereby contribute with sound practices and decisions for the conservation and sustainable use of the Peruvian Amazon.

SIAMAZONIA works as a decentralized and organized network between entities and specialists who generate or handle relevant information. It integrates with similar initiatives such as the CBD Clearing House Mechanism (CHM), the Global Biodiversity Information Facility and the Inter American Biodiversity Information Network (IABIN).

This system has information ranging from taxonomic classification of species, ecosystems and native communities identification, to information on tools including maps, digital files, among other.

This system contains a link called 'BioTrade' where one can find information regarding existing bio-businesses development opportunities in the Peruvian Amazon. It is important to mention

that this page includes some relevant information systems that will serve to implement BioTrade initiatives such as:

- Amazonian BioTrade Services Platform
- Decentralized BioTrade Information Network
- Forest Information System – SIFORESTAL

- **Environmental Information National System - SINIA**

SINIA is an integrated technological, institutional and human network that assists in the systematic organization, use, access, distribution and exchange of environmental information. Information kept by the SINIA serves as support for decision-making in environmental management processes. The system can be found in the website of the Ministry of the Environment (www.minam.gob.pe).

This system allows to access to information regarding components of the environment and several related issues. In fact, it provides information on: air, soil, biodiversity, water, solid waste, among other. The information includes environmental indicators, thematic maps, full papers, reports on the state of the environment, environmental legislation, etc.

The technological operation of the SINIA uses web systems to show environmental information in an orderly and systematized manner. Such information is organized in different modules, as follows:

1. **Environmental Indicators.** Quantitative environmental information that allows us to measure the state of the environment in its different variables.
2. **Thematic Maps.** Slide and maps bank for public access (image and interactive formats).
3. **Environmental Library.** Booklets, magazines, newsletters, books and other environmental publications that are processed by the Ministry's Documentation Centre.
4. **Reports on the state of the environment.** Reports at the national, regional and local level.
5. **Environmental Laws and Regulations.** Compendium of legal instruments sorted by theme in order to facilitate quick access from the web.
6. Useful links to diverse environmental issues, events, news, etc.

- **Foreign Trade Integrated Information System – SIICEX**

Foreign Trade Integral Information System (SIICEX by its Spanish acronym) is an information portal that gives to the business community, especially to the peruvian exporters, updated and classified information in order to strengthen and integrate their business to the world, it is organized by profiles of the following modules:

1. **Intelligent Market.** Foreign Trade Statistics reports, international reference prices and market information.
2. **Commercial Promotion.** Portal with information on embassies and foreign offices. Trade Events and investment projects. Directory of foreign buyers.

3. Exportable Offer Directory of Peruvian exporters
4. Market access and negotiations. Foreign Trade Politics
5. Trainings Programs. Virtual and presence courses.
6. Permanent communication windows with a PROMPERU consulter.
7. Interaction Tools. Specialized forums
8. My SIICEX . Gives personalized and updated information in the user virtual office.

2. Biotrade Principles & Criteria (P&C) in Perú

BioTrade is a relatively new concept in Peru. Biological Diversity Conservation and Sustainable Use Regulations (Supreme Decree 068-2001-PCM) introduced it to national legislation for the first time in 2001. In doing so, said Regulations considered the terms and parameters established by the CBD.

Article 87 of the above-mentioned statute, defined BioTrade as the "*Activity that promotes investment and trade through the sustainable use of native biodiversity resources, lined up with the objectives of the Convention on Biological Diversity; supporting the development of economic activity at the local level through strategic alliances and the generation of added value, competitive biodiversity products for national and international markets with social equity and economic efficiency criteria*".

On the other hand, UNCTAD defines BioTrade as the "*activities of collection, production, transformation, and commercialization of goods and services derived from native biodiversity (species, genetic resources and ecosystems) under environmental, social and economic sustainability criteria*"¹⁸.

We have identified that the P&C design and validation process has taken place through 2 levels: International/Regional level and National level

- **International/Regional level**

At this level, the establishment process of the BioTrade P&C has been done in a participatory manner, including UNCTAD and the National Programs (2004-2007). Three stages have been identified at this level (Ostolaza, 2007):

1. Strengthening of the institutional framework and capacities (1995 -2005). Proposal development and consensus process for the validation of BioTrade P & C at the national and regional levels (2003 - 2006).
2. Development of and global consultancy on indicators and verifying mechanisms for the value chains promoted by UNCTAD's BTFP according to WTO and ISEAL guidelines (2006-2007).

¹⁸ UNCTAD, BioTrade Initiative. BioTrade Principles and Criteria.

It should be noted that the results of stage 2 (BioTrade P & C matrix) and phase 3 (verifying mechanisms for the natural ingredients and products sector), have been used as reference for the validation process at the national level, as described later.

- **National level**

The definition of the BioTrade P&C began in Peru in 2002 through a regional process led by UNCTAD's BioTrade Initiative. Initially, ten BioTrade principles were established which were revised and uniformed later on at the regional level along with the BioTrade National Programs from Bolivia, Colombia, Peru and Ecuador (Regional Workshop held in La Paz, Bolivia in 2004 and promoted by the UNCTAD/BTFP BioTrade Initiative). The aim of the workshop was to develop an international standard to establish BioTrade guiding P&C(Stage 2 of the International level described above).

Seven principles and twenty-six criteria were recognized regionally as a result of the workshop. However, participants agreed that each National Program would validate them at the national level. It was also agreed to establish a methodology or strategy for their application.

For this purpose, a 'Quality Program' took place in Peru in 2005. Six companies were selected to be trained¹⁹ (along with their providers) in order to obtain the Safe Quality Food (SQF) certification provided by SGS (inspection, verification, testing and certification company)²⁰. The P&C validated at the national level were incorporated to the verification process. Afterwards, a compliance verification pilot project took place, which allowed evaluating the selected companies. Although it was found that there was a certain level of difficulty to the application of the BioTrade P&C, it was also confirmed that companies could be ready to start its implementation in the short term. However, support from the NBP was needed to do so. Lessons learned from this experience, were considered in the process of elaboration of a verification framework for the ingredients and natural products sector²¹, which was carried out by BTFP/UNCTAD (stage 3 of the international level).

