

Are NTFPs a way out of poverty?

Over the last 30 years, policymakers and conservation non-government organisations have focused on the sustainable production and commercialisation of non-timber forest products (NTFPs). Is this a way forward in tropical forested areas for successful conservation and rural development?

Development strategies try to include local people in the management and governance of natural resources such as forests, so that they receive more of the benefits. This contrasts with preservationist environmental policies, which excluded people from forests. Strategies that support the collection and commercialisation of NTFPs by local people have the potential to provide an increased source of income for people living in or near forests.

NTFPs also have important subsistence uses, for example providing a 'free' source of food, medicines, fuel and construction materials. And, if properly managed, NTFPs can be an incentive for forest communities to protect existing forests and restore degraded areas, to ensure their source of income is sustainable.

However, forests are being cleared as the global demand for timber rises and as ranching and large-scale agricultural activities expand. Many species fundamental to forest livelihoods are vulnerable and forest resources are declining.

This has alarming consequences for subsistence use and local trade. For example, between 1970 and 1990, the number of species extracted by the timber industry in eastern Brazilian Amazonia rose from fewer than 20 to over 300. At least a third of the 300 also had value for local people as food, medicine or fuel.

While dramatic landscape change takes place across many developing countries, the



Zé Trindade on the Marajói River, in Gurupá, Brazil with a basket of açai fruits. Açai are collected for local consumption and export. They are a main source of energy and are consumed as wine which is thickened with manioc flour and accompanied by fish

Mônica Barroso, 2008

sustainable production of many NTFPs is under threat. Policymakers and development practitioners need a better understanding of the changing role of forest resources for local livelihoods. This issue of *id21 insights* identifies some fundamental policy and management issues.

Marketing NTFPs is an important conservation and development strategy. It can add economic value to forested areas without cutting trees while providing local people with a sustainable, productive activity. For this to happen, researchers and policymakers must collaborate to make community-based forest management initiatives socially and economically viable.

Elaine Marshall argues that NTFP commercialisation is only successful where it is transparent, equitable and sustainable, with a positive impact on poverty reduction, gender equality and resource access, tenure and management. This is more likely if:

- producers, processors and traders collaborate with each other
- producers, processors and traders realise the need for continuous innovation to add value to existing NTFPs and explore new markets
- there is external support from market intermediaries (such as governments, international agencies and the private sector) to support producers and traders in overcoming the barriers to entering markets, including legislative constraints, the inconsistent quality and quantity of products, and the lack of market information.

Policy frameworks for the production and commercialisation of NTFPs are rarely compatible with forest peoples' situations, however. Getting information and credit depends on appropriate access to transport and communications infrastructure, which are deficient in forest areas. **Patricia Shanley** gives an inspiring example of the *Frutíferas* book, which is improving access to reliable and useful information on NTFPs in Brazil. NTFPs are rarely sufficient in themselves to support households but often play a central role during 'hungry' seasons. → p2

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Helen Schneider, from the Institute of Development Studies in the UK, provided academic advice for this issue of *id21 insights*. Helen has over 20 years experience in community-based natural resource management and a particular interest in sustainable forestry.



A man climbs an açai tree in Gurupá, Brazil. The exploitation of açai palm hearts, which requires the cutting of the whole tree, meant the species was almost lost, but nowadays many communities and families manage their açai trees sustainably.

Mônica Barroso

→ Reflecting on wildlife products in Equatorial Guinea, **Sophie Allebone-Webb, Guy Cowlshaw** and **J Marcus Rowcliffe** show that the rational extraction and use of NTFPs can improve livelihoods for different forest groups. While bushmeat hunting is predominantly a male activity, for example, the increased marketing of forest plants can increase women's opportunities to earn income.

The collection, processing and trade of NTFPs should encourage forest populations to use their traditional knowledge to help preserve existing forests and reforest degraded areas. Yet most forest people have poor access to markets, insufficient capital to invest in improving their livelihoods, and little or no bargaining power when selling their products in markets.

Jean-Laurent Pfund argues that it is important to understand how market chains operate, from harvesting to the end market. This helps identify obstacles and understand which stages have the most potential to benefit poor people. A fairer trade environment for everyone involved in market chains is crucial.

