



# What can the bushmeat trade learn from the commercialisation of plant NTFPs?

Kate Schreckenber, ODI

Elaine Marshall, UNEP-WCMC

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# Structure of presentation

- Why the interest in NTFPs
- Background to the CEPFOR research project
- Impact of commercialisation on the poorest
- Impact of commercialisation on women
- Impact of commercialisation on the resource
- Key factors determining successful commercialisation
- Some food for thought for the bushmeat trade

# Why the interest in NTFPs?

- Conservationist interest – keen to preserve rain forests – dominated in the late 1980s. ‘Use them or lose them’ philosophy. Hope that NTFPs would be valuable enough to outcompete other land uses (agric, ranching, logging) that threatened the forest.
- Development interest is dominant today. Aims to improve the safety-net and income-generation functions of NTFPs in the livelihoods of poor people, particularly women. Recent growing focus on NTFP enterprises.

# CEPFOR research project

- Aim to understand the factors determining the successful commercialisation of NTFPs
- Funding from DFID's Forestry Research Programme from 2000
- Fieldwork with 4 NGO partners in Mexico and Bolivia
- 10 different products in 17 communities

<b>Country</b>	<b>Product</b>	<b>Species name</b>	<b>Part used</b>
Bolivia	Organic cocoa	<i>Theobroma cacao</i>	Beans
	Natural rubber	<i>Hevea brasiliensis</i>	Latex
	Incense and copal	<i>Clusia and Protium sp.</i>	Resin
	Jipi japa palm	<i>Carludovica palmate</i>	Leaf fibre for weaving
Mexico	Soyate palm	<i>Brahea dulcis</i>	Leaf fibre for weaving
	Maguey	<i>Agave cupreata</i>	Plant heart fermented to produce alcohol
	Mushrooms	<i>Boletus edulis</i> <i>Tricholoma magnivelare</i> <i>Amanita caesarea</i> <i>Cantharellus cibarius</i>	Fruiting body fresh and dried
	Pita	<i>Aechmea magdalenae</i>	Leaf fibre for embroidery
	Camedora palm	<i>Chamaedora elegans</i>	Fresh leaves as floral greens
	Tepejelote	<i>Chamaedora tepejelote</i>	Inflorescence as food

# Research hypotheses and tools

- Six key research hypotheses, dealing with:
  - (i) Impact of commercialisation on the poorest; on women; on the resource; and on access to the resource
  - (ii) Influence of market structure and function on successful commercialisation
- Multidisciplinary research:
  - 17 community reports, based on participatory research
  - 10 product 'market' reports, based on literature and interviews
  - Detailed questionnaires applied to community members (n= 289) involved in NTFP activities, NTFP traders based outside the community (n=46), and controls (n=117)
  - Policy reviews for Mexico and Bolivia

## Involvement of the poorest in NTFP trade

- Within communities, the ‘poorest’ were identified on the basis of wealth-ranking, self perception and information about their incomes
- In some communities almost everybody was involved in the NTFP activity so no differentiation was possible.
- For the remainder:
  - NTFP households are disproportionately concentrated in the **poorest** well-being ranks in 5 communities;
  - NTFP households are concentrated in the **middle** well-being ranks in 2 communities
  - NTFP households are concentrated in the **top** well-being ranks in 2 communities
- The latter two cases represent two very different scenarios, both of which require a fair bit of up-front investment:
  - collection of incense
  - domestication of pita
- The general conclusion is that NTFP trade is not solely the domain of the “poorest of the poor”.

# Making thread from natural bromeliad fibre, Mexico.





# Impact of commercialisation on the poor

- In Bolivia, 34% of NTFP households depend on NTFP trade for more than half their annual income & it may be their only source of cash income. In Mexico this figure was only 15%.
- For many people NTFP trade has enabled them to:
  - send their children to America;
  - not have to migrate from the community in search of work;
  - put a new roof on their house and cover health costs;
- The level of benefits derived from NTFP commercialisation depends on the level of involvement of the individual.
- Level of involvement depends on a variety of factors including:
  - household size and stage in lifecycle;
  - access to alternative income-generating opportunities, market contacts, land and capital;
  - and combinability of NTFP activity with other household activities

# What about women?

- Involvement tends to be restricted to those activities that do not require travelling away from the community:
  - e.g. collection of incense is a male-only activity
  - Sale of tepejelote is no longer possible for women as trader has stopped coming to their community
- Often involved in activities that also involve their husbands, e.g. processing of rubber goods or cocoa paste
- Benefits include:
  - Income
  - Training
  - Status and self-confidence
- Income benefits tend to be greatest when women are involved in selling and can therefore decide about how income is used

# Making goods from natural rubber, Bolivia.





## Crafting out of Jipi japa, Bolivia.



# Impact on the resource

- It is fair to say that harvesting NTFPs for trade in all cases puts a degree of pressure on the resource
- But only in one case did the resource have to be purchased in from other areas, and here the resource was destroyed not by harvesting but by conversion of the land to agriculture
- In most other cases, serious over-exploitation is avoided by:
  - Management of the wild resource (usually at community level)
  - Plantations (usually individual)

# Individualisation of the resource

- Cocoa
  - Traditionally collected from communal land with no particular management or access rules in place
  - With growing interest in commercialisation, individuals are using wild germplasm to plant cocoa bushes on their individual plots in order to have greater control over the resource
- Pita
  - Pita is collected from wild plants occurring on individualised plots of forest.
  - Commercialisation has led to an increase in plantations on these plots. Start-up costs are USD \$1000 per hectare, thus disadvantaging the poor.

