

# **The BioTrade Impact Assessment System**



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For further information on UNCTAD's BioTrade Initiative please consult the following website:

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## Acronyms

ABS	access and benefit-sharing
ACTO	Amazon Cooperation Treaty Organization
BIP	Biodiversity Indicators Partnership
BT IAS	BioTrade Impact Assessment System
BTO	BioTrade organization
CAF	Corporación Andina de Fomento
CAN	Andean Community General Secretariat
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COSA	Committee on Sustainability Assessment
GEF	Global Environment Facility
ILO	International Labour Organization
IPM	integrated pest management
MEA	multilateral environmental agreement
NGO	non-governmental organization
Osec	Business Network Switzerland
PTA	PhytoTrade Africa
SECO	Swiss State Secretariat for Economic Affairs
SIPPO	Swiss Import Promotion Programme
UEBT	Union for Ethical BioTrade
UNEP	United Nations Environment Programme

## 1. Introduction

The BioTrade Initiative aims to promote the conservation of biodiversity and encourage sustainable development through its sustainable commercial use. Since 1996, a variety of sectors have been supported in Africa, Asia and Latin America, in partnership with regional and national organizations. These sectors include non-timber forest products, wildlife-derived products, sustainable agriculture and tourism.

With a growing number of programmes and partners implementing BioTrade, there is a constant demand to demonstrate and measure at grassroots the social, economic and environmental benefits being generated. Particularly important is validation of the phrase “BioTrade – hence the promotion of trade and investment in biodiversity under its principles and criteria – contributes positively to sustainable development”.

Individual and independent efforts have been made by BioTrade programmes and partners to measure and to report on the impact of their activities. However, the data obtained have not always been comparable or capable of being aggregated. To address this problem, the United Nations Conference on Trade and Development (UNCTAD) with the active participation of its partners, has undertaken the task of developing the BioTrade Impact Assessment System (BT IAS) since 2006. Partners are encouraged to use the BT IAS to measure the impact of their activities meaningfully.

The BioTrade Initiative was launched by UNCTAD in 1996. Its mission is to promote trade and investment in biological resources to further sustainable development in line with the three objectives of the Convention on Biological Diversity (CBD). It frames the implementation of its activities within the global conservation and development objectives established under the Millennium Development Goals, the Commission on Sustainable Development, the CBD, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the United Nations Convention to Combat Desertification and the Ramsar Convention on Wetlands.

The concept of BioTrade refers to those activities related to the collection, production, transformation and commercialization of goods and services derived from native biodiversity (species and ecosystems) under the criteria of environmental, social and economic sustainability. To complement it, UNCTAD, together with national and international partners defined seven BioTrade principles and their respective criteria. The principles and criteria can be applied in different contexts, driving BioTrade processes and programmes to promote the conservation of biodiversity through sustainable commercial use.

More than a decade has passed since the first programme was launched in Colombia in 1998, which was duly replicated and adapted to other countries in the Andean region and Africa. Currently, more than 15 countries in Africa, Asia and Latin America have benefited from BioTrade programmes which focus on a variety of biodiversity-based sectors including cosmetics and personal care, food, medicine, handicrafts, sustainable leather, garments and sustainable tourism.

Results to date have promoted the development of biodiversity-based sectors, generated additional income for producers and local populations, fostered sustainable practices that enhance the use of native biodiversity, created an enabling policy environment, and increased

the knowledge and capacity of producers, companies and government officials in implementing and monitoring BioTrade. However, comparable quantitative and qualitative data to analyse aggregate figures at regional and international levels have been difficult to obtain.

## **2. The BioTrade Impact Assessment System (BT IAS)**

Since 2006, UNCTAD has been developing the BioTrade Impact Assessment System. This system aims to define and measure the contribution of BioTrade to sustainable development and the conservation or sustainable use of biodiversity.

The development process of the BT IAS includes two phases. The first phase started in 2006 when UNCTAD commissioned a consultancy to define the “Impact Assessment System for BioTrade” and a series of working documents were prepared. In parallel, consultations took place with BioTrade programmes in Latin America, certification agencies, government representatives, cooperation agencies and experts. During these consultations, the process and method to define the main elements of the system and the definition of the basic tools to identify, collect and analyse the data to be included, was adjusted based on the feedback received.

In January 2008, the Working Document No. 5, “Building a system to assess the impact of the BioTrade concept on sustainable development” (WD5), was finalized. This document proposes impact and implementation indicators to measure BioTrade activities in line with its principles and criteria. Additionally, it includes guidelines and technical forms for the collection of data in the field.