Comentario [v3]: No me queda claro la relación entre la certificación SQF y los P&C

Following the BioTrade P&C validation process in Peru, Perubiodiverso project supported the NBP, through financing a consultancy on Considerations for the development of a Methodology for implementing BioTrade P&C (J. Ostoloza, 2007). Said consultancy concluded that the implementation of the BioTrade P&C must:

1. Be articulated to the 'competitive chain' concept.
2. Have a technical and financial support.
3. Have tools that allow BioTrade products to differentiate in the market:
 - a. Harmonization/Unification of BioTrade-related terms.
 - b. Strengthening credibility on BioTrade P&C.

Note as a finding of this consultancy that at the national level, credibility on P&C is weak and that BioTrade issues are present only in a very small group of institutions, mainly public²². One

¹⁹ The six companies were: Laboratorios Hersil, Aurandina SAC, Unión Farmacéutica, Peruvian Nature, Laboratorio Fitofarma y Laboratorio Induquímica.

²⁰ The Quality Program was carried out as part of the component named "Strengthening the Value Chain of Natural Ingredients and Products" component of the BTFP in Peru.

²¹ BioTrade Verification Framework for Native National Ingredients (2007).

²² This scenario could change if the BNP effectively leads BioTrade issues at the national level.

of the main reasons on why other institutions have not joined the initiative, have been lack of knowledge on how BioTrade works and lack of agreed and clear guidelines.

J. Ostolaza mentions at this point that at the international level, UNCTAD's BioTrade Initiative has promoted and sought to complement efforts with industry institutions, NGOs and private sector actors. The same author points out the creation of the Union for Ethical BioTrade (UEBT), a non-profit association searching for dissemination and compliance with BioTrade P&C in international markets. For this purpose, UEBT has designed a verification system that will allow companies to demonstrate their social and environmental responsibility through their contribution to biodiversity conservation and sharing of benefits arisen from biodiversity use.

Precisely, this consultancy concludes as a recommendation to implement BioTrade P&C to take the verification process designed by the UEBT as a reference and to use the tools provided by such process:

1. For the registry of initiatives: using the 'Company Profile' (designed for the registry of BTFP BioTrade initiatives).
2. For the evaluation and diagnosis: Using the auto evaluation matrix (taken from the Verification Framework).
3. For the incorporation of the BioTrade P&C: develop and implement a Business Plan.

The results of this consultancy were presented to the NBP during the workshop "Discussing and validating BioTrade P&C" held in Lima in October, 2008. The objective of this workshop was to generate a discussion space to generate consensus between public and private organizations on the P&C, indicators and minimum goals to be achieved by companies willing to be considered BioTrade companies.

GERENS – Consultancy Firm was responsible for providing spaces for discussion and team work during the workshop as well as a system for group decision making. Such system allowed to efficiently gather the participant's comments on the complexity of the criteria implementation by the companies.

It is appropriate to clarify that as a result of this workshop, some adjustments were stated to the criteria proposal as well as the one regarding the indicators and their gradual application. Participants agreed that this would be a pending task since it was suggested to complete this process by applying the verification proposed methodology by J. Ostolaza to a group of companies in a pilot project²³.

One of the commitments taken by the Perubiodiverso Project during the P&C Validation Workshop was to implement a Pilot Project. In this way, the "**Assistance in the evaluation and application of the concept and BioTrade P&C in selected value chains**" was developed and implemented.

With the purpose of evaluating its applicability, during December 2008 through March 2009, the Centro de Ecoeficiencia y Responsabilidad – CER, part of the GEA Group, applied the

²³ Report of the BioTrade P&C Validation Workshop (prepared by GERENS).

Verification Framework²⁴ by carrying on the evaluation of four selected companies of the project:

- Koken del Perú S.R.L., for the maca crop
- Peruvian Nature S.A.C., for the maca crop
- Aurandina S.A.C., for the valeriana crop
- Roda Selva S.A.C., for the sacha inchi crop

The assessment of the value chains represented by the companies mentioned above, included a 'first part' evaluation or 'self evaluation' in which the General Manager of each of the participating companies applied the Verification Framework, and a third part evaluation, carried on by CER. Both assessments served as tools to identify adjustments and improvements to the BioTrade P&C Verification (UEBT) considering its field application.

After the application of the Verification Framework, GEA presented the following recommendations to the project²⁵:

- The need to unify the terms used as part of the Verification Framework.
- The compliance indexes must reflect the commitments of each one of the members of the value chain. Additionally, these must be gradually placed where the final indicator states compliance of the previous indicator.
- The use of adjectives that state a value judgment such as "there is no interest" must be removed from the compliance indexes.
- Definitions of specific technical aspects that may cause confusion must be included.
- When possible, examples of means of verification should be included to allow an easier comprehension on BioTrade P&C implementation.

Likewise, the use of this Verification Framework allowed highlighting of some issues to be considered in the process to support organizations in the implementation of BioTrade P&C:

- Clear definitions of products applicable to BioTrade.
- Support of the organizations seeking mid and long term contracts with markets interests in BioTrade products.
- Flexibility in the evaluation of principles related to land holding and use of resources due the lack of clearly defined property.
- Definition of the role and functions of the State and organizations related to certain actions such as the investigation of genetic variability, among other.
- Construction of appropriate competitive tools that support promotion and awareness of potential markets interested in purchasing goods produced respecting these P&C. In this step, it is very important that the Government and International Cooperation entities interested in these matters, along with the organizations, promote the awareness of goods produced considering these principles in order to expand markets and opportunities.

²⁴ Proposed by the Union of Ethical BioTrade (J. Ostolaza, 2007).