# Community management

- Mushrooms
  - Used to be an open access resource on communal land
  - Trade has led to introduction of harvesting fees (paid to the community) and requirement to be trained in proper harvesting techniques
  - Apparent overexploitation of *Boletus* at national level has led to government requirement for an environmental impact assessment in order to obtain a community harvesting permit. EIA costs of \$10,000 accessed by an NGO (from Government).
- Maguey
  - Communally managed resource
  - Harvesting rights are allocated to 8-10 'fabricqueros' (processors of mezcal) each year in return for payment into a community fund
  - Poor people are unlikely ever to have enough funds to become *fabricqueros*, but are employed as harvesters

# Impact of commercialisation on resource access

- In no case has commercialisation led to a formal change in access rights for the poorest
- However, the move towards domestication is nearly always disadvantageous to the poorest because of their lack of capital to cover establishment costs and in some cases because of their lack of land.
- In one community involved in harvesting Camedora palm, attempts at domestication failed and the resource is now collected from so far away that only the poorest (with no other options) now engage in it.



# Key factors determining success:

## 1. Finding the right niche

- Need the right consumer niche
  - In almost all our cases, this required a good deal of innovation
  - e.g. natural rubber from one community is processed into a range of very specialised products including football bladders and various surgical equipment for which natural rubber is better than synthetic substitutes. The other rubber community produces waterproof ponchos and bags for local miners.
- Also need the right producer niche
  - i.e. the activity has to fit in well with other activities carried out by the household
  - e.g. plaiting soyate palm fibre has very low rates of return but can be carried out simultaneously with many other activities

# Combinability...



# Key factors determining success:

## 2. Market information

- The most important barrier to entry mentioned by actors all along the value chain was market information
- Information is needed on desired timing, price, quality and quantity of products
- Very few producers know the end destination and use of their product
- No product benefited from a formal market information system (e.g. via radio)
- Communication along the value chain between producer and consumer was dependent on intermediaries (and NGOs).

