

BioTrade – development opportunities for small farmers in Peru

Not only is biodiversity a valuable asset, but it also represents a possible source of income for rural communities. The article shows how Peru is making use of this potential in the context of the BioTrade concept to sustain both, rural livelihood and conservation of native biodiversity. It further analyses the challenges farmers face and how targeted support for supply chains can help to overcome these challenges.

During the last ten years, the Peruvian economy has experienced a considerable economic growth. Although living conditions for many of the country's 29 million inhabitants have been improved, income inequalities are still high, and more than 30 per cent of them still live below the poverty line, 60 per cent in rural areas. Especially in the Andean highlands or the Amazon forest, home to a large majority of indigenous communities, 20 per cent of the population are considered extremely poor.

The main source of income for the rural population is agricultural production, which consists of small family farms of less than 1 hectare (ha). Productivity of these farms is low, as their harvest is mainly used for self-consumption and exchange between neighbours and communities. Only a small proportion

of the products is traded on local food markets or through intermediaries, mostly with low value commodities.

■ Making use of the country's biodiversity

One of Peru's main assets is its rich biodiversity. It has 84 of the world's 104 climate zones and is among the top ten countries that account for the world's greatest biodiversity of plant and animal species. So Peru has a great potential to supply food and raw materials derived from native biodiversity, and linking up to value chains that guarantee the sustainable use and commercialisation of these products has been identified as a new promising opportunity to ensure rural farmers a stable income and improved livelihood.

The concept of production, transformation and commercialisation of products derived from the sustainable use of native biological resources is called BioTrade. It contributes to the conservation and sustainable use of biodiversity, the minimisation of negative impacts on people and environment, and the generation of economic benefits for rural farmers. Its products can include those coming from wild collection or from cultivation practices. To qualify for the BioTrade concept, companies

have to meet the seven sustainability principles (see Box) as defined by the United Nations Conference on Trade and Development (UNCTAD).

The concept as developed by UNCTAD seeks an inclusive value chain approach to enhance business linkages within the chain, not only allowing a better sharing of benefits, but also to enhance efficiency and traceability of the products. These linkages are long-term, trust related and mutually beneficial commercial relations and partnerships, including technology transfer, technical assistance and capacity

UNCTAD's BioTrade Principles

Principle 1: Conservation of biodiversity

Principle 2: Sustainable use of biodiversity

Principle 3: Fair and equitable sharing of benefits derived from the use of biodiversity

Principle 4: Socio-economic sustainability (productive, financial and market management)

Principle 5: Compliance with national and international legislation and agreements

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

Katharina Wortmann
Katharina.Wortmann@giz.de

Silke Spohn
Silke.Spohn@giz.de

Luis Rosa Pérez
Luis.Rosa-Perez@giz.de
Rural Sustainable Development Programme (PDRS)
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
Lima, Peru

Women farmers harvesting physalis in Cajamarca, northern Peru.

building initiatives benefiting small rural producers.

Normally, the transformation and commercialisation of these products is done by local small and medium-sized enterprises (SMEs). However, by providing financial resources and transferring technical knowledge to their producers, these are often able to take over some of the basic value-adding activities (e.g. selecting, peeling, cleaning, drying, etc.) in order to maximise their income.

■ Access to markets – benefits and challenges

The demand for BioTrade products is growing considerably, especially in the United States, the European Union and Japan. One of the advantages of exporting BioTrade products is that many of the customers are more receptive to sustainability messages, willing to pay a price premium for products produced without harming the environment or society. Often, however, information asymmetry in these markets is high, as many of the exporting companies have no direct contact to their international clients and thus find it difficult to capture the real needs of consumers and to establish a trustful relationship. Also, BioTrade products are frequently subject to high quality demands and special regulatory procedures before they can enter international markets.

Though the main markets for BioTrade products are those outside of Peru, local and domestic markets are also an important platform, not only because of lower transaction costs and a less demanding environment in terms of quality, but also because consumers in local markets are more familiar with and increasingly proud of their native products. Consequently, the demand in Peru has shown a considerable growth, also thanks to the domestic gastronomy



Photo: Villa Andina

having recently rediscovered the richness of native biodiversity and its value for a high-class cuisine. On the other hand, local consumers are often unfamiliar with social and environmental certifications and standards and thus unwilling to pay a price premium.

Another major constraint that companies face for both national and international market development is the unstable supply of raw material for products derived from biodiversity. The following factors cause unstable supply in Peru:

- weak implementation of good agricultural practices or standards ensuring sustainability in the cultivation of BioTrade products;
- low levels of productivity and quality due to limited access to technical assistance, training and information;
- fluctuating prices due to changing climate conditions, leading to unpredictable abundance or scarcity of the harvest;
- weak associativity of horizontal and vertical production units and lack of strategies to promote the development of the respective chains.