²⁵ Final Report on the experience in the application of the Verification Framework of BioTrade Principles and Criteria in priority chains of the Perubiodiverso Project (GEA, 2009)

Finally, GEA points out that in order to apply the Verification Framework as a tool that supports the implementation of BioTrade Principles and Criteria, it is important to consider:

- The voluntary nature of the application of BioTrade P&C.
- The spirit of “Code of Conduct” rather than a System of Management that the P&C transmit.
- The demonstration of a close relation between each of the members of the chain.
- Knowledge of BioTrade and Biodiversity by the organizations (and their members) subject to evaluation.

The report concludes with a proposal of a new Verification Framework of the BioTrade Principles and Criteria, which is currently under assessment as part of a consultancy. The objective of said consultancy is to analyze the lessons learned from the implementation of the P&C, which will be addressed later.

A second verification experience took place as part of the National Contest “BioTrade, a challenge for a Biodiverse country” promoted by MINAM and supported by Perubiodiverso. For this process the company Control Union Peru – CUP was selected as a verification entity (approved by the UEBT).

As part of this activity, five projects were subject to verification:

1. Andean Food Consortium, Cusco (Andean grains)
2. Villa Andina S.A.C, Cajamarca (Potato).
3. Inversiones 2A, Junin (maca).
4. Hierbas Aromáticas de Sihuas Pachachin (Hapssa) S.A. Sihuas, Ancash (Aromatic Herbs).
5. CECOVASA, Puno (Coffee).

Be advised that we have not obtained the report of this verification, but it has come to our knowledge that, shortly, MINAM will be organizing the information obtained from this experience.

Finally, to conclude with the analysis of this process, we identified that the Perubiodiverso project is currently carrying on a consultancy which has as primary purpose: **Identifying, documenting, organizing, and analyzing the most important experiences of the work carried on by the Perubiodiverso Project Phase I in regard with the application of BioTrade Principles and Criteria and the Verification Framework of the UEBT.** The consultant has carried on actions in order to:

- Determine the applicability and functionality of BioTrade P&C and the Verification Framework of the UEBT.
- Obtain an application proposal for BioTrade and its corresponding verification framework / certification.

Although a preliminary diagnosis report of application process of the Verification Framework in Peru is available (GEA and CUP)²⁶, the proposal to continue with the BioTrade P&C application process in Peru is still under development.

It must be noted that the findings as of this date are aligned with the report from GERENS, as well as with the GEA report, both oriented, basically, towards the adjustment of the Verification Matrix and clarification of the indicators and the Criteria. Although results of said consultancy have been presented, the proposal for the application of the P&C in Peru is still pending. This proposal should be the starting point for collecting the information.

3. Biotrade Impact Assessment System – BT IAS

a. Antecedents

As of 2006, the UNCTAD BioTrade initiative has developed a System to evaluate the Impact of BioTrade (BT IAS) with the purpose of providing a harmonic system that will allow defining and measuring the contribution of BioTrade to sustainable development, as well as the use and conservation of biodiversity.

The BT IAS was concluded and validated on July 2010 by all its members after a year of design. This process included meetings, consultations and national and regional workshops with key parties, as well as the participation of experts.

The BT IAS was initially approved by stakeholders related to BioTrade from Africa and Latin America. The workshop to validate the BT IAS took place on March 5 and 6 of 2010 in Lima, Peru, when indicators and the pathway to conclude the development and application of the system were agreed. During this workshop, stakeholders approved the use of this system as part of their Monitoring and Evaluation System (M & E).

It is necessary to note that, for purposes of this System, the impact assessment is “...the systematic analysis of the significant and longstanding changes – positive or negative, expected or unexpected – due to an intervention or a group of interventions”²⁷. Hence, analyzing the direct consequences of BioTrade is analyzing the “changes”, positive or negative, expected or unexpected at field level in the application of the BioTrade concept.

a) Methodology²⁸:

The methodology to develop the BT IAS has been developed by UNCTAD in the last five years. It has been determined that the system shall be implemented annually and the information will be collected through field visits associated to regular activities of National Programs. Said

²⁶ The collection of information was based on interviews made to the companies involved in these verifications.

²⁷ « ...the systematic analysis of the lasting or significant changes – positive or negative, intended or unintended- in people’s lives brought about by a given action or series of actions » Roche, C. (1999). Impact Assessment for Development Agencies, Learning to Value Change. Oxford, Oxfam and Novib. Traducción libre.

²⁸ Biotrade Impact Assessment System, UNCTAD (2010)

system will also be implemented by self evaluations and external evaluations, when these are possible due to coincidence with verification audits. Other activities that could be useful for the implementation of the System will be identified. The analysis will allow a progressive assessment of the trends and the changes in the State until five years of significant information is collected. The progress (potential / change) will be determined based on the evolution of the results. This will allow a maximum restriction of any subjectivity involved in the estimation of the change potential.

a) Impact Indicator

The indicators taken into account for this consultancy are part of the latest version sent by the UNCTAD, which have been aligned with the Impact Indicators of the UEBT (electronic message 10.10.2010).

a) Information Sources

BT IAS documents determined that, in order for information to be reliable, it was necessary to explore beyond the experts "professional judgment" and recommended reviewing primary and secondary sources, such as:

- Documents produced by the BioTrade National Programs.
- Documents produced by private organizations or by government entities.
- Polls and direct interviews.

Additionally, it is stated that, to have access to these information sources shows in most cases the commitment from National BioTrade Programs, as well as from private companies working in BioTrade. It is expected that UNCTAD develop an Information Management System (IMS) which will centralize all the available information and the data collected from the impact evaluation system.

a. Development of the Base Line in Perú

For the development of the baseline, UNCTAD has provided an Impact Indicators Matrix: BT IAS Data Gathering Sheet. This document shall be completed with data from companies that have applied BioTrade P&C. Product No. 1 of this consultancy focuses in said Sheet Gathering information from selected companies.

This process was carried on in three stages:

Phase 1: Company selection

Companies were pre-selected jointly by PROMPERU and the UNCTAD BioTrade Initiative. For such purpose, being a beneficiary of the NBP was not the sole criteria. Companies were required to pass a process of verification of the application of BioTrade Principles and Criteria.

