

Partnerships for agrobiodiversity



Devil's claw (*Harpagophytum procumbens*), Namibia. Photo: GTZ

Products from rare useful plants and animals whose preservation is at risk – so-called agrobiodiversity products – provide numerous opportunities for private industry. Marketing these products or otherwise promoting agricultural biological diversity enables companies to gain access to new groups of customers, make more profit and build up an image of being ecologically and socially responsible. At the same time, successful marketing gives the producers and breeders of such rare plant varieties and animal breeds an incentive to continue conserving them. This secures a rich gene pool which future generations will be able to draw on to continue developing and adapting agriculturally useful plants and animals to changing environmental conditions.

Development partnerships with industry

Very many different forms of cooperation are possible between private companies and development initiatives, institutions or programmes which support the sustainable use and marketing of agrobiodiversity.

GTZ provides various kinds of support for private companies operating in developing and newly industrialising

Advantages for the companies

A firm that has made or wishes to make the conservation of agrobiodiversity one of its company objectives can benefit from doing so:

- " Agrobiodiversity products are innovative and new. Selling them opens up new markets, provides access to new groups of buyers and creates profit.
- " For companies dependent on agrobiodiversity, conservation of the latter secures their resource base and future raw materials supply.
- " A commitment to conserving (agro)biodiversity creates a positive social and ecological image.
- " By committing itself to conserving agrobiodiversity a company can achieve its sustainability goals while also securing itself a marketing advantage.
- " A positive image makes it easier to find well-trained employees.
- " Investments in the protection of agrobiodiversity receive public support, as in the context of PPP projects, for example.

countries. Companies interested in using and protecting agrobiodiversity in these countries are no exception. These development partnerships with private industry, or Public Private Partnerships (PPP), enable the public and private partners involved to combine their individual strengths. PPP projects are jointly planned, financed and implemented. The companies benefit from GTZ's contacts, experience and global network of experts, and at the same time their active involvement contributes towards achieving development policy objectives.

More than € 140 million have flowed into these projects so far. The public-sector contribution amounted on average to about 40 % (www.gtz.de/de/themen/uebergreifendethemen/ppp/2362.htm).



Cocoa production is a theme of promising Public Private Partnerships, for example in the Côte d'Ivoire or in Viet Nam. Photos: GTZ



Private companies and their potential for using agrobiodiversity

Fundamentally, any company can contribute something to the conservation of agrobiodiversity, such as using predominantly regional and seasonal produce in their works canteens or serving only fair trade coffee. And rather than having plane trees or robinias planted on the green spaces belonging to the company, old endangered fruit trees, such as the service tree (*Sorbus domestica L.*) or old species of cherry, could also be planted. This kind of activity gives companies above all a means of improving their image both internally and externally.

The companies that manufacture or trade in agrobiodiversity products have direct benefits from the use of agricultural diversity. There are various possibilities for this:

Development of new products

Little used agricultural species are often largely unknown. They offer the possibility of developing new products for various spheres – a unique opportunity for companies to create marketable produce for existing or new groups of consumers.

Integration of agrobiodiversity products into existing ranges

Companies that market foods, spices, oils, flavourings or starch, for example, have the opportunity to integrate biodiversity products directly into their product range.

Large retail chains that have included fair trade and organic products in their range provide a role model for this. New products such as these improve the range of products on offer for existing customers and attract new ones.

As the number of markets for various agrobiodiversity products increases, so too does their importance for the conservation of agricultural biological diversity.

Awareness-raising and information for consumers

Retail companies can charge higher prices for biodiversity products if they raise their customers' awareness and inform them about the background of the products and their specific objectives. In doing this, they send a signal to consumers that they are environmentally aware and concerned about quality.

Responsible use

Companies that process large quantities of plant or animal raw materials from endangered varieties and breeds can cause farmers to switch to sustainable production methods by means of appropriate supply contracts. In the case of semi-wild species, sustainable use can ensure that stocks are not wiped out through overuse. This is also a way of helping to conserve diversity. Dealing responsibly with agricultural diversity can also be useful in marketing, creating a positive image in the general public sphere and among customers.

Benefit sharing

Private companies can contribute actively to the welfare of farmers by sharing benefits fairly by paying them a higher price for certain qualities, for example. Dealing with producers and suppliers in this way demonstrates an active commitment to agricultural diversity.

Fair and equitable benefit-sharing

The Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture stipulate that the country of origin is to receive an appropriate share of the benefits arising from the economic use of genetic resources. This share can be monetary or non-monetary. Access to seeds or support for conserving seed and plant resources also counts as sharing benefits. On the basis of these rules, seed companies that obtain new varieties from genetic material, for example, are obliged to give the country of origin a share of the turnover from a product derived from genetic resources. Exactly how these approaches can be implemented is still a matter of trial and debate. Private industry can set a good example here and make clear its interest in the conservation of genetic resources. At the same time it can use its commitment to do so as a competitive advantage.

Examples of successful marketing of agrobiodiversity products

Agrobiodiversity products have become a taken-for-granted part of the range of international foods, especially in the organic sector; the range of products offered by the manufacturers of natural cosmetics and natural medicines would also be much the poorer without the diversity produced by small farmers around the world. There are now many examples of agrobiodiversity products being marketed successfully, including those that are worthwhile for both producers and marketers and that conserve diversity at the same time.

India:**Small local companies established in conservation area**

On account of their great diversity of native plants the Biligiri Rangan Hills in the Indian state of Karnataka were declared a nature reserve in 1974. About 4,500 people live in 25 villages in this area. They belong to the Soliga ethnic group. They generate about half their income through the commercial use of plants that grow in the conservation area. These include the Indian gooseberry (*Phyllanthus emblica*), the soap nut (*Sapindus spp.*) and shikekai (*Acacia sinuata*). The latter contain saponins,

which are a component of natural shampoos. These plants are endangered by overuse, as is the diversity of the other plants.