The second phase started with a consultation phase on the proposed BT IAS that included the organization of the African Technical Workshop on the Impact Assessment System for BioTrade in November 2008 and constituted the first consultation with African partners and experts. In addition, comments were also received from other BioTrade partners and practitioners in Latin America and Europe.

With the inputs received and with the support of an international expert, the concept for field-testing was prepared and tested from March to September 2009 in:

- Africa: Swaziland and Namibia with a natural ingredients chain; and
- Latin America: the Plurinational State of Bolivia with a wildlife chain, Colombia with tourism and handicrafts chains, and Ecuador with natural ingredients and final products for the food industry.

Consultations with other partners were also held.

With the inputs received, a new version of the BT IAS was developed, which was informally discussed and adapted taking into account partners’ comments from January to February 2010. This adapted version was the background document used in the BT IAS workshop held in March 2010 in Lima, Peru. This workshop aimed to present the progress in the development of the BT IAS, as well as to agree with BioTrade partners the system that will be used for developing the information system to host the BT IAS. Participants included representatives from BioTrade programmes, environmental authorities and partners in the

Andean region, as well as PhytoTrade Africa and the Union for Ethical BioTrade (UEBT). See Annex 1 for the workshop participants.

The final system and its indicators are the result of the agreements made by all BioTrade practitioners during the BioTrade Impact Assessment Workshop held in March 2010, the work and discussions that followed this workshop and the meeting with the UEBT in October 2010.

## 2.1 Conceptualization of the BioTrade Impact Assessment System

The conceptual basis of the system includes the following approaches:

- **sustainable livelihoods approach** – this strengthens the human, social, physical, financial and natural capital of people and communities;
- **value chain approach** – where the strengthening of value chains is a critical element in implementing BioTrade principles and criteria;
- **adaptive management approach** – when implementing sustainable practices, it is crucial to consider the identification of impacts on species and ecosystems and the continual improvement of BioTrade initiatives; and
- **ecosystems approach** – ensuring the planning of productive processes related to BioTrade initiatives are environmentally and socially responsible with regard to their impact on species, habitats, ecosystems and local communities.

The seven BioTrade principles and criteria are the core conceptual framework of BioTrade and, therefore, of the impact assessment system and the indicators proposed to measure and track the changes generated. For this reason, the indicators proposed respond to these principles grouped under environmental, socio-economic and governance categories.<sup>1</sup>

### Environmental

- Principle 1: Conservation of biodiversity
- Principle 2: Sustainable use of biodiversity

### Socio-economic

- Principle 3: Fair and equitable sharing of benefits derived from the use of biodiversity
- Principle 4: Socio-economic sustainability

### Governance

- Principle 5: Compliance with national and international regulations
- Principle 6: Respect for the rights of actors involved in BioTrade activities
- Principle 7: Clarity about land tenure, use and access to natural resources and knowledge

There are benefits in developing an impact system that not only measures the impact but also assesses the activities that are being implemented. For instance, it can include the identification of areas for improvement or those that are successful, and define better resource allocation (see Box 1).

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<sup>1</sup> For more information please refer to UNCTAD (2007) *BioTrade Principles and Criteria* (UNCTAD/DITC/TED/2007/4).



### **Box 1. Eight potential benefits of the BT IAS**

**1. Project vision and programme design**

If we achieve our objectives, what would success look like?

**2. Project management**

Are our objectives being achieved? Are we being accountable?

**3. Organizational learning**

What seems to be working (or not working) and why?

**4. Stakeholder management**

To whom must we demonstrate our BioTrade business impacts and what evidence do we need to do that?

**5. Resource allocation**

Where should we put more resources based on the results achieved to date? Where are the payoffs?

**6. Training and capacity building**

Are we helping to improve the ability of people along the supply chain to learn and improve? Is it increasing their self-monitoring ability?

**7. Building a shared understanding of the BioTrade business**

How do we get clarity about the business amongst all stakeholders? Are we communicating effectively?

**8. Sustaining the business**

How can we protect that natural resource base of the business? How can we improve or sustain our reputation for a quality product? How can we grow the business through customer satisfaction?

*Source:* Cunningham AB (2009). BioTrade Impact Assessment. Working Document No. 6, UNCTAD (internal document).