Fat from Sal seeds, for example, has enormous economic potential in India for export and domestic markets. Increasing their collection could increase the incomes of approximately 30 million forest dwellers. **Sanjoy Patnaik** shows, however, that the legal framework for supplying this product does not support poor people who collect seeds. In contrast, a recent policy in

Brazil which set minimum prices for ten NTFPs promises to secure minimum trading conditions for local producers.

Susann Reiner uses evidence from South America to identify further constraints to NTFP-based livelihoods. Merely gathering NTFPs rarely generates enough revenue to sustain the households harvesting them. Lacking direct access to markets, they depend on intermediaries to sell their products, reducing their share of the income. Processing locally gathered NTFPs could add value and contribute to poverty alleviation and the sustainability of NTFPs.

Dependence on a single NTFP can be a problem, increasing people's vulnerability due to variations in yield, market demand and prices. Over-harvesting is also common where harvesters depend on one resource. This can leave people without their only source of subsistence; it can also threaten local biodiversity. **Kaspar Schmidt** provides a compelling example of the risks facing farmers in Kyrgyzstan, dependant on uncertain walnut harvests.

NTFPs rarely provide a pathway out of poverty because poor people have limited access to the assets needed to exploit NTFPs such as rights to use resources, information, financial capital or credit to invest in harvesting, production, processing, transport and marketing. They also lack political capital to influence policies; social capital or opportunities to work together to increase their bargaining power; and physical capital such as

processing equipment, storage facilities, and transport infrastructure.

Developing NTFP markets can offer sustainable alternatives for forest areas. Strategies need to address a range of issues:

- Women and men play different roles in NTFP market chains and benefit in different ways. A gendered analysis is important in supporting households dependent on forest resources.
- NTFP initiatives must make existing forests more or as profitable as the economic activities that threaten forest areas such as cattle ranching or logging.
- Scientific evidence needs to merge with traditional knowledge to provide a better understanding of the socio-economic and ecological environments in which NTFPs are used.
- Developing NTFP market chains will require investing in other areas such as access to credit, transport and training in sustainable forest management, including the collection, processing and trade of NTFPs.

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Useful weblinks

Centre for International Forestry Research
www.cifor.cgiar.org/ntfpcd

Forest Connect, forestry social networking site
forestconnect.ning.com

Forest Trends
www.forest-trends.org

International Union of Forestry Research Organisations
www.iufro.org/iufro

Rainforest Alliance
www.rainforest-alliance.org

Livelihoods Connect
www.livelihoods.org

NTFP Exchange Programme
www.ntfp.org

United Nations Forum on Forests
www.un.org/esa/forests

World Rainforest Movement
www.wrm.org.uy

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Walnut fruit forests in rural Kyrgyzstan

Agroforestry is the predominant way of life in forested parts of southern Kyrgyzstan and walnut forests are a major part of the cultural landscape. Local farmers lease forest plots from the state and these provide a wide range of non-timber forest products (NTFPs).

NTFPs including walnuts, wild apples, rose hips and mushrooms provide an important source of subsistence food; other useful products include fire wood, hay and medicinal herbs. Collecting, processing and marketing NTFPs – mostly walnuts – is also a source of potentially high and much needed cash income for local households.

- In a year with a good harvest, walnuts form a significant part of the livelihood for households from all income categories.
- The income from a good harvest can sustain families for up to one year and significantly complements the income gained from other activities.
- Walnuts fetch considerably higher market prices than most other NTFPs; the price for 1 kilogramme of walnuts is approximately 30 times the price of 1 kilogramme of wild apples.

This income is unreliable, however, mainly due to late frosts damaging the young shoots and flowers of walnut and other species. However, there are only two to four good walnut harvests per decade on average. In years with bad harvests, only poor households get a significant part of their income from forest resources. This is because their incomes are particularly low, and they typically lack many alternative income opportunities.

The prime role of NTFPs from walnut-fruit forests is to contribute to local people's basic subsistence needs.



Due to the strong variations in yields, their role as a reliable source of income is limited.