The local non-governmental organisation VGKK (Vivekananda Girijana Kalyana Kendra), in cooperation with the Biodiversity Conservation Network (BCN), the University of Massachusetts and the Tata Energy Institute, formed two local organisations and set up two companies to process various forest products. One company processes medicinal plants, the other foodstuffs and honey. The produce – vegetables in a sweet-sour brine, jams, honey and pumpkins – are sold in company-owned shops in Mysore and Bangalore, the two largest cities in the region. The companies also sell their products in the villages themselves. This has created jobs and increased the people's incomes.

South Africa: Devil's claw from agricultural production

Devil's claw (*Harpagophytum procumbens*) is a plant that grows only in southern Africa. Its root nodule contains active substances that help to ease rheumatic pain. It has been used by the local population for a long time. The growing demand worldwide for natural medicines in the last few years has not stopped at devil's claw, posing a threat to those that occur in the wild: the plants have been dug out whole from the soil, damaging the parent tuber and thereby reducing their natural ability to regenerate. It was obvious that measures aimed at the sustainable use of the plant were needed. These included improving the production, harvest, gathering and marketing of the plant. However, little was known about the ecology of devil's claw.

GTZ initiated a cooperative venture between a medium-sized German manufacturer of natural medicines, with 250 employees and an annual turnover of € 55 million, a 5,000-hectare commercial cattle farm in South Africa, and three villages, in which a total of 300 people earn their living collecting devil's claw. The Universities of Durban in South Africa and Münster in Germany looked into specific research issues. The goal of the company was to ensure a reliable supply of good quality raw material and the genetic improvement of devil's claw. The interest of the three villages and the farm was to preserve existing jobs, create new ones and earn extra income. The sustainable use of devil's claw was the common goal of all those involved, through improvements in production, harvesting, wild gathering and marketing.

GTZ financed a number of measures, such as training events for the farm workers in which they learnt how to handle the devil's claw nodule properly and with care.

Staff from Durban University received special training in the area of tissue culture and cloning, and the laboratories' capacity for analysis was improved. The villagers received instructions regarding the agricultural production of devil's claw and how to preserve the wild plants, while special collecting areas were also marked out. GTZ contributed a total of € 110,000 to this cooperative venture.

The cattle farm Avontuur provided experimental fields for growing the plant and permitted research to be done on the devil's claw plants that grow wild on the farm's land. A central collecting point for devil's claw was set up and managed by the farm. Münster University provided research equipment and scientific know-how for the tests on the farm. The German company contributed analytical instruments and software, know-how about the ecology and the processing of devil's claw, as well as expertise with regard to data analysis. The company also secured certification for the product and committed itself to purchasing a fixed amount at a price guaranteed by contract. The overall financial contribution of Münster University and of the company was € 125,000.

Within two years suitable procedures were developed for the agricultural production of devil's claw and the villagers were trained as professional producers. Now, not only do they produce the raw product, they also dry it, which brings an additional increase to their income. The quality of devil's claw produced on the farm has also improved, thanks to the training given to the technical staff. So far, only a small part of the population has benefited from the above measures. Efforts are currently being undertaken to increase the number of beneficiaries.

The Issue Paper series "People, Food and Biodiversity" aims to:

- stimulate an interest in the conservation and sustainable use of biological diversity,
- present quickly and clearly concrete actions and experiences,
- explain new concepts and issues relating to the topic of biological diversity,
- encourage and stimulate the mainstreaming of this topic within development cooperation projects and programmes.

We look forward to your suggestions and experiences so as to enable us to improve this series.

Further improvements needed

The systematic and organised development and promotion of new biodiversity products has so far been limited to a few initiatives. There is generally little transparency surrounding the market for biodiversity products, patent rights for such products and benefit-sharing along the value chain.

Many agricultural biodiversity products are used traditionally, meaning that they have to be "discovered" and adapted to urban consumer habits in terms of their appearance, quality, taste and packaging if they are to be launched on new markets.

Further information:

BCNet:
http://www.worldwildlife.org/bsp/bcn/projects/ghats97_1.htm

Biotrade Facilitation Programme:
<http://www.biotrade.org>

Business and Biodiversity Resource Centre:
<http://www.businessandbiodiversity.org>

Centre for the Promotion of Imports from Developing Countries: <http://www.cbi.nl/>

Coalition for Environmentally Responsible Economics:
<http://www.ceres.org>

Danish Import Promotion Programme:
<http://www.dipp.eu/en/linksen.aspx>

Dr. Willmar Schwabe Group:
<http://www.schwabe.de/content/wir/visionen/pflanzenforschung.php?navid=23>

Grote, Katrin (2003): The Increased Harvest and Trade of Devil's Claw. www.underutilized-species.org/Documents/PUBLICATIONS/devils_claw.pdf

GTZ/GFU: Value Chains for the Conservation of Biological Diversity for Food and Agriculture http://www.underutilized-species.org/record_details.asp?id=507

GTZ-PPP:
<http://www.gtz.de/en/leistungsangebote/2362.htm>

GTZ: ppp-buero@gtz.de

Intern. Petroleum Industry Environmental Conservation Association: <http://www.ipieca.org>

Swiss Import Promotion Programme:
<http://www.osec.ch/osec/glossar-aw/sippo;internal&action=buildframes.action>

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Text: Dr. Dieter Nill
Editor: Beate Wörner
Contact: Annette von Lossau,
Dr. Marlis Lindecke
E-mail: annette.lossau-von@giz.de,
marlis.lindecke@giz.de
Website: <http://www.giz.de>