Companies participating in the GEA pilot project and the winners of the BioTrade contest²⁹ were selected. A complete list of the selected companies is showed in Box5.

Box 5: Company Selection

Company	Verifier	Resource	Products	UEBT Member
Grupo Empresarial Cusco Alimentos Andinos Andean Food	CUP	Quinoa, kiwicha	Productos derivados de quinua y kiwicha	X
Peruvian Nature S & S SAC	GEA	Maca	Medicinal plants, maca, yacón, quinua, kiwicha, agüaymanto	
Bebidas Interandinas SAC (BISAC)	SGS	Maca	Maca and other products	X
Hierbas Aromáticas Sihuas Pachachin SA (HAPSSA)	CUP	muña, matico, palisante	Aromatic herbs (fresh and dried)	X
Aurandina SA	GEA	Valeriana	Natural Medicine	Applying
Villa Andina SAC	CUP	papa native	Agüaymanto, instant native potatoes puree, mushrooms, yacón	X
Promociones e Inversiones Roda SA	GEA	sacha inchi	Sacha Inchi, Sacha Inchi oil	
Koken del Perú SRL	GEA	Maca	Maca	
Candela Perú	CUP	Castaña	Amazon Nuts, Sacha Inchi oil, chestnut byproducts, agüaymanto	X

²⁹ Which also passed a Verification process.

Inversiones 2A SRL	CUP	Maca	Maca, yacón, camu camu, uña de gato (cat's claw), lúcuma, agüaymanto in various presentations	X
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Phase 2: Gathering of secondary information

Access to and availability of up-dated information to fulfill the data gathering sheets determined the selection of the verified companies. Hence, it was expected to obtain useful information during the verification process. However, we found that the verification framework is mainly based in qualitative information rather than quantitative information. The lack of this type of information represents an obstacle to value and obtain proper scores from the data gathering sheets.

For this phase, the Perubiodiverso project provided the diagnoses made by GEA and CUP, reports and information regarding analysis of verified chains, baselines (mainly for sachá inchi and maca).

Additionally, information was sought in the Information Systems of the National BioTrade Commission (SIAMAZONIA, SINIA, SIICEX, among others). Reports from the data bases of regional governments related to verified resources (mainly Junin, Cajamarca and San Martín,) were identified.

Note that the all the information analyzed is presented in the bibliography included at the end of this report.

Despite all the information consulted, the completion of matrixes posed a great difficulty.

Phase 3: Analysis of the results obtained

In this phase it is important to be advised that the selected companies have recently passed through an interview process carried on by the consultant responsible for the analysis of the verification process. Therefore, carrying on the same process (including interviews and information collection) was not considered recommendable as it could exhaust the companies with additional interviews on the same matter.

Consequently, the data gathering sheets were completed with the available information. Then, they were qualified and valued. Only indicators 1.1 to 1.5 were fulfilled properly, since the rest of them require quantitative information.

The main findings and results of the first analysis are shown in Box 6.

Box 6: Information analysis and completion of the Data Gathering Sheets.

Indicators	Findings
<p>Biological Indicators</p> <p>The way and values to measure the indicators quantitatively has been generated along with experiences and initiatives taking place. Therefore, it has been difficult to visualize in the value chain, and particularly in producers, how to preserve biodiversity.</p> <p>Biological indicators are particularly complex to be catalogued in a quantitative manner if indexes, averages and densities are not considered.</p>	<p>Indicator 1.1 is very clear. However, the information collected does not allow identifying the location of the conservation areas. The indicator states that “For an <i>in-situ</i> production system, the conservation area is to be considered as the total area used by the organization”. This does not apply to the context of the BTOs under analysis since they are provided not only by their own land but from third parties only. Consequently, the term “used” should be extended to third parties’ land that provides BTOs. Unfortunately, we have not been able to find information regarding the area used by the BTO. In Peru, legally protected areas occupy less than 16% of Peruvian territory.</p> <p>Only one case where a legally protected conservation area (or part of it) matches the land used by the BTO has been found. This is the Junin National Reserve (where maca crops grow).</p> <p>Although some companies have got the highest score according to the information provided by them, we believe this is due to misunderstanding of the concept “conservation area”.</p>
<p>The lack of this information did not allow making this analysis.</p>	<p>While evaluating Indicator 1.2, it was determined that some BTOs have included in their Workplans conservation objectives (although in an incipient manner).</p> <p>Regarding Indicator 1.3, it was suggested that it should be used only with wild species. We consider however, that it could also be used for <i>ex situ</i> production areas used by farmers and producer associations.</p>
	<p>Regarding Indicator 1.4, it was observed that the awareness criteria related to those practices and measures was very subjective. Specific interviews would be required for a more precise measurement. Observation of the application or use of these practices would be another alternative.</p> <p>Although it is true that this indicator (and 1.5) measure the producer’s work, its compliance requires that the BTO is committed to the processes at the beginning of the chain and that their work is more proactive. This has been hard to obtain from the existing</p>

Comentario [v4]: El indicador no involucra áreas protegidas, debe hacerse una definición de área de conservación para este y evitar confusiones.

Comentario [v5]: El indicador calza para especies silvestres pero no para cultivos. Considerando que Peru trabaja productos de agrobiodiversidad, se considero incluirlos en el BT IAS pero ciertamente el enunciado del indicador solo aplica a recursos silvestres (tasa de cosecha o de saca) y no a cultivos.

Comentario [v6]: A la empresa no se le puede preguntar sobre las practicas agrícolas que se utilizan en campo, escapa a su competencia

	information.
	<p>Indicator 1.5</p> <p>The importance of biodiversity is acknowledged, particularly in case of wild biodiversity. However, it has been determined that it is not considered as an important value in the work they carry on.</p> <p>Some producers recognize agricultural biodiversity or agrobiodiversity but have not documented their experiences, hence being difficult to measure the indicators.</p>
	<p>The majority of the processes by producers are poorly documented. Therefore, measurement is difficult.</p> <p>90% of the companies are organic or are in the process of being organic.</p> <p>The remaining 10% of the companies receive assistance from a development NGO that aids documenting and eases processes.</p>
SOCIAL / ECONOMIC INDICATORS	Complete information that would allow measurement of these indicators was not obtained.
LEGAL INDICATORS	Complete information that would allow measurement of these indicators was not obtained.