The BT IAS is conceived as an integral tool to be used by partners implementing BioTrade activities and carried out as part of their monitoring and evaluation systems. The BT IAS comprises guidelines for partners to understand the concept of the system, as well as indicators to measure and to track the social, environmental and economic impact of their BioTrade activities. Furthermore, by using the system in a regular basis, we can be able to analyse and define the lasting changes that have been generated.

Due to the broad scope of BioTrade across several sectors, and considering the feedback from field testing and consultations, the current BT IAS will be used to measure products derived from flora and fauna. For sustainable tourism activities, UNCTAD will link with the on-going work carried out by the Sustainable Tourism Stewardship Council.

## **2.2 The objective of the BT IAS**

The aim of the BioTrade Initiative is to promote the conservation of biodiversity to further sustainable development through the sustainable commercial use of biodiversity. Thus, the BT IAS aims to validate this statement, in particular to check if the promotion of trade and investment in biodiversity under BioTrade principles and criteria is positively contributing to sustainable development and the objectives of the CBD.

With this system, we “intended to determine more broadly whether the programme [BioTrade] had the desired effects on individuals, households and institutions and whether those effects are attributable to the programme intervention”. (Cunningham, 2009: 4). “The BioTrade impact assessment system is based on an analysis of the lasting [not temporary] changes in the lives of local communities and the environment in which they live that can be attributed to the concept, be they positive, negative, intentional or unintentional. This should not be confused with assessing the implementation of the BioTrade initiative which provides information, amongst other, on the number of producers engaged, the number of products in the portfolio and laws that have been enacted or modified. It is also distinct from the result of the application of the UEBT verification framework that reveals if and how the producers or other actors along the supply chain conform to the targets set by the BioTrade principles and criteria”. (Pi Environmental Consulting, 2008: 10).

### **2.3 Relationship with biodiversity-based sectors supported**

The development of a BT IAS has been challenging because of two main issues. Firstly, BioTrade programmes and activities are implemented in a wide range of countries and regions in Africa, Asia and Latin America. Secondly, it involves many biodiversity-based sectors (e.g. cosmetics, pharmaceuticals, food, decoration, eco-fashion, flowers and sustainable tourism), productive practices (e.g. agro-forestry systems, wild-collection, farming etc.) and private property rights (e.g. privately owned, community owned or government owned).

The inevitable interminable discussions on the many issues arising could have detracted from producing a practical and cost-effective tool, generating the following pitfalls:<sup>2</sup>

- Overemphasis on “top-down” control and loss of ownership by developing country partners;
- Lost opportunities to develop and fully use local capacity;
- Over-planning and loss of flexibility in impact indicator design;
- Oversimplification and misunderstanding of how development outcomes occur;
- Overemphasis on impacts that are easy to quantify at the expense of less tangible, but no less important outcomes; and
- Mechanical use of impact indicators for reporting purposes in ways that fails to feed into strategic thinking and organizational learning.

However, efforts have been made to render this system applicable for all its users, starting with a broad category which relates to fauna and flora *in situ* and *ex situ*. For other sectors, such as sustainable tourism, the proposed BT IAS needs to be adapted to consider the unique characteristics of this service sector as well as other on-going initiatives, for example those carried out by the Sustainable Tourism Stewardship Council.

Additionally, as the first data are gathered, a revision of the BT IAS should take place in order to adapt and improve the system. (This topic is further developed in the following section 4. Baseline and measurement period.)