- To reduce poverty, it is important to guarantee that poorer households have access to NTFPs; poorer households should be prioritised when allocating leased forest plots.
- Poorer households also need to be involved in processing (for example cracking walnuts, making jam, and drying mushrooms, wild apples or rosehips) and marketing NTFPs.
- It is important that poorer households also have access to more reliable sources of income than NTFPs, such as agricultural and off-farm activities, to diversify their subsistence and income sources and thus increase their livelihood security.

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See also

Poverty and Forestry. A Case Study of Kyrgyzstan with Reference to Other Countries in West and Central Asia, LSP Working Paper 13, Rome: FAO, Livelihood Support Programme, by R.J. Fisher *et al*, 2004
www.fao.org/docrep/007/i2603e/i2603e00.htm

NTFPs and Poverty Alleviation in Kyrgyzstan: Potential and Critical Issues by K Schmidt, pages 28 to 29, in *Non-Timber Forest Products Between Poverty Alleviation and Market Forces*, Berne: Intercooperation, edited by J-L Pfund and P Robinson, 2006 (PDF)
www.intercooperation.ch/offers/download/NTFP-poverty-alleviation-market-forces.pdf

Livelihoods and Forest Management in Transition – Knowledge and Strategies of Local People in the Walnut-fruit Forests in Kyrgyzstan, PhD thesis, University of Reading, by Schmidt, 2007

A Kyrgyz farmer selling walnuts in a regional wholesale market

Kaspar Schmidt

Collecting, processing and marketing NTFPs, mostly walnuts, is a source of potentially high and much needed cash income for local households in southern Kyrgyzstan

What are NTFPs?

The Centre for International Forestry Research defines non-timber forest products (NTFPs) as any product or service other than timber produced in forests. For example fruits, nuts, vegetables, fish, game, medicinal

plants, resins, essences, barks, and fibres such as bamboo, rattans and other palms and grasses.

Harvesting, using and trading NTFPs are some of the several livelihood strategies that people with access to forest resources adopt.

Over the past 20 years, governments, conservation and development agencies and non-government organisations have encouraged the marketing and sale of NTFPs as a way of boosting income for poor people in tropical areas and encouraging forest conservation.



Brazil's Minister of the Environment, Marina Silva, supports a recent book about fruit trees and useful plants for people living in the Amazon, and a Kayapo Indian, from the Xingu River in Brazil, looks at a page showing how many kilos of which species of game were captured beneath which kind of fruit tree. If a tree attracts over 230 kilos of game it will be more valuable than selling it for logging *Christopher Barr*

Sharing science with forest communities in Amazonia

People in remote Amazon villages regularly sell 30 metre fruit trees to loggers that can produce up to 2,000 nutritious fruits a year. The villagers, who rarely know the market prices, earn the equivalent of two US dollars per tree.

The villages are losing valuable timber, fruit and medicinal trees that sustain their families. And researchers of non-timber forest products (NTFPs) have information that villagers need, such as market prices. But many take the information they want and leave without giving anything back.

Is it possible to change this? Can complex economic and ecological information be made available to semi-literate rural people, in ways that improve their negotiation skills?

Motivated by the information gap felt by communities, 90 Brazilian researchers collaborated to share their data with forest farmers. The resulting book, *Frutíferas e Plantas Úteis na Vida Amazônica* (Fruit Trees and Useful Plants in the Lives of Amazonians), combines scientific information with traditional knowledge of 30 tree and palm species grown in the Brazilian Amazon.

The book includes illustrations and descriptions of tree and wildlife ecology. It also features economic information, management techniques, nutritious recipes, local legends and songs. The collaborators include scientists, forest farmers, midwives, teachers, policymakers, musicians and artisans.

The first edition of the book, in Portuguese, has been shared with remote villagers throughout Amazonia, with positive results:

- improved negotiations with loggers, resulting in the conservation of fruit and medicinal trees
- improved roles for women in community discussions of timber sales
- the integration of NTFP management into the Institute of Tropical Forestry's national forestry training programme.

