

Rattan is no basket case

An ITTO-funded project to promote rattan has created opportunities for forest-based communities

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Community bonding: Villagers participate in a rattan furniture making workshop. Photo: P. Denrungruang

The local supply of rattan for Thailand's furniture and handicraft industries is derived almost entirely from the wild. Excessive and wasteful harvesting, including from illegal sources, however, has resulted in supply shortages. Rattan has been classified as a protected non-wood forest product (NWFP) in Thailand since 1988—even before a total logging ban was introduced in 1989. A permit system for the extraction of rattan from natural forests in quantities greater than ten kilograms was also introduced but, in most parts of the country, this regulation did not halt illegal harvesting activities (Subansenee 1994).

ITTO project PD 24/00 Rev.1 (I): *Promotion of sustainable utilization of rattan from plantation in Thailand* was approved and funded by the International Tropical Timber Council in November 2000 and implemented by Thailand's Royal Forest Department (RFD) between July 2001 and June 2005. Its objective was to develop and disseminate appropriate technologies for rattan plantation management and the efficient use of rattan for weaving and furniture-making. The target beneficiaries of the project were village farmers and forest communities. This article summarizes the findings of the ex-post evaluation of the project.

Project achievements

The project established demonstration plots for rattan shoot and cane production at the RFD's Non-Wood Experimental Stations in the widely dispersed provinces of Sakon Nakhon, Narathiwat, Krabi, Trang and Songkhla. Basic information and techniques that were either generated in research and development studies conducted under the project, provided by international consultants and national experts, or gathered by project staff from study tours in Indonesia and the Philippines were published in technical reports and

manuals. These addressed topics such as rattan plantation management, shoot processing, the protection and preservation of canes, and rattan weaving and furniture-making. Training courses were conducted on rattan-shoot processing and packaging and on rattan weaving and furniture-making. In collaboration with other government entities, two community-based enterprises, one on rattan-shoot processing (in Sakon Nakhon) and the other on rattan furniture-making (in Ratchaburi), were established.

In general, project beneficiaries and other stakeholders interviewed for the ex-post evaluation gave positive feedback. The success of project activities in one community generated support from the local government and led to improvements in infrastructure such as roads and water supply. The local-government community development officer also helped to create a website to further promote and market rattan products.

The Baan Kumphangsae (BKS) Group, a furniture-making enterprise, was particularly successful, progressing from basket-making to medium-value and high-end furniture-making for export. The community obtained a 4-star certificate from the government's One Tambon–One Product program.¹

On the other hand, further intervention would be required in the community enterprise in Sakon Nakhon engaged in rattan-shoot processing to transform it into an economically viable operation. External factors played a role in the failure

¹ In Thailand, One Tambon–One Product Certification is awarded to enterprises on the basis of the overall quality of their products, processing methods, packaging and use of indigenous materials. Five stars is the highest rating possible under the program.

of this enterprise: in particular, the market for rattan shoots preserved in jars did not match the project's expectations. The enterprise needed to identify more carefully its target customers, how they might be reached, and how they make decisions about buying the product. More information was also needed on the degree to which and at what price bottled rattan shoots would become a compelling purchase.

Nevertheless, these experiences suggest that small and medium-sized community-based enterprises are promising options for reducing poverty and conserving resources through sustainable forest management. To maximize their chances of success, such enterprises must have legal access to the resource base, technological support for increased value-adding, financial capital for effective business management, access to micro-credit, and effective linkages to the market.

The RFD's extension program to promote NWFPS, which has been implemented at most of the project sites, provided strong support for the development of community enterprises in rattan-shoot and cane production and furniture-making. Collaboration among various RFD internal units was critical to the success of the project's extension activities.

Impacts

An examination of the research-to-impact pathway of the project design showed that while the design focused more on outputs than outcomes, the project achieved its milestones for promoting rattan plantation management and efficient utilization techniques. Some technology-transfer activities, such as those on plantation management and rattan-shoot harvesting, led to the creation of new livelihood opportunities and an improvement in community income; on the other hand, some activities had only short-term effects. The demonstration plots established in the RFD's Forest Products Research Centers (FPRCS) gave the communities a clearer grasp of the benefits of adopting sound plantation-management and shoot-harvesting techniques. This was critical in the decision by farmers to replace crops such as cassava and sugarcane with rattan.

The project was able to make use of savings in project funds to create rattan demonstration plots, mainly for the production of canes. These were established in Sakon Nakhon (three hectares) using *Calamus caesius* (small-diameter rattan) and *C. siamensis* (medium-diameter rattan) and in Narathiwat, Trang and Songkhla (four hectares each) using *C. manan* (large-diameter rattan) and *C. caesius*.