Comentario [v7]: Si es organica la producción este tema esta resuelto y la empresa debe responsabilizarse por el indicador.

Comentario [v8]: Depende de donde midas el indicador. Si es empresa y tiene certificado fair trade es facil, si es productor qué medio de verificación puedes usar?

Comentario [v9]: Solo las empresas formalmente constituidas pueden aplicar a este indicador pero habria que formularlo en funcion a productores que muchas veces desconocen sus propios derechos.

An integration “matrix” has been prepared with the most relevant information required to assess the indicators that will allow to obtaining total data, for example (ha). This will be the basis of the construction of the Form to be used in the interviews with the companies (see Annex3).

The following are the observations raised for the completion of the matrixes based on the verification reports:

- (1) The verification has not taken place considering a predetermined protocol, hence restricting the gathering of information. In some cases the verification was applied on a company to analyze one resource (Aurandina, Peruvian Nature, Koken, BISAC, RODA, Villa Andina). In other cases, it was applied on a single company, for various resources (HAPSSA: muña, panizala, matico) and in another case, the verification was applied to a consortium of companies (Andean Food – 4 companies) and for various resources (Andean grains). An explanation for this situation could be that two institutions (GEA and CUP) were involved. Also, that the verification was practiced on the winners of a contest that presented a project, Andean Food.

- (2) The verifications have obtained more qualitative than quantitative information. In those cases where the verifier of the indicator required quantitative data, no analysis could be carried on (for example, the data of the sales in national and international markets, data related to payment to suppliers, the number of job positions created in the primary links of the chain).
- (3) Although the majority of the indicators aimed at collecting relevant information from the first link of the chain, the gathering of information takes place through the companies (application of the matrix). This situation is complicated due to the fact that the majority of these companies does not present an advanced level of articulation with their supplier (except for some exceptions BISAC/APROTMACA RJ y KoKen/APROMACA E). Therefore, they do not manage this information, which makes us reflect on who should we be directly applying the matrix (on the producer through the company or directly on the producer). Certainly, the value chain focus approach proposed by the BioTrade Initiative should not be disregarded. However, the level of articulation of these companies should be taken into account, in order to obtain information in a more direct manner.
- (4) Note that the final list of the companies will be defined as the information from the interviews is obtained.
- (5) An issue that draws our attention is related to the scope of the term “area of influence”. The verification reports do not mention if these areas are referred to as the species in question or the whole area where the resources are obtained. Therefore, it is presumed, that the information obtained through the verifications should be corroborated in the interviews. This should take place to reassure the accuracy of the information, considering that, as a baseline, it is expected to be as real as possible in order to avoid altering the monitoring and evaluations processes to be applied later.

Phase 4: Gathering of Primary Information

To complete this process, it was agreed with PROMPERU and the Perubiodiverso Project that we would create a Value Chain Registry Format (Annex4). El instrumento podrá ser útil cuando se disponga de la información de las empresas.

Comentario [v10]: Asumo que se refiere a la matriz de información que mencionas en la primera parte.

This format will be used as a tool by the NBP for future follow-up of BioTrade activities in Peru.

It was also agreed that for the final stage of filling the data gathering sheets, only those companies which answered the format would be rated. Otherwise, a baseline with incomplete data would be established.

b. Guideline on how to include the BT IAS into NBP's monitoring and evaluation

The absence of an integrated monitoring and evaluation system obstructs the proper implementation of the BT IAS. Therefore, as it is presented here, we propose several conditions that must be considered by the BNP in order to establish such system:

- Technical Conditions of the BNP
- Functioning Conditions
- Defined responsibilities and roles of the actors of the chain
- Updated information useful for biotrade
- Information system to measure impacts
- Funding

Technical Conditions of the NBP

From the application of the first three indicators, we concluded there is a weak relationship between BTO's and their providers (producers). Therefore, it was very difficult to find clear and defined conservation objectives. It was also found that producers have little or no knowledge on wild biodiversity management or on general aspects of conservation biology.

In this way, we consider that it is necessary to have manuals or training guidelines to register and document local biodiversity. Also, it is essential to know and understand the National System on Natural Protected Areas – SINANPE.

In this process, the participation of local organizations providing technical support to establish conservation objectives and basic indicators to measure the impact of the first two indicators, is certainly very useful.

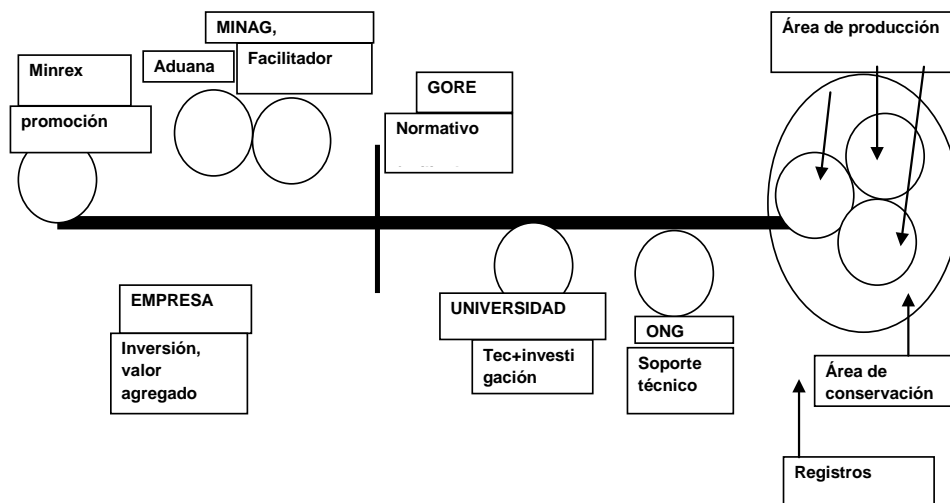
Basic indicators could measure for example species density and wealth or could support developing the species inventory.