The Brazilian government is producing a new edition which will be distributed to rural communities and non-government organisations, such as the National Council of Rubber Tappers. The Food and Agricultural Organisation will publish an English translation in 2009.

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See also

Frutíferas e Plantas Úteis na Vida Amazônica, CIFOR: Imazon, edited by Patricia Shanley and Gabriel Medina, 2005 (Portuguese)
www.cifor.cgiar.org/publications/pdf_files/Books/BShanley0501.pdf

Sal seeds, an untapped resource in India

Across central India, around 30 million forest dwellers, mostly tribal people, depend on the seeds, leaves and resins from Sal trees (*Shorea robusta*) for their livelihood.

Sal seeds are crucial because people collect them in May and June when other sources of income are limited – after Kendu (*Diospyros melanoxylon*) leaves have been harvested and before the agricultural season.

Sal seeds have many commercial uses. They are processed into fat and the oil is used in global food and cosmetic industries; it is mostly exported to Europe as a substitute for cocoa butter; de-oiled seeds are also used in cattle feed.

Incomes are low, however. Due to the cumbersome collection process, a person can harvest only 8-10 kilos of seeds a day, worth about 50 rupees and far less than the minimum wage. Current studies show that schemes such as the National Rural Employment Guarantee Scheme – which provide higher wages – are reducing the number of people collecting sal seeds.

Local processing could increase the value of sal seeds, but there are few incentives to start enterprises. Little technology is available and enterprises have suffered from unsustainable harvests and post-harvest methods. Legal requirements regarding the quality of sal fat used in domestic food processing limit these enterprises; delayed shipments reduce the value of seed products.

Developing livelihoods dependent on non-timber forest products, such as sal seeds, should be a part of the Indian government's welfare function. It lacks a clear focus and mandate on this, however.

- Efforts to develop the skills of primary collectors should receive special attention, for example, in negotiating with traders and using technology.
- Studies on sal forests in different areas could help to determine their ecological status and enable the development of sustainable silvicultural systems.
- There should be inter-state and national coordination on policy reforms regarding trade barriers and quality requirements (such as pesticide and fatty acid content). These currently limit economic opportunities from sal seed collection.

Sal seeds could provide effective livelihoods support for poor people when few alternative natural resource based strategies are available.

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Wildlife products are a significant source of food, income and fuel for many people living in tropical forested regions.

These products include bushmeat (meat from wild animals), freshwater fish and wild plants. Harvests are often unmonitored, but there is evidence to suggest that many tropical forest species are being overexploited, particularly mammals.

As human populations increase, the demand for wildlife products is likely to grow. If access to wildlife becomes more restricted, because of over-exploitation or planned changes in forest management, it is important to understand who will be most affected.

Benefits from wildlife products

Harvesting wildlife products is one of the few livelihood activities open to poorer households. It often has negligible start-up costs and does not require constant labour, so can be fitted around seasonal activities such as agriculture. Wildlife products can also be a vital food source during 'hungry' seasons and times of hardship.

While these products support many poor rural people, extremely poor people do not always benefit. Bushmeat hunting, for example, is usually done by the men but many of the poorest households do not have any.

Equatorial Guinea

Studies by the Institute of Zoology and Imperial College London in the UK, investigated the importance of wildlife and forest products in Equatorial Guinea. The following findings expand on previous research in central Africa.

- During the agricultural lean season, the consumption of forest plants increases significantly, especially among the poorest households.
- For most people, harvesting wildlife products is not a preferred livelihood strategy but is a last resort when no other work is available.
- Bushmeat is more important for income than food and hunters often sell their catch to buy cheaper alternative foods.
- Some people earn high incomes from selling bushmeat, particularly successful gun-hunters.
- Poor and middle-income rural households are more likely than wealthier households to hunt: the small income this provides can make up a higher proportion of their total income.
- The income from bushmeat becomes more important when agricultural incomes decrease.