As a result of the project there has been a considerable increase in the production of rattan shoots in both government and private plantations in Sakon Nakhon—in contrast to the market for preserved rattan shoots, the market for freshly harvested shoots is strong in the region. A total of 200 000 seedlings are given out to about 1000

families annually, with about 100 farmers and forest-dwellers having replaced their cassava plantations with rattan plantations for shoot production.

Overall post-project situation

The project achieved its intended outcomes at the project sites, albeit to a limited extent. The sustainability of the activities and enterprises it spawned depend on many factors, including the continuation of technical support from the RFD's FPRCS.

Using rattan plantations for shoot rather than cane production is attractive to most rural communities. In Sakon Nakhon, rattan shoots are consumed by villagers of all income levels and not only the poor. Village farmers exchange rattan shoots for rice, meat and other basic needs. Fresh and steamed shoots can be bought every day at roadside stalls as well as in bulk (100–200 kg) by ordering in advance from plantation owners. Cooked rattan shoots served during meals, however, are available mainly in restaurants frequented by tourists and very seldom in small eateries.

The success of the BKS Group can be viewed as a model for developing enterprises in other previously subsistence-based communities. The One Tambon–One Product Four-Star Certificate awarded to the community has been instrumental in attracting further support from the local government and other government business-support units. The effectiveness of technology transfer depended to a large extent on the leadership of both the technical team (the 'technical champion') and the recipient (the 'business champion'). The sustainability of the BKS Group's business operations can be attributed largely to the project's technical interventions and the leadership of the group, which, aside from showing sound financial management and resourcefulness, has also encouraged innovation among its members. Further contributing to the BKS Group's success was the assistance given by other national-government organizations, such as the Industry Development Center, as well as the strong support of the local government.

The RFD FPRCS in Sakon Nakhon, Krabi, Narathiwat, Songkhla and Trang are committed to monitoring the performance of the plantations and to promoting sustainable plantation management techniques. At a wider level, more oversight of the sector is required. In Hat-Yai District in Songkhla Province, for example, some cottage-sized rattan-furniture-makers interviewed for the ex-post evaluation did not perceive a shortage in rattan canes. They claimed that as long as they had the money, buying large-diameter rattan canes in any desired volume from suppliers in Bangkok and small-diameter canes from within the province had not been a problem. Rattan-cane suppliers in Bangkok claimed to import their rattan from Singapore and Indonesia. Furniture-makers are aware that available rattan materials

are mostly illegally harvested, both from government-owned forest lands and from nearby countries such as Laos, Viet Nam and Myanmar.

Recommendations

Sustainability of effects

Projects on conservation and enterprise development covering a wide geographical scope tend to focus more on outputs than outcomes. The duration and scope of projects using enterprise development as a strategy, therefore, should be reviewed carefully to ensure that there are direct, straightforward links between enterprise development and conservation. Multi-stakeholder participation is critical during project formulation, and the involvement of experts on socioeconomic, business-development and marketing aspects can help ensure that the project achieves its intended outcomes.

Enterprise-oriented forest communities

Aside from technological support, entrepreneurship and business-skills development are vital if subsistence-based communities (such as most forest communities) are to develop successful commercial enterprises. Such a strategy requires an enabling policy environment that supports access to financial capital, increased value adding, legal access to the resource base, and incentives for sound harvesting practices.

Follow-up actions

The RFD, through its NWFP program, should embark on the preparation of a country-wide inventory of rattan resources and continue to monitor and assess the performance of the rattan demonstration plots established under the project.

Rattan canes in the project's demonstration plots will not be ready for harvesting until the end of 2010. While rattan conservation efforts have focused mainly on establishing and managing plantations and increasing utilization efficiency, it has been reported that harvesting may waste up to 40% of the harvestable rattan (Tesoro 2004). Therefore, studies on techniques to reduce wastage in rattan harvesting should be undertaken at the demonstration sites. In the medium term, the RFD should develop a germplasm or gene bank to help conserve the country's commercially important species.

The RFD should also find ways to highlight and replicate the success of the BKS Group by maintaining and expanding its productive collaboration with institutions such as the Industry Development Council, the Department of Export Promotion, King Mongkut's Institute of Technology, PRS Industry Co. Ltd, the Bangsai Arts and Craft Centre, and local governments.



Pole position: Villagers preparing rattan poles for processing.

Photo: F. Soriano

In its technology-transfer activities the RFD should disseminate information and technologies more widely by partnering with industry associations such as the Thai Furniture Industry Club and the Thai Furniture Industries Association, as well as other organized groups.

Similarly, the RFD and its FPFC at Sakon Nakhon should conduct further studies on rattan-shoot processing and develop food products for carefully identified markets. They should seek partnerships with experts and organizations with a view to developing a successful community-based enterprise for rattan-shoot processing in the province.

References

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The complete report of the ex-post evaluation is available at www.itto.int or on request from the ITTO Secretariat (fi@itto.int).