Functioning Conditions

The development and application of biotrade requires a territorial approach from the regional and local perspective. The implementation of the BNP and impact indicators must consider the specific and local circumstances.

The BNP's role is to facilitate and promote biotrade in such a way that each institution involved or all of them contribute to establish a favorable environment allowing the model to succeed at the regional level.

Physical aspects and human, material, environmental and technical resources must be taken into consideration in order to generate opportunities. The following diagram shows the actors of the value chain highlighting the key role of regional actors.



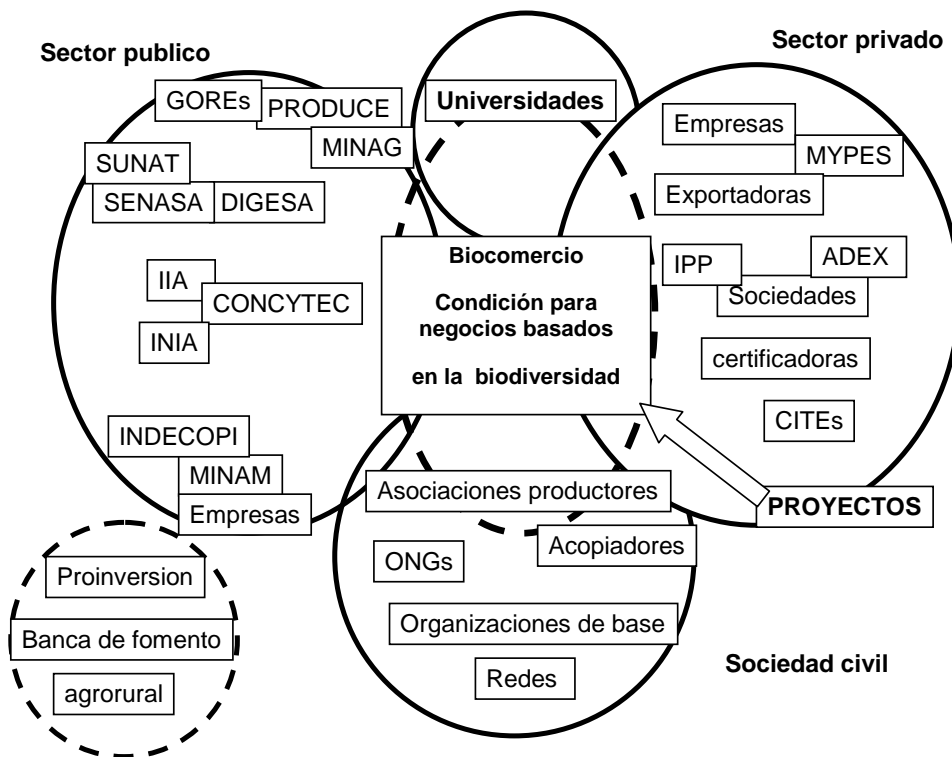
Responsibilities and roles in the Value Chain

The objective of a map of actors interacting with biotrade is to represent the institutional/organizational picture with the aim of identifying intervention, responsibilities and cooperation/alliances relationships involved with biotrade- Maps of the roles of public and private actors are shown in Box 7 and 8.

Box7: Public actors

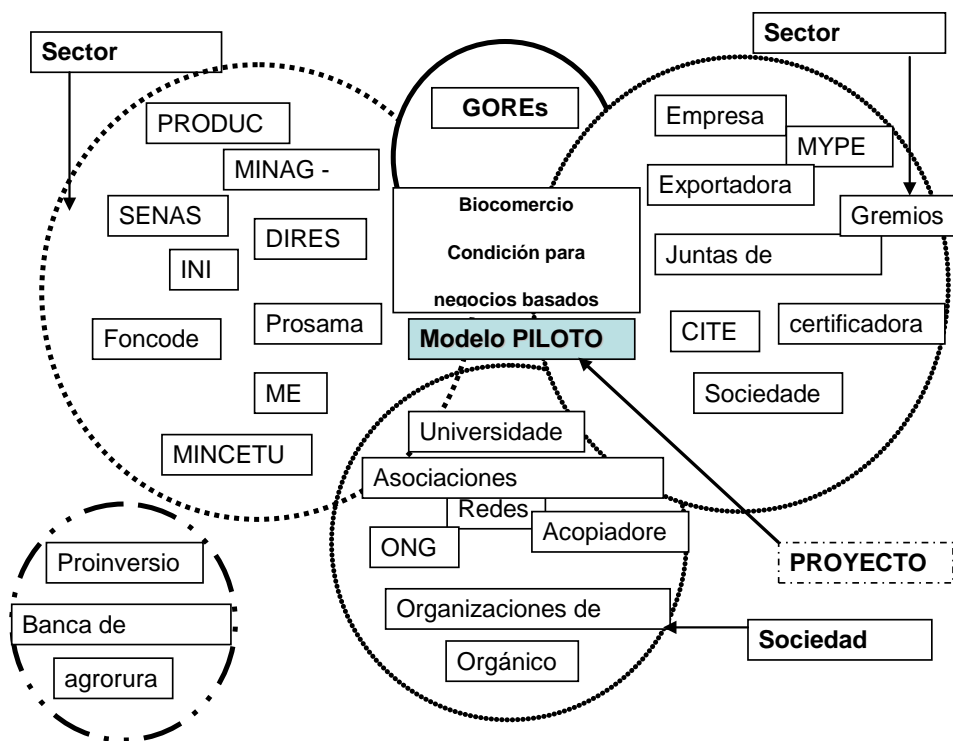
Acción sobre biocomercio	Instituciones	Sector	función
Instituciones normativas de carácter nacional	MINAG (SENASA, INIA), PRODUCE,	Agricultura, bosques, aprovechamiento forestal no maderable	Certificación semillas, planes, concesiones, sanitarios, aduanas
Instituciones normativas de carácter nacional	DIGESA, SUNAT,	Saneamiento, aduanas	Autorizaciones, exportaciones
Instituciones normativas de carácter regional	Gobiernos Regionales -GORES	Multisectorial	Permisos, planes, promoción.
Instituciones normativas de aprovechamiento silvestre	DGFyFS - MINAG	Forestal y fauna silvestre	Permisos aprovechamiento, concesiones