Wildlife products and forest livelihoods



The research suggests several guidelines for future policies:

- The sale of wildlife products is commonly outside the formal economy: acknowledging the importance of these products is the first step to successful management.
- Strategies to decrease bushmeat hunting are unlikely to succeed without also developing alternative livelihood options.
- Increased marketing of sustainably harvested forest plants may increase women's capacity to generate income.
- Harvesting forest products is unlikely to help people out of poverty, but restricting access to forests without compensation may have a negative impact on rural food security and livelihoods, particularly for the poorest households.
- Policies that allow some access to sustainably harvested products, and where collectors recognise the importance of harvesting controls, will be most successful. However, these will be difficult to develop without a greater understanding of the sustainability of these harvests.

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See also

Evaluating Dependence on Wildlife Products in Rural Equatorial Guinea, PhD thesis: Imperial College London, by Sophie Allebone-Webb, 2008
www.iccs.org.uk/thesis.htm

Incentives for Sustainable Hunting of Bushmeat in Rio Muni, Equatorial Guinea, PhD thesis: Imperial College London, by N Kumpel, 2006
www.iccs.org.uk/thesis.htm

Wild Resources and Livelihoods of Poor Households in Democratic Republic of Congo, ODI Wildlife Policy Briefing 1, by E de Merode *et al*, 2003 (PDF)
www.odi.org.uk/resources/specialist/wildlife-policy-briefings/1-wild-resources-livelihoods-poor-democratic-republic-congo.pdf

A young boy carries a recently killed gazelle in Cameroon. Increased poverty and food insecurity is leading many people to turn to wildlife as a food source
Sven Torfinn,
Panos Pictures

Harvesting wildlife products is one of the few livelihood activities open to many poorer households, and can be a vital food source during 'hungry' seasons and at times of hardship

Governing NTFP market chains

Strategies to extract and cultivate non-timber forest products can increase financial returns to poor producers. However, a global study by the Center for International Forestry Research shows that such strategies have led to resource depletion and inequalities between households and people within the market chains.

Before NTFPs reach the end consumer they usually pass through a market chain with several stages, including harvesting, transport, control, transformation and commercialisation. Each stage has complex governance issues, involving many people in different roles, often with conflicting interests. To balance the profits between the various roles more fairly, strategies should consider market chains as an integrated whole, as shown by the following case studies.

Red Stinkwood

Red Stinkwood (*Prunus africana*) bark is collected from African montane forests, in countries including Cameroon and Madagascar. It is used locally as a traditional medicine and exported to Europe and the USA as the principal ingredient in medication for prostatic hyperplasia.

International demand has grown over the last 40 years, resulting in more

informal, unorganised harvesters and traders. In 1995 *Prunus africana* was listed as a 'vulnerable' species by the International Union for Conservation of Nature. This led to more transparent trade chain figures from the Convention on International Trade in Endangered Species. Recent inventories in Cameroon show a previously unknown level of domestication of this species, a practice which partially mitigates unsustainable harvesting from natural forests.

However, persisting fears about overexploitation could result in trade from Cameroon being suspended and the collapse of a market that, in 2007, generated US\$540,000 and provided incomes for around 60,000 people. Increased consumer awareness of the impacts on livelihoods and conservation may lead to lobbying and certification schemes, which could support policies that favour producer communities.

Bush mangoes

Bush mangoes (*Irvingia gabonensis*) from Cameroon are sold nationally, regionally and internationally (in France and Belgium). In some remote areas of Cameroon, harvesting, processing and trading contribute up to 80 percent of a household's cash income. The trade in bush mangoes is especially important for women, but changes in forest access rights is a threat to them.

Supporting fairer mechanisms to share resources and benefits will require local, national and international efforts, all along the market chain. If producer and fair trade organisations develop and gain credibility, the need for 'governance by buyers' within the chain will decline. This will balance power, and therefore profits, more equally between primary producers, local processors and buyers further along the market chain.

Policy recommendations

Better governance of NTFP market chains requires greater competition between traders, increased processing and marketing capacity in producer countries, and the introduction of quality, labour and environmental standards for products. To achieve this, governments and international agencies should:

- improve the recognition of local rights to forest resources
- create policies and institutions that facilitate local partnerships between communities and private enterprises, and ensure that trade and use of natural resources are monitored
- improve the transparency of markets, for example, in the information given to consumers on sustainability issues
- form trade associations and hold regional multi-stakeholder 'round-tables' with the objective of removing trade barriers and setting transparent and concrete agreement terms.

