

## SUSTAINABLE HARVESTING

A number of TCM resource management plans have also been developed, including 'Sustainable Harvest Guidelines for Schisandra', jointly drafted by harvesters, international buyers and TCM experts. They have been implemented in September 2009 in Pingwu, Sichuan. In March 2010, with the input of international and domestic experts, the Guidelines were reviewed, and have been applied by collectors since.

## POLICY

The implementation of the ECBP project has also included the analysis of the key policies and regulations on wild TCM plant species conservation, marketing and management at both the national and provincial levels. Based on the analysis, the project influenced the development of 'The Notice of Traditional Chinese Medicine Sustainable Plant Management in Ningshan County, Shaanxi Province' (the first county-level regulation governing the harvest, management and trade of wild medicinal plants in this part of China). The Notice was published in September 2010. The project partners have also carried out a side event entitled 'Fair for Biodiversity - Sustainable Medicinal Plants Management' during the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD CoP10), demonstrating the benefits of sustainably harvesting of Southern Schisandra in project areas.



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## Promoting sustainable harvesting of *Schisandra sphenanthera* in Upper Yangtze Ecoregion

**BACKGROUND** Mountain landscapes in the upper Yangtze River basin, designated as a Global 200 Ecoregion\* by WWF, are internationally recognized for their biodiversity values and listed as the top priority area for biodiversity conservation in China. An estimated 75% of commercially harvested Chinese medicinal plant species are found in the mountains of the Upper Yangtze ecoregion, with many endangered due to overharvesting. Over-harvesting of wild medicinal plant species in these mountains is a serious conservation concern—not only the collection of the target plant species, but also the collectors can have serious secondary impacts: harvesters camp within reserves, hunt, and gather fuel-wood to dry commercial quantities of medicinal plants. The wild collection is rising, with households compensating for loss of income from farming and timber logging due to the promulgation of two policies: a 1998 logging ban and a "Grain for Green" Programme, introduced in 2000, which discourages farming on steep slopes.

**EU-CHINA BIODIVERSITY PROGRAMME** In order to protect the biodiversity in the Upper and Middle Yangtze River Basin a major collaborative project "*Supporting the sustainable management of traditional medicinal plants in high-biodiversity landscapes of Upper Yangtze Ecoregion*" was launched in 2007 to help the local communities develop alternative livelihoods. This was done with the support from the EU-China Biodiversity Programme (ECBP), and implemented by international conservation organizations WWF, TRAFFIC, and IUCN. The goal of this project was to address the degradation of the habitats in which medicinal plants grow, and the over-exploitation of high-value medicinal plant species, including traditional Chinese medicinal plants (TCM) that are components of these habitats, and improved livelihoods in these landscapes. For conservation impact and for sales reasons, Southern Schisandra *Schisandra sphenanthera* was the main plant that was selected as a focus for micro-enterprise development by the project. This case study summarizes the main results of this collaborative project, as well as the important role that Southern Schisandra could play in improving income for local people through sustainable harvest (outside of nature reserves) in the Upper Yangtze ecoregion.

## OUTCOMES

### Trainings and resource management

Establishment of community-based TCM resources management committees in eight villages (hereafter 'pilot sites'), located in Sichuan, Gansu and Shaanxi Provinces, was one of the effective management mechanisms for the sustainable wild medicinal plants conservation developed within this project in the Upper Yangtze Ecoregion. Local producers in the pilot sites have been introduced to the concept and skills needed for sustainable harvesting of wild TCM plants, including application of the FairWild Standard principles, certification procedures, and trade links to international markets. Furthermore, about 130 local collectors attended the trainings on sustainable harvesting skills for Schisandra and regulations governing exploitation of medicinal plants. These collectors were all members of producer associations and provided Schisandra to Changchun Wine Factory (a local winery using wild medicinal plants as part of its raw materials). These trainings explained the guidelines on how to sustainably harvest Schisandra for their existing market.