Instituciones promotoras de investigación e innovación	INIA, CONCYTEC, IIAP	Educación, Agricultura, Ambiente	Agricultura, acuicultura, innovación, investigación.
Instituciones promotoras de aspectos productivos	CITEs	Producción	Forestal, acuicultura, pesquería, otros
Instituciones con función bisagra	MINAM, INDECOPI	Ambiente, PCM	Articulación sobre temas específicos



The graphic shows the actors involved with biotrade. Each organization holds a specific role in the value chain. Their interrelationships and the extent of their participation is not shown.

DIAGRAMA GENERAL SOBRE LAS INTERRELACIONES DEL BIOCOCOMERCIO EN EL AMBITO REGIONAL



Box 8: Private actors

Acción sobre biocomercio	Instituciones	Nivel
Organizaciones o Asociaciones específicos	ADEX, COMEX, Asociaciones de productores (APROMACA, APROMACARJ, APSI, APEPA, APEAC, Ceproagro Huanico) Coordinadora de Desarrollo de la Taya - CODETAYA, Centro Ideas, Instituto Cuencas, Instituto Peruano de Productos Naturales - IPPN, Asociación de Productores de Tara de San Marcos, Mesa Técnica de la Tara	Nacional, Sectorial, Regional
Empresas	Candela Perú, Grupo empresarial Cusco alimentos Andinos Andean food, Aurandina SA, Hierbas Aromáticas Sihuas Pachachin SA , Roda, Bebidas Interandinas SAC, Peruvian Nature S&S SAC, Inversiones 2A SRL, Koken del Peru SRL, Villa Andina SAC, Promociones e Inversiones Roda SA.	Nacional
Instituciones con función bisagra	Organizaciones No gubernamentales (AIDER, IDMA, Pronaturaleza, Apeco)	Nacional, Regional
Proyectos	Peru biodiverso, GEF-CAF-PNUMA	Nacional, regional
Actores sociales para promover desarrollo regional	Asociaciones, Gremios, Comités de gestión de ANPs,	Regionales

General Criteria for the information under the BT IAS

Relevance of biotrade in the current context of “Green Economy” and new paradigms mentioned in the **The Economics of Ecosystems and Biodiversity (TEEB)** study, indicates the urgency to record and document the information as the most effective means to make decisions. In that regard, biotrade is the most important mechanism to make biodiversity an integral part of development.

That is why we propose managing an articulated information system between all stakeholders with the aim to improve exchange and dissemination of validated information on biotrade impact indicators.

This can be done through a scenario of services, integrating other information systems, mechanisms for providing information and other information technology tools.

Its objective? To generate information that indicates the real impact of biotrade in national economy under its principles and criteria.

In that sense, it is proponed that such system should be built in a 'nodal way' and that each member of the BNP provide their own information to the system.

The operation of the system requires managing reliable information and databases that must be easily accessed. It should also use common formats for the collection of data and information. In this way, information could be validated by the Organization (public or private) responsible for its management before it is disseminated on the Internet.

This system must contribute and share relevant, timely, and reliable information through various formats (including electronic). Also, it must be updated on a regular basis and provide good service to the user who is seeking for information with biotrade impact monitoring purposes.

The following chart shows the type of information that some actors manage that Could be considered to be included in the proponed information system³⁰.

ACTORES	Técnica científica	Políticas	Financiera	Legal	Empresas	Academia
Gobiernos regionales y locales		X		X	X	
Universidades	X					X
Institutos de Investigación	X					X
Organizaciones no gubernamentales ONG	X		X		X	X
PRODUCE		X			X	
MINCETUR		X			X	
MINAG	X	X				

³⁰ Taken and adapted from BIODAMAZ Report on Information Service Platforms (2004).

MINAM		X			
Cámaras de comercio			X		X
PROMPERU			X		X
SUNAT		X		X	
Organismos internacionales	X		X		X X

What is the impact to be measured?

Regarding environmental sustainability, the BNP should demonstrate that biodiversity is conserved and sustainably used; that all actors involved in the value chain are satisfied in the sense that they are recognized by other; that the product manufacturing complies with environmental standards (including recycling, reutilizing and reducing resources use); that products are organic; among other.

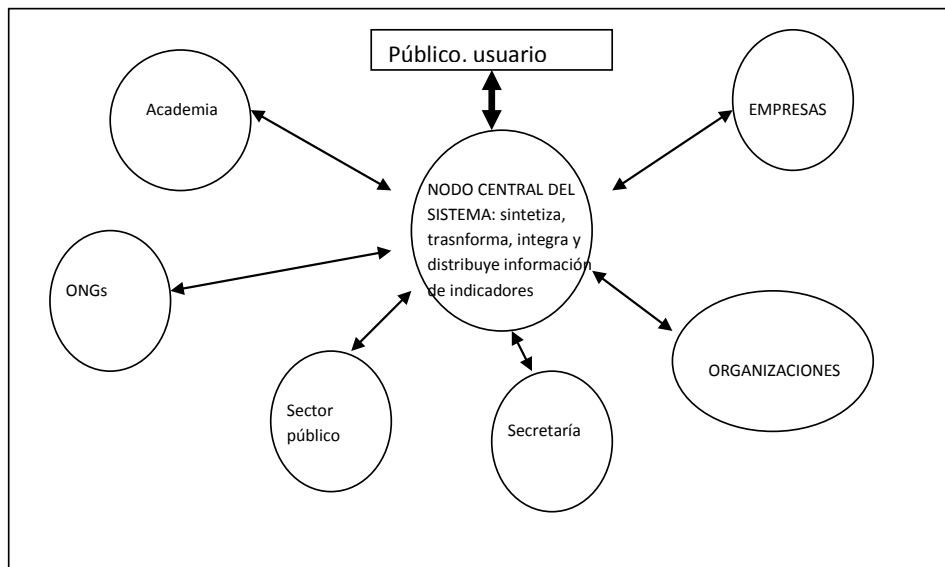
Regarding social sustainability, it should be demonstrated that the actor's incomes have increased (through fair prices) and that their participation is recognized; that they are linked through formal and traceable relationships; that inclusion policies have been placed; that there are tangible benefits for direct and indirect providers; among other.

