

# Factsheet

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Photo: Schäfer

## Medicinal Plants

### Biodiversity for health care

Medicinal plants have acquired increasing significance in development cooperation in recent years. Their use and conservation are cross-sectoral concerns that embrace not only health care but also nature conservation, biodiversity, economic assistance, trade and legal aspects (e.g. intellectual property). Even today the majority of the world's population is dependent upon traditional medicine and thus on the use of plants and plant extracts. This is particularly true for poorer sections of the population in developing countries, because natural remedies are not only cheaper than modern medicines but are often the only medicine available in remote rural areas (according to the WHO 80 per cent of the world's population is dependent on health care provided by medicinal plants). Besides serving medical and cultural functions, medicinal plants in developing countries also have an important economic role. The gathering of wild medicinal herbs frequently provides socially and economically disadvantaged groups such as smallholders and landless shepherds with their only form of cash income.

In addition, medicinal plants are easily integrated into traditional crops such as maize, beans and vegetables. The differing harvest times enable the farmers to distribute their income more equally over the entire year. Small-scale traders and industries also benefit from being able to buy dried medicinal plants and process them into teas, ointments and tinctures for the local market. But the economic

importance of medicinal plants extends far beyond the national markets in developing countries. Germany alone imports medicinal plants worth over 75 million euros per year. Most of these come from developing and transforming countries. The sustainable use of plant material can therefore considerably improve trade balances in the countries of origin and offers major potential in terms of development. The basis for this is the unique biodiversity that exists in the developing countries, where 90 per cent of Earth's genetic diversity is to be found.

### Medicinal plants in the Biodiversity Convention

The Convention on Biological Diversity (CBD or Biodiversity Convention for short) is the key international regulatory apparatus for ensuring the conservation and sustainable use of biological resources. The Convention works on the assumption that clear conditions of ownership are an indispensable prerequisite if genetic resources are to be handled responsibly. The Biodiversity Convention also contains rules for the equitable distribution of the benefits accruing from the use of genetic resources. The Convention thus represents the most important international legal framework for the use of, and trade in, medicinal plants.



Photo: Schäfer

### What are medicinal plants?

Worldwide, a total of at least 35,000 plant species are used for medicinal purposes. The most important industrial medicines nowadays are based on no more than about 90 species, whilst traditional remedies in developing countries are usually based on mixtures of herbs collected in the wild. In Indonesia, for example, up to three-quarters of all instances of sickness are treated with mixtures of teas – known as »jamu« – which contain plant extracts from up to 30 different kinds of dried plant species. But plants are not just the main component of traditional medicines. According to estimates by the World Health Organization, they also form up to about 70 per cent of the basis of modern pharmaceutical products. One example is acetylsalicylic acid, the main ingredient in painkillers (for headaches), which was first extracted from domestic willow as long as 150 years ago.

## GTZ's contribution to the conservation and use of medicinal plants

GTZ, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), is working to ensure that greater importance is attached to the conservation and use of medicinal plants. This is achieved through projects for the conservation of natural resources, support for small businesses and health projects. GTZ is also involved in WWF's initiative to introduce sustainability standards for the collection of plants from the wild.

An important aspect of the programme »Implementing the Biodiversity Convention« is the support provided to developing countries in connection with various international negotiating processes concerning regulation of access to the genetic resources of medicinal plants, benefit-sharing and the development of structures to ensure that the regulations are observed.

An additional area of work is in the carrying out of projects that contribute directly or indirectly to the conservation and use of medicinal plants. Around 30 such measures all over the world have so far been supported. For example, a project to support the Issyk-Kul biosphere reserve in Kyrgyzstan included instruction for women's groups in the collection, cultivation and processing of medicinal plants and herbs, and a parallel business promotion project facilitated the marketing of these products and the development of appropriate organisational structures.

The great majority of the drugs currently recommended by the WHO for the treatment of malaria are based on artemisinin. In a PPP project, GTZ is supporting the training of up to 5,000 smallholders from Kenya, Uganda and Tanzania who are being shown how to cultivate the artemisinin-containing plant *Artemisia* in accordance with good agricultural practice. Agreements with a pharmaceutical firm guarantee an outlet for the plants the farmers grow. The project makes life-saving drugs more affordable and helps to tackle malaria. The cultivation of *Artemisia*, which has considerable market potential in east Africa, provides many small farmers with an additional source of income. In addition, the value chain for the production of anti-malarial drugs is transferred to Africa, where malaria is one of the major causes of illness and death among the poor.

In Morocco, argan (*Argania spinosa*) is regarded by the Berbers as the »tree of life« and the oil from its seeds is used as an effective treatment for many diseases. GTZ has for many years supported the

## Biodiversity and the Biodiversity Convention

The term »biological diversity«, or »biodiversity« for short, encompasses the diversity of life on Earth, ranging from genetic diversity and diversity of species to the diversity of ecosystems. The Convention on Biological Diversity (CBD) adopted in Rio de Janeiro in 1992 comprises three elements: the conservation of biological diversity, its sustainable use and the equitable sharing of benefits arising from such use. In the meantime, 190 Parties have joined the Convention. By signing the Convention, Germany has agreed not only to conserve biodiversity on its own territory but also to support developing countries in implementing necessary measures.

production of argan oil, not only through measures to preserve traditional methods of cultivation and oil production but also through the introduction of adapted organisational structures and hygiene standards and assistance in obtaining organic certification. Members of a number of women's cooperatives now work under conditions that meet European legal requirements, thus paving the way for the export of the argan oil. This enables the women to participate to a significant extent in the value chain.

## Action required

- Trialling and further development of sustainability standards for the collection of medicinal plants and herbs from the wild;
- Adoption of internationally binding rules governing the economic exploitation of medicinal plants and protecting the rights of the local population against biopiracy (= illegal bioprospecting);
- Creation of internationally valid regulations to ensure that developing countries have a share in the benefits arising from the use of medicinal plants;
- Increased involvement of local and poor sections of the population and women in questions relating to access to the genetic resources of medicinal plants and equitable benefit-sharing;
- Support for indigenous groups in building the knowledge and organisational structures needed to enter into contract negotiations with pharmaceutical companies;
- Increased cooperation between the pharmaceutical industry and indigenous groups in the use of traditional knowledge to research applications and broaden the use of medicinal plants.

## Further information

**TRAFFIC:** [www.traffic.org/](http://www.traffic.org/)

**IUCN SSC Medicinal Plant Specialist Group:**  
[www.iucn.org/themes/ssc/sgs/mpsg/](http://www.iucn.org/themes/ssc/sgs/mpsg/)

**International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP):**  
[www.floraweb.de/map-pro/](http://www.floraweb.de/map-pro/)

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