Luo Zhongping, head of the Shuijing Cooperative, and his daughter, CREDIT: TRAFFIC/Anastasiya Timoshyna

\* the term "Global 200" refers to WWF's strategic approach to conserving the world's most distinctive ecosystems, prioritized on the basis of their species richness, species endemism, unique species (such as the giant panda), globally rare habitats, or unusual ecological or evolutionary features ([http://wwf.panda.org/about\\_our\\_earth/ecoregions/about/](http://wwf.panda.org/about_our_earth/ecoregions/about/))



**Links between producer associations and buyer groups** The ECBP project has established six local producer associations in the villages of the three Provinces, representing about 970 local families and 3322 villagers, in order to reduce the high transaction costs of coordinating thousands of small-scale producers to get sufficient quantities of TCM plant products harvested and the appropriate quality for the market. The project also led to the establishment of links between producer associations and buyer groups: in 2010 two communities have signed purchase agreements with a local winery and the newly established Shuijing Traditional Chinese Medicine Cooperative has signed a 5-year fair trade agreement with a US-based Traditional Medicinals Inc. (TMI) covering the supply of sustainably harvested Southern Schisandra fruits.

Because TMI needed the Schisandra fruit processed into a dry extract form, a second company was invited into the project. Draco Natural Products (DNP Shanghai) carries out processing (extraction and spray drying under certified organic and kosher rules) and arranges export to California. Transparent purchase agreements between the two companies and the Shuijing TCM Producers Association were initiated. A pre-certification audit by the Institute for Marketecology was carried out in 2009 and the cooperative achieved organic certification for Southern Schisandra fruit later in 2011. In 2010, more than 5 tonnes (dry weight) of Southern Schisandra fruits were sustainably harvested of which more than 3 tonnes were sold to DNP Shanghai for production of a concentrated dry extract specified by TMI. The project has scaled up from one village in the 2008 and 2009 harvests up to 22 villages in the 2011 harvest. From the autumn 2011 harvest, about 11.5 tonnes were shipped to DNP, enough to produce about 1.2 tonnes of certified organic dried extract for use in TMI products.

**CONCLUSION** Since the ECBP-funded actions ended in 2011, the cooperation between harvesters, cooperatives, government agencies, non-governmental organizations (NGOs) and private businesses has progressed into a long-term fair trade relationship for the supply of sustainably harvested NTFPs. The cooperation is also continuing to develop criteria and indicators for Giant Panda-friendly branding of biodiversity products from the project villages. The project showed that using market-based approaches (the introduction of standards and certification schemes) and facilitating links to responsible buyers can stimulate ongoing investment by the private sector in sustainable NTFP management. However, making the transition from external public funding support has its challenges. The main lessons learnt were:

- The Shuijing TCM cooperative needs to receive further support in additional capacity building and training in, for example, business planning, invoicing and banking, and good agricultural collection practices. The cooperative also needs to improve its cost calculations to include the cost of organic inspection and certification.
- The long-term viability of a project and of a sustainable commercial enterprise cannot depend solely on the demand projections of one company and on one species harvesting. The gradual inclusion of a wider range of botanical species would increase potential incomes and decrease the risk, as would carefully diversifying trade chains to include other companies committed to fair trade and supporting sustainable forest management. This would require more species to be included in the sustainable resource management plan and scaling up to encompass more villages.

**INCOME GENERATION** Income for local producers in the project areas has increased, owing to higher prices paid for certified sustainably harvested medicinal and aromatic plants. In the case of Southern Schisandra fruits, international and local buyers paid at least 30% above market price for certified produce. A survey of project sites in March 2011 found incomes from medicinal plant collection had risen, thanks to the certification schemes; in one village by almost 18% over 2007 levels.



Ripe fruits of *Schisandra sphenanthera*,  
CREDIT: TRAFFIC/Anastasiya Timoshyna

**AWARDS** The success of the project has been publicly acknowledged through receiving two awards, an “Outstanding Contribution Award” from the Chinese State Ministry of Environmental Protection, ECBP, Ministry of Commerce and the United Nations Development Programme (UNDP) in 2011 and the Prestigious Equator Prize in 2012.



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This factsheet is compiled by Kristina Rodina, TRAFFIC, based on the ECBP project and respective publications (reference available on request).

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