

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

The baobab tree of southern Africa produces a fruit resembling an American football. Its pulp is unusually nutritious: it has three times the vitamin C of an orange, twice the calcium of milk, and provides healthy doses of iron, antioxidants, potassium, and magnesium. Small African health food firms such as Treecrops of Malawi have long wanted to sell baobab products (including dried, powdered pulp as an ingredient for other foods) in Europe and the United States.

Working with Treecrops and several African and European environmental and scientific organizations, UNCTAD oversaw a two-and-a-half-year process which affirmed that baobab pulp meets European Union food safety standards. Baobab products are now beginning to appear on European store shelves, and approval for sale in the U.S. followed recently. Money earned from baobab sales can boost incomes in poverty-stricken rural African communities and can give villagers an incentive to preserve the trees. The baobab is an iconic species that is increasingly cut down to clear space for farming and livestock grazing.



Photo courtesy of PhytoTrade Africa

UNCTAD BioTrade: Profiting from – and conserving – biodiversity

There are hundreds of millions of rural poor around the world, and all too often, when economic opportunity comes, it is a devil's bargain: to raise their incomes, they must exploit the environment. In the long term, that frequently leaves them living in denuded landscapes with fewer economic options than before. Forests are cut down, and animal, fish, and plant species are brought to the point of extinction.

The accelerating loss of the world's biodiversity has become a serious problem. The current rate of anthropogenic (human-caused) species extinction was estimated by the 2005 Millennium Ecosystem Assessment to be 1,000 times more rapid than the "natural" extinction rate typical of Earth's long-term history. Loss of habitat is the principal cause. Some 11% of the natural areas remaining in 2000 may soon disappear, chiefly as a result of conversion for agriculture, the expansion of infrastructure (such as roads, railroads, and ports), and climate change. Some 60% of coral reefs could be gone by 2030. Over the last 300 years, the global forest area has shrunk by 40%, with forests disappearing completely in 25 countries, and since 1900 the world has lost 50% of its wetlands. Potential cures for diseases or potential new sources of energy may reside in the amazing treasury of species that is now being lost. And the widespread altering of landscapes can change ecosystems upon which millions of people depend – expanding deserts, for example, now pose a daunting challenge for Africa.

But if local populations have an economic incentive to preserve biodiversity, the loss of species may be slowed or stopped at the same time as the rural poor raise their incomes. One option is to harvest and develop natural products by using local flora and fauna sustainably. . . and then to sell these goods on world markets.

UNCTAD's BioTrade Initiative

Sustainability is the objective of BioTrade, which helps local communities market products that give them an economic interest in nurturing and preserving biodiversity. For example, communities in Bolivia have successfully implemented sustainable management plans resulting in exports of skins and products derived from the Caiman yacare, a species of crocodile, to Italy. These exports generated over US\$ 1.4 million in sales in 2008. Exports of these products to the United States totalled an average of US\$ 500,000 per year from 2007 to 2009. The management plans ensure that harvesting of the species does not exceed its rate of reproduction, and that the communities maintain a clean environment in which the crocodiles can thrive.

Other biotrade products from around the world include ornamental fish, medicinal plants, exotic flowers, native cocoa, natural ingredients for cosmetics – an oil from the fruit of the marula tree of Namibia and Botswana is used in this way – and pharmaceutical products, natural fibres, tropical fruits, and ecotourism. Demand for such goods has been growing in recent years as a result of new scientific discoveries based on the study of rare plants and creatures; the growing role of biotechnology, which derives benefits from genetic research into widely varying life forms; and climbing consumer demand for “natural” ingredients in cosmetics and medicines.

But village collectives or small firms based in developing nations often lack the knowledge or the technical capacity to carry out international trade of this kind. As it did with baobab pulp, UNCTAD can help these firms meet the safety standards required for export to major markets in Europe and North America. It can help them set up plans so that valuable flora or fauna are managed sustainably. It can help firms find suitable foreign customers or can link them to overseas

businesses that may want to use their natural products as ingredients. To this end, UNCTAD often works with partner organizations and has helped to establish national BioTrade programmes in 15 developing countries¹.

In the case of baobab pulp, the collaborative framework included, among others, UNCTAD; Phytotrade Africa, a non-profit association that promotes the sustainable harvesting of natural products from southern Africa; Herbal Sciences International, a consultancy that supported the development of the European Union application dossiers; Afriplex, a commercial partner that markets and sells baobab; Leatherhead Food Research, a firm that identified the potential of baobab products; the United Kingdom's Food Standards Agency; and the European Commission. The last two provided advice and guidance during the application process.

In their work, UNCTAD and national BioTrade programmes follow a set of BioTrade Principles:

- ☒ Conservation of biodiversity
- ☒ Sustainable use of biodiversity
- ☒ Equitable sharing of benefits derived from the use of biodiversity
- ☒ Socio-economic sustainability (in management, production, and marketing)
- ☒ Compliance with national and international legislation and agreements
- ☒ Respect for the rights of actors involved in BioTrade activities
- ☒ Clarity about land tenure, use, and access to natural resources and knowledge

¹ *Bolivia, Brazil, Columbia, Ecuador, Indonesia, Peru, Uganda, and – through the regional network PhytoTrade Africa – Botswana, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe. In addition, there is an Amazon Regional BioTrade Programme whose membership includes Brazil, Guyana, Suriname, and Venezuela.*