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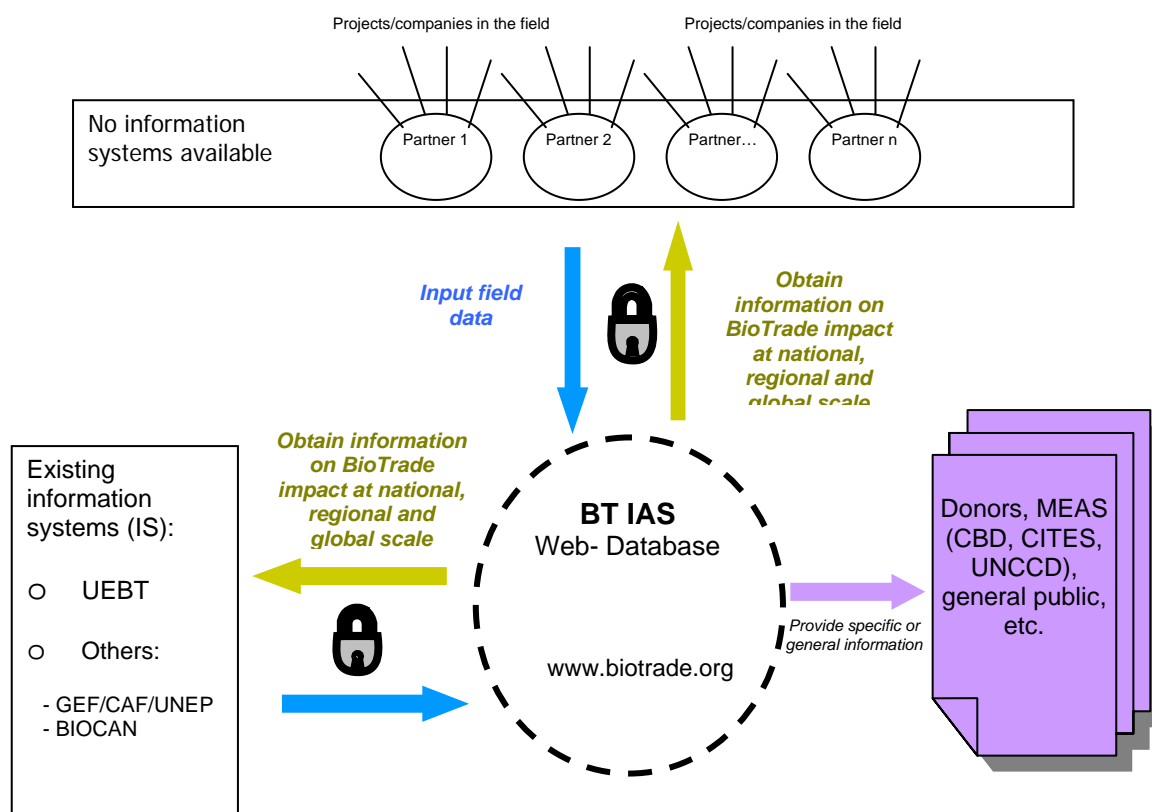
<sup>2</sup> Cunningham AB (2009). BioTrade Impact Assessment. Working Document No. 6, UNCTAD (internal document).

### **3. BT IAS – information system**

The BT IAS has been conceived as an information management tool that partners can access through the Internet to obtain information and/or to enter data into the system (Figure 1). As much as possible, the BT IAS intends to build on the existing information and activities already implemented by partners. BioTrade partners will compile the information in the field based on the agreed indicators and datasheets, as part of their monitoring and evaluation systems. For other partners who have developed or will develop their database systems, the process would be to establish linkages to share information already available (e.g. UEBT, GEF/CAF/UNEP project).

As a result, the system will then compile and process all the data received to prepare reports on the impact of BioTrade worldwide. These reports can be used, for instance, to show the impact of BioTrade to beneficiary governments, donors and MEAs (CBD, CITES and the 2010 Biodiversity Indicators Partnership [BIP]) while identifying areas for improvements.

**Figure 1. BT IAS information system**



Source: L Jaramillo, UNCTAD.

### 3.1 Users of the BT IAS

The BT IAS has been developed as a tool to be used by BioTrade programmes, partners and practitioners that are implementing BioTrade activities. It has been developed in a participatory manner with the aim of searching for a balance between information required and user practicality, so that it will be adopted and used successfully by BioTrade partners.

The system will have three types of users as described below.

#### **USERS: BioTrade partners**

#### **RIGHTS: write and read**

These users includes BioTrade partners such as BioTrade focal points of BioTrade programmes, and national, regional and international partners such as ACTO, BioNativa, CAF, CAN, PhytoTrade Africa and UEBT, among others. These users will have the rights to input information into the system which relates to their activities in the field. However, they will have access to aggregated figures at the regional and international levels that were inputted by other user and no access to individual company or project information will be available.

**USERS: donors and other users of BioTrade**

**RIGHTS: read only aggregated figures**

These users will be able to read aggregated information at the national, regional and international levels that is gathered by BioTrade partners. No access to individual company or project information will be available to them, therefore if only one company is working in one country the data available will be at the regional level. If individual information is requested, it will need to be addressed to the BioTrade partner directly.

**USERS: general public and other users**

**RIGHTS: read only general information**

These users will be able to read only regional and global aggregated figures.

#### **4. Baseline and measurement period**

The baseline for the BT IAS will be the first data gathered in the field and future measurements will be compared with them.

The gathering of the information for the BT IAS is expected to be done annually, as part of the monitoring activities of BioTrade partners and practitioners. However, it is also envisaged that third-party audits and/or company self-assessments will be carried out to gather the information, as is the case with the UEBT.