■ Support activities

To address this situation, Peru has taken important institutional and legal steps to support the sustainable use

and commercialisation of biodiversity products. Various governmental institutions as well as international co-operation agencies have joined forces in the National BioTrade Program, led by the Ministry of Foreign Commerce and Tourism of Peru (MINCETUR), to enhance the competitiveness of companies and farmers working with BioTrade. One of the initiatives is the Perubiodiverso (PBD) project, implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and co-financed by the Swiss State Secretariat for Economic Affairs (SECO). PBD aims to strengthen and promote value chains of goods and services related to Peruvian native biodiversity in order to include farmers and small companies into national and international markets.

One approach taken by Perubiodiverso is to promote public-private partnerships with local small and medium-sized companies working with the BioTrade principles in order to leverage activities and achievements. While some of these activities seek to create mutual benefits between companies and farmers, others aim to improve the access to markets for BioTrade products. Results include the following:

Capacity building. Eight public-private partnerships were signed between 2011 and 2012 with companies working with different native crops. One of them is

Sacha Inchi, a seed rich in omega 3 and 6 that grows in the Peruvian Amazon region of San Martin. Capacity building initiatives supported the farmers in the implementation of good agricultural practices, certification with sustainability standards (organic, fair trade and others), extension of crops and the installation of post harvest machinery, which improved their productivity, quality and income. At the same time, they were trained in the BioTrade principles, learning how to protect native Peruvian biodiversity and put it in value. In total, the partnerships have directly benefited 1.818 rural families.

Conservation of biodiversity and benefit sharing. A partnership between PBD and Takiwasi, an organisation transforming and selling medicinal plants in the Peruvian Amazon, has become a reference on the work related to benefit sharing, the third BioTrade principle. Takiwasi sources its plants from native communities. In order to ensure the conservation and sustainable supply of the plants, Takiwasi developed an environmental management plan defining the exact amount of plants that can be collected from the forest without harming stocks. Further, the organisation provided capacity building initiatives and the transfer of technologies to the communities enabling them to develop their first own product, a soap from copaiba (*Copaifera reticulata*) and dragon's blood (*Croton lechleri*), which is ready to be marketed.

Technical Boards. The Sacha Inchi Value Chain Technical Board is an institutional platform established by companies, producers and regional government representatives in which stakeholders meet regularly to discuss the terms of commercial relations within the value chain. Thanks to this platform, farmers have been able to engage in formal long-term contracts with exporting companies including a minimum price that covers the cost of sustainable production of the product, even if the market price falls below it.

International market access. To improve access to international markets, Peruvian BioTrade companies have been supported through various initiatives, such as marketing, sales and quality trainings as well as matchmaking activities. The latter may be so-called 'buyers missions', in which international clients are invited to attend Trade Fairs in Lima, such as the Expoalimentaria Fair, which has recently opened a special pavilion for BioTrade products. During the mission, the buyers can also visit the production sites of the Peruvian SMEs and to meet their farmers 'in situ'. This way, buyers can familiarise themselves with the harvest and production processes and make sure that quality and sustainability standards are being met. However, more and more BioTrade companies have also been able to participate in international trade fairs, such as the Biofach in Nuremberg. These activities allow companies not only to establish direct contact with clients, but also to get to know international market trends and opportunities for innovation in the area of BioTrade.

National market development. To stimulate national market demand, PBD and the Ecological Association of Peru – *Ecológica* have joined forces to develop new local market channels for sustainably produced products. One of these channels is the recently launched Ecological Market in the Surquillo district of Lima. The market offers about 600 different products ranging from food and cosmetics to accessories provided by more than 35 organisations of organic producers from different regions of Peru. Some booths are reserved for producers of BioTrade products, such as those from Piura (mesquite syrup), San Martin (sacha inchi and medicinal plants), Cajamarca (Andean fruit) and Cusco (Andean grains).

Another channel used to create access to local markets for SMEs and producer associations was participation in trade fairs such as the Peru Natura

– Expoalimentaria Fair and the Gastro-nomic Fair Mistura, contributing to a wider dissemination of BioTrade products in local markets. During the fair, farmers could establish first contacts with potential customers and get to know their needs, concerns and suggestions. Feedback was helpful in improving their product presentation such as labelling and packaging, making their products more attractive for the local market.

Conclusions

Working with the BioTrade principles offers companies as well as small-scale farmers in rural areas many advantages. The strong linkages between the different actors in the chain enable the transfer of knowledge and technology to small producers, helping them to comply with quality and sustainability criteria and enhance their productivity while protecting native biodiversity in and around their fields. Further, the participation of local actors (companies and associations) via the Regional Technical Committees has led to a high performance of the value chain with good co-operation and articulation between the different actors in the sector. It has set an interesting scheme of work that could be replicated in other regions and chains in order to create a healthy and competitive environment.

It is also important to focus on the development of the national BioTrade market, not only to diversify the client base but also to educate customers on the richness of native biological resources and the importance of their sustainable use and conservation.

However, since most BioTrade chains are led by small and medium-sized companies, their capacity to create strong linkages on their own has yet to be developed. Thus, public support can leverage the activities and achievements made through a variety of initiatives, such as public-private partnerships.