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Rubber market chains in Indonesia

Rubber (*Hevea brasiliensis*) has generated substantial profits to communities living near forests in many countries. In Indonesia, rubber producers have taken advantage of international demand, national development schemes, and high competition among wholesalers working for processing plants. Supported by local authorities, they organise auctions for the entire production of some villages. This has many benefits; wholesalers reduce their collecting costs and farmers get better prices. This practice is also a strong incentive for communities to organise themselves effectively.

Conservationists are concerned, however, about the loss of biodiversity as communities convert mixed rubber agroforests into monocultures. This practice also presents risks to producers:

- Industries using rubber complain about decreasing quality.
- There are risks for producers relating to possible global market changes, such as product substitution or competition, as shown by the recent drop in global rubber prices.

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How Local Knowledge and Global Policies Influence the Landscape. The Case of Rubber Agroforests Conservation in Jambi (Indonesia), in *Small Scale Forestry* by L Feintrenie and P Levang (forthcoming)

See also

Balancing Development and Conservation? An Assessment of Livelihood and Environmental Outcomes of Non-Timber Forest Product Trade in Asia, Africa and Latin America, *Ecology and Society* 11(2): 20, by K Kusters, *et al*, 2006
www.ecologyandsociety.org/vol11/iss2/art20

Pygeum: Money Growing on Trees in the Cameroon Highlands, in *FAO Nature & Fauna: The Value of Biodiversity*, 22 (1), pages 29-36, by VJ Ingram and A T Nsawir, 2007

Fears about over-exploitation of Red Stinkwood could result in trade from Cameroon being suspended and the collapse of a market that, in 2007, generated US\$540,000 and provided incomes for around 60,000 people

Local processing boosts local earnings

Households rarely generate enough income from gathering NTFPs (non-timber forest products) and selling them locally. Their retail value sold beyond local markets is far higher.

NTFPs can provide a viable livelihood, however, if collectors receive support to engage in local processing - to increase the value of their products and market them more effectively.

The growing demand for Fair Trade and environmentally sustainable products is opening up opportunities for marketing NTFPs globally, although a lack of standards increases the threat of resources being overexploited. However, local markets requiring crude or semi-finished products are the main trading sites for most NTFPs.

Strategies such as local processing may contribute positively to poverty alleviation and conservation. This is particularly the case in remote markets (processing is rarely necessary for local markets, where customers have little money). Local processing is sometimes necessary for supplying remote markets, for example drying perishable products such as fruit, but it also adds value and strengthens the producer's trading.

Local processing can encourage local development for small local enterprises offering employment and training, and producer cooperatives that take over processing. In addition:

- It provides diverse employment opportunities and creates additional income for local people.
- Revenues from the value-added chain remain within an area and are often used for reinvestment in local enterprises or for paying for education, health treatments, or goods such as bikes or televisions, for example.
- It can support cooperation in an area through the formation of cooperatives and trader associations. Processors also build networks with other enterprises in the area that provide the services and further materials for processing (such as packaging) as needed.
- Local producers have more power in business negotiations through local cooperation and through their position in the value chain, which is closer to the market.

- Processing also decreases pressure on local natural resources, as fewer raw materials are needed to earn a living and labour time is spent on processing activities rather than harvesting.

However, local processing is rarely initiated by the most marginalised. Reasons for this include the lack of access to NTFPs, credit and markets, as well as limited negotiating power and administrative capacity. To support local processing, non-government organisations and development initiatives need to:

- support local people in clarifying access rights to ensure sustainable harvesting
- help small local producers develop simple processing industries to create good quality products
- assist in marketing the finished products by making contacts, providing market analyses and giving training in administration where needed.

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Rubber tapping in the Brazilian Amazon

Rubber tapper associations and small rural enterprises in the Brazilian Amazon work along the complete value chain.

As well as tapping latex, they produce cloth impregnated with rubber from which they make high quality bags and waterproof clothes.

They mostly work in the production stage and sell the processed product through short commercial chains (usually one intermediary). However, some cooperatives sell their products directly to consumers.