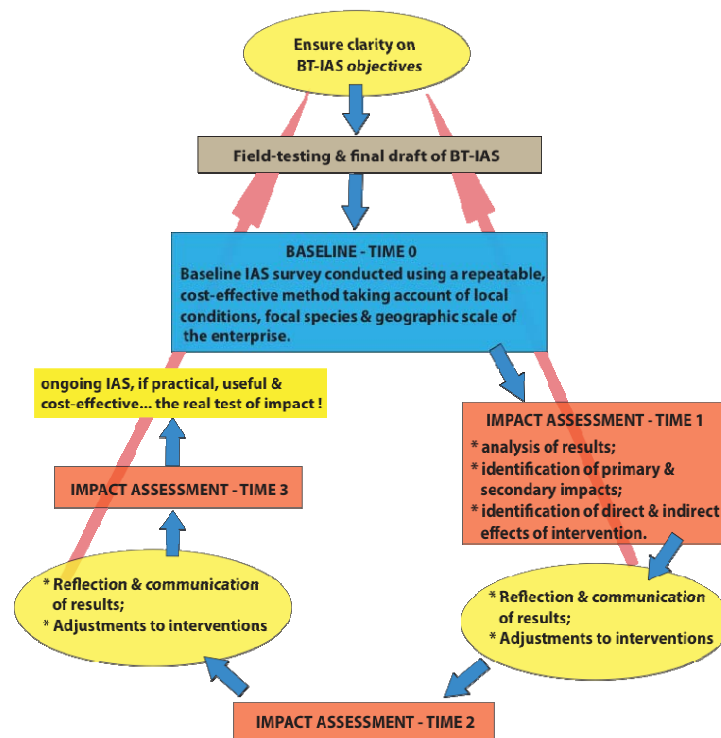
Through the systematic use of the system (data gathering in the field and analysis by BioTrade partners), a revision of all the components of the BT IAS could take place, for instance after the first measurement and then on an on-going basis every other year.<sup>3</sup>

The clarity of the objectives of the BT IAS needs to be ensured by analysing the results of its application, identifying primary and secondary impacts, and considering the direct and indirect effects of BioTrade activities. Thus, the BT IAS will be operated and improved on an ongoing basis as shown in Figure 2.

#### **Figure 2. Enhancing the BioTrade Impact Assessment System**

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<sup>3</sup> Pi Environmental Consulting (2008). Building a System to Assess the Impact of the BioTrade Concept on Sustainable Development. Working Document No. 5: 10. UNCTAD.



Source: AB Cunningham 2009.

## 5. Gathering information in the field

An interpretation datasheet will accompany the BT IAS, which allows assessors to interpret the indicators and register the information using the datasheets developed. The final indicators, as well as the interpretation guidelines (datasheets) were agreed and developed jointly with BioTrade practitioners in Africa and Latin America.

The gathering of information of each BioTrade organization that is being supported will be fed into the information system of the BT IAS. This will be done by experts during their monitoring activities (e.g. the monitoring teams of BioTrade programmes or regional partners such as PhytoTrade Africa) or during the verification and self-evaluation assessments (e.g. as required by the UEBT).

Two complementary steps are envisaged. Firstly, the evaluator or assessor should review relevant documents and information on the company or project that will be assessed, in order to have clear ideas about the activities undertaken and the information that should be sought in the subsequent field visit phase. Secondly, the evaluator or assessor will visit the company or project to discuss with the beneficiaries in order to complement or verify the information obtained. Finally, with all this information, the evaluator or assessor will complete the

A BioTrade organization (BTO) refers to all entities that are using and trading biodiversity-based ingredients and products in compliance with BioTrade principles and criteria. Companies (e.g. transnational, small and medium and micro enterprises), business associations and cooperatives (e.g. producers' associations), NGOs and foundations are examples of BTOs.

information needed for the BT IAS (datasheets) which will then be fed into the information system on an annual basis.

Annual analysis of the data obtained will make it possible to assess and track changes that are generated in a systematic manner.

### 5.1 Guideline sheets for BT IAS indicators

Guideline sheets were prepared jointly by BioTrade partners and practitioners and UNCTAD for each indicator. These sheets explain what is to be measured or assessed as well as how to measure or value and interpret what is being found in the field.

There follows a summary of key analytical steps that should be followed when carrying out the BT IAS.