# Key factors determining success:

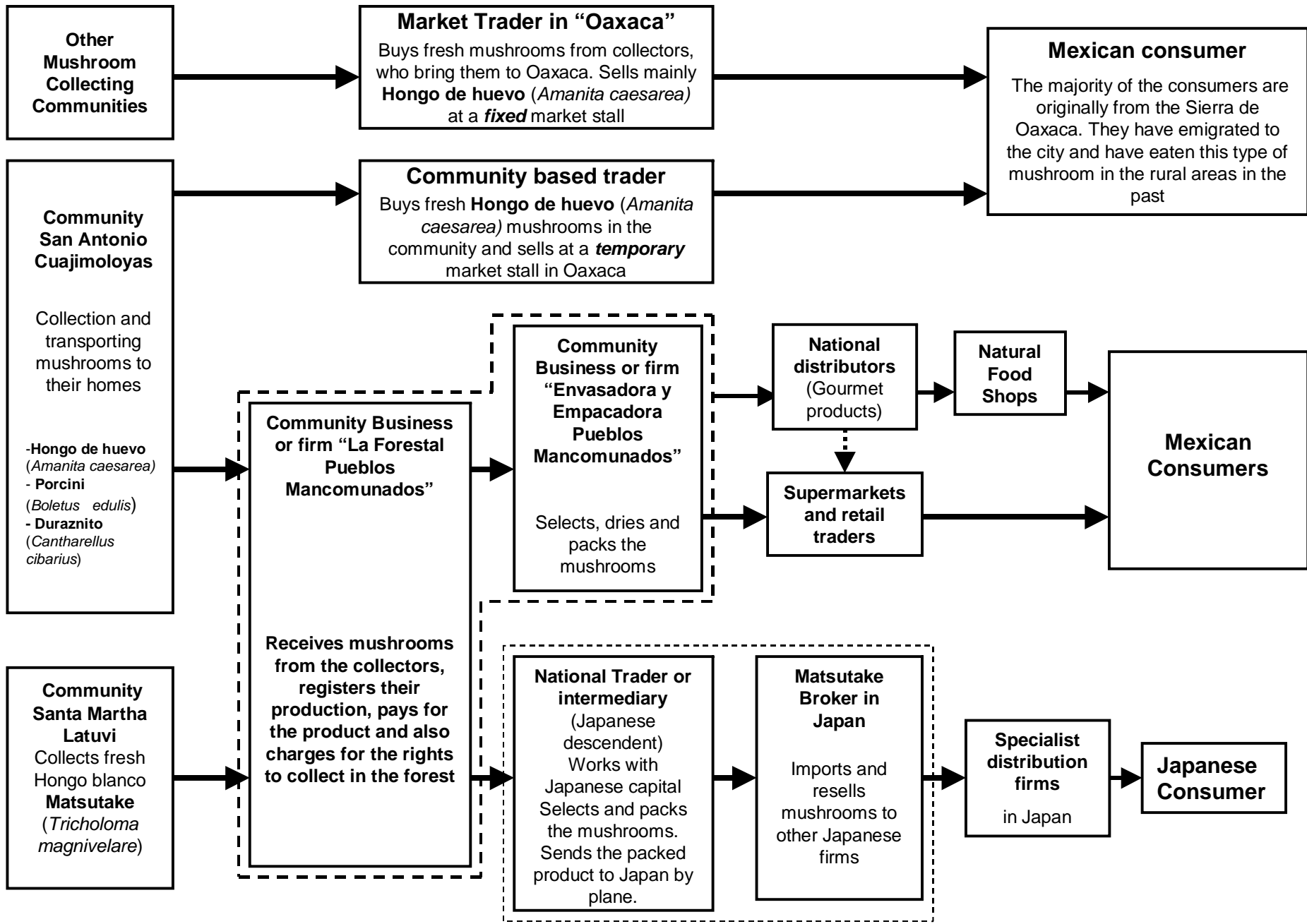
## 3. Critical mass of product

- If there is insufficient product, traders will not come to the community (e.g. Camedora palm community)
- Limited amount of product can be overcome in two different ways:
  - Processing into a more easily transportable product; e.g. the rubber community with lots of trees sell latex while the less well resourced community sells processed products
  - Combining NTFP sale with another product; e.g. traders come to one community to buy cocoa beans and/or dried fish depending on the season – neither product would be sufficiently attractive on its own

# Key factors determining success:

## 4. Presence of entrepreneurs

- In almost every one of our value chains, we found one or more entrepreneurs were key to sustaining the chain.
- The essential role of these entrepreneurs is:
  - to bridge information gaps (making contacts between producers and consumers);
  - advance capital to ensure consistent product supply;
  - provide training and information to ensure product quality, in some cases, to help organise communities.
- Notwithstanding their positive role, there is always a danger that such individuals may obtain an ‘unfair’ share of the profits along the value chain – but this was not observed in our cases.
- Entrepreneurs are particularly important for long value chains where products are exported outside the country.
- Typically ‘entrepreneurs’ are private individuals acting as intermediary traders, but they may also be presidents of producer associations or NGO staff members



# Food for thought for the bushmeat trade

- In spite of the many differences between the trade in bushmeat and plant NTFPs, there are some areas where the two debates may have something to say to each other.
- Based on the preceding presentation of some of our findings, two areas of mutual interest may be:
  - Impact of commercialisation on the resource
  - The degree to which the benefit from the trade (and any increases in it) are distributed equitably.

# Impacts on the resource

**Our findings which may be relevant to the bushmeat trade include:**

- Commercialisation rarely leads to extreme overexploitation: land use conversion is often a much greater threat to the resource;
- Commercialisation often leads to either domestication (usually on an individual basis) and/or community management of the resource;
- Our cases suggest that domestication may benefit less poor individuals with some up-front investment capacity; whereas community management of the resource is more likely to continue to benefit the original collectors;
- Both domestication and community management are more difficult when dealing with moving animals. In either case legality would be an important pre-condition;
- However, as we've seen in our dried mushroom case, a legal trade is usually heavily regulated and this may introduce new expenses for a community. Intervention by NGOs or others is likely to be needed to help carry out ecological impact studies (to obtain permits), develop management plans, monitor the resource and the division of benefits, etc.



# Distribution of benefits

- Emphasis on the importance of NTFPs to the poorest is sometimes a red herring. Definition of the 'poorest' in already marginalised communities is difficult. Important issues to examine include:
  - What are the barriers to entry for different individuals? Can these be overcome so that more people can benefit from the trade and associated activities?
  - What proportion of the money being realised from the trade stays in the community? Can this be increased, e.g. through processing?
- A large proportion of the benefit in the value chain may remain with entrepreneurs. However, they play an essential role communicating along the chain and taking risks. Rather than by-passing intermediaries, it may be better to work with them and aim to increase the proportion of benefits received by the community.
- In addition, improving communication of market information can increase the bargaining power of a community.
- Reducing the risk along a value chain can reduce the justification for any abnormally high profits. A key source of risk for most bushmeat is illegality. Legalising *some* of the trade might therefore lead to a more equitable distribution of profits along the chain.

# Conclusion

- The bushmeat and NTFP debates have been running along in parallel for some time now
- We hope that some of the results from our study may provide food for thought for those bushmeat cases where the aim is to work with the trade to reduce its negative impacts on the resource and improve its contribution to local livelihoods