Through these initiatives, people gain about 10,000 percent of the income they receive for crude rubber:

- Rubber tappers earn about 0.56 Reais (R\$) for 1.5 litres of latex but they make R\$5.6 by producing rubber impregnated lamina, for which they need about 1.3 litres of latex.
- By tailoring bags and waterproof clothing from impregnated cloth, the rubber tappers earn between R\$50 and R\$55.

Even if they only produce rubber impregnated lamina, rubber tappers can still earn about 1,000 percent of the income they get for selling 'crude' rubber. Similarly, producing refined oil and soaps from seeds and fruits earns them over 1,000 percent more than selling the raw materials.



Colourful lamina of rubber-impregnated cloth for making bags (R Putz) and local production of lamina using traditional vulcanisation methods

(M Schmidlehner)



NTFP commercialisation

What influences success?

The commercialisation of non-timber forest products (NTFPs) has been widely promoted as a successful approach to rural development in tropical forest areas. But the benefits of poverty alleviation and natural resource conservation can be hard to achieve.

NTFP commercialisation is about people earning money from the sale of a locally harvested and/or processed product beyond their community.

A CEPFOR research initiative, led by the United Nations Environment Programme World Conservation Monitoring Centre, examined the impact of NTFP commercialisation on poverty reduction, women's livelihoods, natural resources and poor people's rights and access, in 18 communities in Bolivia and Mexico.

The research also examined the structure and function of 16 different NTFP market chains to identify the conditions under which trade may contribute to poor people's livelihoods more effectively. Findings include:

NTFP commercialisation can be beneficial

- It can provide up to 95 percent of annual household cash income and act as a financial 'safety net' when other income sources fail.
- It can give women greater self-confidence and improve their status within households and communities by contributing to food security and generating income.

NTFP market chains are dynamic and demand-driven

- Producers, processors and traders are resilient to external shocks such

as market fluctuations.

- The ability to negotiate prices and define trade rules is vital in determining satisfaction levels in NTFP market chains.

A lack of market information is the main barrier into NTFP trade

- Market intermediaries and entrepreneurs can play a vital role in facilitating access to markets by providing market information, as well as skills and financial support.
- However, the concentration of power among a few individuals is likely for highly processed or perishable products for international markets.

Increased commercialisation initially leads to over exploitation of resources, regardless of tenure, in most cases. Land tenure arrangements influence the strategies used by communities and individuals to ensure that NTFP supply meets the demands of increased commercialisation. While this can lead to over-harvesting, the research shows:

- Communal resources are managed and harvested more sustainably.
- Individuals domesticate NTFPs on a small-scale where land is held privately and the plant can be easily propagated.

Despite potential benefits for national economic development, local livelihoods and conservation, there is little policy or legislation that is specific to NTFPs in Mexico or Bolivia. Communities are often left to trade in the informal sector, unable to meet the legal requirements of formal-sector commercialisation. This leads to unsustainable practices, increased dependence on other income sources, and loss of traditional knowledge.

The ability to negotiate prices and define trade rules is vital in determining satisfaction levels in non-timber forest product market chains

Governments, NGOs and the private sector should provide direct assistance to communities, which:

- addresses constraints on small enterprise development
- enhances community organisation to increase the market power of NTFP producers and processors and decreases their vulnerability to external risks and shocks
- creates more opportunities for women in NTFP activities
- builds the business skills of potential entrepreneurs and improves access to education and information
- provides technical knowledge and organisational skills to ensure sustainable resource management and harvesting, domestication where appropriate, and product processing to add value locally.

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See also

Commercialisation of Non-timber Forest Products: A Reality Check, *Development Policy Review*, 25(3) by Brian Belcher and Kate Schreckenberg, 2007

Balancing Development and Conservation? An Assessment of Livelihood and Environmental Outcomes of Non-Timber Forest Product Trade in Asia, Africa, and Latin America, *Ecology and Society*, 11 (2) 20, by K Kusters *et al*, 2006
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<http://quin.unepwcmc.org/forest/ntfp/outputs.cfm>

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