1. Identify the BioTrade organization being assessed; gather as much information as possible on the initiative, its value chain processes and actors involved as well as review registries and reports relevant to BioTrade. This will involve for instance, secondary information available on the initiative in BioTrade programmes, at UEBT, PTA, BioNativa and others.
2. Establish meetings with key actors including managers, technical staff related to the production and processing processes, producers' leaders and government staff relevant to the sustainable use of biodiversity (e.g. CITES).
3. With the information available, for each indicator assess the organization using the scores (1 to 5) shown in the guidelines and record it in the data collection sheets (explained below). Once all the scoring is finished, analyse the impact of the organization via the interpretation of the results of each indicator.

Each guideline sheet is organized with the following information, and the complete set can be seen in Annex 2.

<b>Indicator X:</b> (Name of the indicator)
<b>Rationale:</b> explain why this indicator is important and demonstrate how it is linked to sustainable development, in particular its relationship towards environmental, social or economic sustainability. It can also give a broader overview of what the BTO should be doing in this regard. Finally, highlights its relationship to the BioTrade principle(s).
<b>Definition:</b> describe the type of indicator (quantitative or qualitative) as well as specific definitions used.
<b>Interpretation:</b> explain what is intended to be measured with the indicator and interpret the results. Also mention its limitations, if any.
<b>Indicator scale:</b> describes where the data will be obtained and how they should be compiled.
<b>Information source and type:</b> describes the required data and the source and type of information needed to assess the indicator. Finally and if needed, please mention the formula used in obtaining the data for the indicator.
<b>Measure:</b> explain how the BioTrade organization will be measured from 1 to 5, 1 being the lowest and 5 the highest.

## 5.2 Data collection sheets for the BT IAS

To register the information and score obtained under each indicator for the BTO being assessed, the BT IAS recommends data collection sheets. These sheets can be filled directly in the UNCTAD information system [www.biotrade.org/ impact4.asp] or ideally, also in partners' web databases from which BioTrade will extract the information. The data collection sheets should include the following fields:

<b>Contact details and information of the BTO, the activity or industry and the species used</b>		<b>Contact details of evaluator</b>			
<b>Area of influence (in hectares: ha) of the producers/collectors of the BTO, including privately owned land, communitarian area, state-controlled area, no-harvest area or other</b>					
<b>Type of impact evaluator</b>					
<ul style="list-style-type: none"> <li>• First party – being the BTO</li> <li>• Second party – being BioTrade programmes and partners that have no direct link to the BTO</li> <li>• Independent third party – being auditors such as those involved in UEBT</li> </ul>					
<b>Date of evaluation</b>		<b>Period covered in the evaluation:</b>			
<b>Indicator</b>	<b>Score for evaluation</b>				
<b>Environmental, social or governance indicators</b>					
<b>Number and name of indicator</b>	BT Impact Indicators: please put an “x” in the box “☒” according to the results of the assessment, showing the score from 1 to 5, or enter the information accordingly.				
	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
	<b>Very low</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Very high</b>
	Description of score	Description of score	Description of score	Description of score	Description of score
	<b>Comments and observations</b>				

The data collection sheets for the BT IAS can be seen in Annex 3.

## 6. Summary of the BT IAS indicators

The definition of the indicators and their interpretation and measurement is based on extensive research and analysis by experts and BioTrade practitioners that started in 2006. In particular, the work carried out by Pi Environmental Consulting (through their technical documents one to five) and Anthony B Cunningham (through his two technical papers). Their work included the analysis of linkages between BioTrade and sustainable development, the



identification of possible indicators and variables, and finally the analysis of the field testing of the BT IAS in Africa and Latin America.

Moreover, the definition of the BT IAS indicators was developed under the umbrella of the following criteria:

**Box 2. Criteria for selecting indicators\***

**Practicality:** How easy and cost-effective is it to measure the impact criteria? What sort of training is required?

**Breadth:** Are some impact indicators redundant because other more inclusive impact indicators already cover them? It is better to choose indicators that correlate with several components.

**Scientific merit:** It is important that impact indicators are backed up by well-founded relationships between the indicator and the component of interest. However, it is often much more difficult to establish scientific merit for a target level of an indicator.

**Accuracy:** How precise do we want (or need) to be? This is a very important trade-off. In general, very accurate measurements cost more and as a result, may not get done at all. On one hand, as Legg and Nagy (2006) point out: “The results of inadequate monitoring can be both misleading and dangerous not only because of their inability to detect ecologically significant changes, but also because they create the illusion that something useful has been done”.