Regarding economical sustainability, it should be demonstrated that the retail price of biodiversity products has increased due to the addition of value; that formal employments and companies (holding permits, licenses and authorizations) have increased; among other.

Under the above, we propose some basic criteria for the organization that will be responsible for managing the System of Impact Indicators Follow up (Graphic 1):

1. National scope and regional links for information organization purposes.
2. Data base and information proper management (including markets information)
3. Alliances with key / integrating institutions
4. Knowledge and understanding the local and regional context.

Grafico N1: The BT IAS



4. Conclusions and recommendations

In the present consultancy, we have followed the methodology, indicators and protocols established by UNCTAD on the Terms of Reference. However, we believe that there are some changes that need to be implemented in order to build a system that will truly assess the impact of BioTrade activities.

Firstly, we have confirmed that an impact system must be based on official information (provided by SUNAT, PROMPERU or other official institutions) rather than the information provided by the same BTOs that are being assessed.

Comentario [v11]: Que ambas infos se crucen en algun punto.

Secondly, we strongly believe that the data gathering sheets should be filled out considering the information provided by the producers (including local NGO and local governments) rather than by the BTOs. In fact, we have confirmed that BTOs do not have information regarding field facts required by the data sheets.

Comentario [v12]: Lo ideal es que la info se acopie en cada punto de la cadena pero no existe una institución que lo haga, Promperu solo puede inferir en la performance de las empresas exportadoras de biodiversidad.

Requiring information only to BTOs does not reflect properly what occurs in the field. It is possible that BTOs do not have information on some issues or even worse, present inaccurate information. BioTrade value chains in Peru are still basic, and are definitely not articulated. Therefore, it is essential to include other actors of the value chain to measure the impacts.

References

- BT IAS working document, UNCTAD (02.2010)
 - BT IAS workshop report, UNCTAD (03.2010)
 - BT IAS Data Gathering Sheet, UNCTAD (10.2010)
 - BT IAS Compatibility UEBT, UNCTAD (10.2010)
 - UEBT impact measurement System, Draft document, UEBT (2010)
 - Informe sobre “La economía de los ecosistemas y la biodiversidad-TEEB”
 - Estrategia Nacional de Biocomercio - Perú (2007-2010), Blanca Sánchez A. (2007)
 - Proyecto PeruBiodiverso I (2007)
 - Consideraciones en el Desarrollo de una Metodología para la implementación de los principios y criterios del Biocomercio, en el marco del Proyecto Perubiodiverso, Jocelyn Ostolaza (2007)
 - Resultados del Taller de Validación de Principios y Criterios de Biocomercio, GERENS (2008)
 - Experiencia en la aplicación del Marco de Evaluación de los Principios y Criterios del Biocomercio en las cadenas preseleccionadas del Proyecto Perubiodiverso, CER/GEA (2009)
 - Lecciones aprendidas en la promoción de la aplicación de los Principios y Criterios y el marco de Verificación de la UEBT por el proyecto PerúBiodiverso, Frank Schreiber (2010)
 - Marco lógico del Proyecto Perubiodiverso II (2010)
 - Manual del Sistema de Monitoreo y Evaluación del Proyecto GEF/CAF/PNUMA, Anamaria Aristizabal (2010)
 - Documento de Trabajo Cadena de Valor de Maca Meseta Bombón Junín y Pasco – Análisis y Lineamientos Estratégicos. Aliaga Cárdena R. et al 2007.
 - Línea de Base de Productores de sacha inchi en 7 provincias de la región San Martín, Proyecto Perubiodiverso (2008)
 - Analisis de la cadena de Maca en la Meseta del Bombom, Proyecto Perubiodiverso (2008)
 - Analisis de la Cadena de sacha Inchi en San Martín, Proyecto Perubiodiverso (2008)
 - Análisis de la situación de la Asociación de Productores de Sacha Inchi APOLPAWA en la provincia de Lamas, San Martin. Shanantina S.A.C, 2009.
 - Fundamentos Técnicos de Zonificación para el Cultivo de Maca Meseta de Bombom Junín. Aliaga Cárdena R. et al 2007.
 - Análisis Situacional de la Asociación de Productores de Maca – APROTMACARJ. CEDEP 2010.
 - Línea Base de Productores de Maca – Análisis del Territorio de la Meseta Bombom y de los Hogares Rurales.
 - *Marco de Verificación para Ingredientes Naturales Nativos Happsadoc resumen publico – Control Union World Group*
 - *Marco de Verificación para Ingredientes Naturales Nativos 2A resumen publico – Control Union World Group*
 - Measurement Impact Happsadoc - Unión para el Biocomercio Ético método de medición de impacto Formato para la recolección de datos
 - Measurement Impact 2A- Unión para el Biocomercio Ético método de medición de impacto Formato para la recolección de datos
- Grupo GEA 2009

Web pages:

- www.biotrade.org
- www.uebt.org
- www.biocomerciooperu.org
- www.promperu.gob.pe
- www.minam.gob.pe
- www.iiap.org
- www.minag.gob.pe

- www.kokendelperu.com
- www.inversiones2a.com
- www.peruviannature.com
- www.bisac.com.pe
- www.rodaperu.com
- www.herbssihuas.com
- www.wawasanacom.pe
- www.apromacae.com

Annexes

Annex 1: Supreme Decree 009-2010-MINCETUR

Annex2: The GEF-CAF-PNUMA's logic framework

Annex3: Matrix's Value Chain (Company selection)

Annex4: Value Chain Registry Format