**Credibility:** Impact assessments need to be impartial, reflecting positive, negative or neutral outcomes. It is essential that there is no conflict of interest between the BioTrade related enterprise and those doing the impact assessment. Third-party certification is widely recognized as necessary. It is equally important that independent assessors, such as university researchers or independent consultants, conduct impact assessments. On-the-spot assessments will generally be necessary. Using methods such as telephone interviews with BioTrade businesses will lack credibility: after all, how many BioTrade business managers are going to say things are not working if continued trade depends on the response?

**Relevance:** How appropriate are the impact indicators to the values of stakeholders? This largely depends on the extent to which key stakeholders have been involved in the indicator selection process. One of the significant challenges with BT IAS is that BioTrade covers so many different types of enterprises, from crafts to crocodiles and tourism to tortoises.

**Usefulness:** A key objective of impact assessment is to leverage positive changes and improvements. Can the participants in BioTrade enterprises make decisions based on the indicators? For this to happen, it is not only the independent evaluators, but also the participants in the BioTrade supply chain who have to reach consensus and an understanding of what are good or bad levels for an indicator. Impact indicators generally are most useful when target levels or goals have been set and understood.

\* Adapted from Hagan and Whitman (2006).

Source: extract from Cunningham AB (2009).

## 6.1 List of agreed indicators

As a result of an extensive consultative and participatory process with all BioTrade practitioners and programmes, the following ten indicators were agreed as part of the BT IAS.

<b>INDICATOR</b>
<b>Environmental indicators</b>
1.1 Conservation area under the management of the BioTrade organization
1.2 Conservation and sustainable use of <i>in situ</i> biodiversity (wild species)
1.3 Usage or harvest rates of resources are defined according to the species characteristics (wild species)
1.4 Environmental sustainability of the <i>ex situ</i> production systems
1.5 Level of use of toxic or dangerous substances in agricultural practices
<b>Social indicators</b>
2.1 Average annual income for actors at the first stage of the value chain involved in BioTrade*
2.2 Employment generated by the BioTrade organization at the producer level (first stage of the value chain)
2.3 Annual sales of the BioTrade organization*
2.4 The BioTrade organization has established partnerships with suppliers that comply with BioTrade requirements of traceability, inclusion, transparency and fair pricing
<b>Governance indicator</b>
3.1 Level of compliance with legal requirements and adoption of additional social and environmental responsibility activities

## 7. Other relevant efforts under way and their linkages with the BT IAS

### 7.1 2010 BIP

The 2010 Biodiversity Indicators Partnership ([www.twentyten.net](http://www.twentyten.net)) is a global initiative that aims to track progress towards achieving the "2010 biodiversity target" to significantly reduce the rate of biodiversity loss at global, regional and national levels by 2010. It developed global biodiversity indicators and information on the trends of biodiversity presented during the 10 session of the Conference of the Parties to the Convention on Biological Diversity. It is currently a key partner and source of information to the indicators that measure the achievement of the New Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets. UNCTAD has been an affiliate partner of this initiative since April 2010.

The 2010 BIP includes 17 headline indicators and indicators as described below.

Focal area	Headline indicator	Indicators
1 Status and trends of the components of biodiversity	1.1 Trends in extent of selected biomes, ecosystems and habitats	1.1.1 Extent of forests and forest types 1.1.1 Extent of assorted habitats
	1.2 Trends in abundance and distribution of selected species	1.2.1 Living Planet Index 1.2.2 Global Wild Bird Index 1.2.3 Waterbird Indicator
	1.3 Coverage of protected areas	1.3.1 Coverage of protected areas 1.3.2 Overlays with biodiversity 1.3.3 Management effectiveness
	1.4 Change in status of threatened species	1.4.1 Red List Index and Sampled Red List Index
	1.5 Trends in genetic diversity	1.5.1 <i>Ex situ</i> crop collections 1.5.2 Genetic diversity of terrestrial domesticated animals
2. Sustainable use	2.1 Areas under sustainable management	2.1.1 Area of forest under sustainable management: certification 2.1.2 Area of forest under sustainable management: degradation and deforestation 2.1.3 Area of agricultural ecosystems under sustainable management
	2.2 Proportion of products derived from sustainable sources	2.2.1 Proportion of fish stocks in safe biological limits 2.2.2 Status of species in trade 2.2.3 Wild Commodities Index
	2.3 Ecological footprint and related concepts	2.2.3 Ecological footprint and related concepts
3. Threats to biodiversity	3.1 Nitrogen deposition	3.1.1 Nitrogen deposition
	3.2 Invasive alien species	3.2.1 Trends in invasive alien species
4. Ecosystem integrity and ecosystem goods and services	4.1 Marine Trophic Index	4.3.1 Marine Trophic Index
	4.2 Water quality	4.2.1 Water Quality Index for Biodiversity
	4.3 Connectivity/fragmentation of ecosystems	4.3.1 Forest fragmentation 4.3.2 River fragmentation and flow regulation
	4.4 Health and well-being of communities	4.4.1 Health and well being of communities dependant on ecosystem goods and services
	4.5 Biodiversity for food and medicine	4.5.1 Nutritional status of biodiversity 4.5. Biodiversity for food and medicines
5. Status of traditional knowledge, innovations and practices	5.1 Status and trends of linguistic diversity and numbers of speakers of indigenous languages	5.1.1 Status and trends of linguistic diversity and numbers of speakers of indigenous languages
6 Status of access and benefit sharing	To be determined	
7. Status of resource transfers	7.1 Official development assistance provided in support of the CBD	7.1.1 Official development assistance provided in support of the CBD

Note: blue text is where possible collaboration/synergies exist.

Source: Biodiversity Indicators Partnership (BIP),

<http://www.bipindicators.net/LinkClick.aspx?fileticket=6AmjPbR9ZYI%3d&tabid=59>

## **7.2 Sustainable Tourism Stewardship Council**

This initiative is led by UNEP and the UN World Tourism Organization. Efforts are being led by UNCTAD to participate in this council which is developing impact indicators for sustainable tourism initiatives.

## 8. BioTrade network contacts

The Plurinational State of Bolivia	Vice-ministry of Biodiversity, Forestry Resources and Environment, Plurinational State of Bolivia
	Fundación Amigos de la Naturaleza (FAN), Plurinational State of Bolivia
	BioNativa, Plurinational State of Bolivia
Colombia	Ministry of Environment, Housing and Territorial Development (MAVDT), Colombia
	BioTrade Fund, Colombia
	BioNativa, Colombia
Ecuador	Ministry of Environment of Ecuador
	Export and Investment Corporation (CORPEI), Ecuador
	EcoCiencia, Ecuador
	Nativa Ecuador
Peru	Ministry of Environment, Peru
	PROMPERU, Peru
	Peruvian Institute of Natural Products (IPPN), Peru
Uganda	Uganda Export Promotion Board (UEPB), Uganda
Southern Africa	PhytoTrade Africa (PTA), Zimbabwe
Andean and Amazonian regions	Andean Community General Secretariat, Peru
	Andean Development Corporation (CAF), Venezuela
	Amazon Cooperation Treaty Organization (ACTO), Brazil
	BioNativa, Colombia
International level	Union for Ethical BioTrade (UEBT), Switzerland
	UN Conference on Trade and Development (UNCTAD), Switzerland

**Annex 1. BioTrade partners involved in the BT IAS development workshop held in Lima, Peru in March 2010**

<b>Component</b>	<b>Group members</b>
<b>Environment</b>	Maria Arguello, EcoCiencia (Ecuador) Maria Teresa Becerra, CAN María Helena Cendales, Fondo Biocomercio Colombia Felipe Gómez V, Ministry of Environment, Housing and Territorial Development (Colombia) Evelyn Sassarini, Fundación Amigos de la Naturaleza (Bolivia)
<b>Socio-Economic</b>	Jaime Cárdenas, expert Itai Chibaya, PhytoTrade Africa (Zimbabwe and representing eight southern African countries) Pierre Hauselmann, UEBT* Vanesa Ingar, Promperu (Peru) Héctor Ramirez, Peruvian Institute of Natural Products and BioNativa (Peru) Nancy Sánchez, CORPEI (Ecuador)
<b>Governance</b>	Anamaría Aristizabal, consultant for GEF/CAF/UNEP Project on BioTrade Pamela Avila, Vice-ministry of Biodiversity (Plurinational State of Bolivia) John Bejarano, Fondo Biocomercio Colombia Isabel Endara, Ministry of Environment (Ecuador)** Helena Sisniegas, Ministry of Environment (Peru)***

*Notes:* other key actors such as ACTO were also invited but unfortunately, could not attend the workshop.

\* Informed of the group discussions, however it was requested by the UEBT and agreed by the participants that the final version of this process will be discussed with them, in order to define further compatibility.

\*\* Teddy Escarabay replaced Ms. Isabel Endara, and participated in the activities and discussions following the Lima workshop in March 2010.

\*\*\* Her position changed during the process and no replacement was designated.

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