



# **Women, forests and markets: researching poverty alleviation through commercialisation of forest resources in Mexico and Bolivia**

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## **Summary**

During the past decade, non-timber forest products, such as fruits, nuts, resins, fibre, and medicines, have been widely promoted as a potential solution to high rates of tropical deforestation. The commercial development of (NTFPs) could increase the value of forest resources, thereby encouraging forest conservation while alleviating rural poverty. However, while some NTFPs have been commercialised successfully, many have failed.

Specifically, this paper focuses on the relationship between poverty and gender and the successful commercialisation of NTFPs. It seeks to identify the socio-political, gender-related, and cultural factors that contribute to successful commercialisation and the impact of different types of commercialisation on communities, gender relations, and the environment.

In much of Latin America, women primarily undertake the harvesting of NTFPs and the management of the NTFP resource base. In areas with long-term habitation, women have a strong working knowledge of forest products and play a major role in passing on this knowledge to future generations. Despite this, women suffer from lack of access to health and education services; social norms limit their participation in public life and restrict opportunities, and their low levels of education result in occupational segregation and inequality.

While it is recognised that NTFPs are an important resource for rural women, and women play a key role in eliminating poverty, there have also been many

gaps identified in the sectoral coverage of existing research. While women have traditionally operated in the subsistence sector, they may not have equal access to the cash economy, because of traditional domestic responsibilities or gender inequality. These gender issues have been neglected in the implementation of many development projects. In addition to the role that this research plays in filling information gaps, it will also contribute to a greater understanding of the impact of change.

Principal outputs from the research are Decision-Making Tools (DMTs) that will assist communities in successfully developing NTFP resources. The following will be developed in collaboration with project partners, following comparative analysis of research data.

- *A manual developed and tested with rural communities, to provide tools for successfully developing NTFP resources.* Consultation is underway to ensure that this manual complements or feeds into FAO's manual on market analysis and development for community-based tree and forest product enterprises.
- *An Expert System for use by decision-makers to evaluate the potential for successful NTFP commercialisation*

This collaborative research is undertaken with country partners in 17 selected indigenous case study communities located in two of the three poorest states in Mexico and in some of Bolivia's most geographically remote areas. All the case study communities are geographically isolated, lack various basic services, and are characterised by high illiteracy rates, inadequate medical attention, poor domestic conditions, and high mortality rate. NTFPs are commercialised in these communities with varying degrees of success, and differ in a number of important characteristics including yield, perishability, value, seasonal availability, etc. The local communities harvesting these resources differ in social structures (including gender influence), culture and ethnicity, degree of marginalisation, and access to capital resources (financial, physical, environmental, human, and social). Considering the variables, a comparative analysis of different NTFPs can, therefore, enable the identification of key criteria for successful commercialisation.

In fact, one of the greatest challenges facing the researchers was the designing of a research methodology that could successfully be applied across different communities, commercial products, and geographical areas. In addition, this research is multidisciplinary and is being implemented across seven different institutions in four countries in two languages. The first four research hypotheses are predominantly concerned with the impact of NTFP commercialisation on different groups of participants in the commercialisation process (both within communities and along the market chain), as well as on the environment. The latter two are focused on understanding the different types of market structure that exist for NTFPs and, in conjunction with the earlier hypotheses, their relative impact on participants.



Some of the hypotheses are given below.

1. Changes in commercialisation of NTFPs have a greater impact on the livelihoods of women
2. Increase in the volume of NTFP commercialisation leads to forest over-exploitation and/or domestication
3. Changes in the volume of NTFP commercialisation lead to reduced rights/access to the resource for the poorest producers.
4. The successful commercialisation of an NTFP depends critically on: accessible market; potential demand; the absence of substitutes; access by producers, processors, and traders to market information; technical management capacity; organisation; high value/unit weight, and trader characteristics (age, experience, education, etc).
5. The success of poor producers, collectors, processors, and traders in NTFP commercialisation depends critically on the level of supply and demand (market structure); capacity to exert market power; barriers to entry; degree of vertical and horizontal integration; and presence of substitutes.

The research questions we developed to help us answer whether changes in commercialisation of NTFPs have a greater impact on women's livelihoods are as follow.

- To what extent are women involved in the harvesting, processing, and marketing of the NTFP?
- To what extent are women involved in transporting the NTFP from the forest to the market?
- To what extent do women have control over the income derived from NTFPs and therefore, to what extent do they benefit from their sales?
- Do men displace women when new technologies for NTFP processing are introduced?
- Does NTFP commercialisation help or damage the social, political, and economic status of women?

All the research at the field level was implemented directly by the researchers' country partners, allowing them to build on the trust that the research communities enjoy. The research tools were designed to be implemented using a multitude of participatory techniques, including group work (with different gender, age, and wealth groups), key informant interviews, household interviews, and so on, and partners were encouraged to draw from their previous experience with communities.

A community report is to be written for each community to collate all the information relating to NTFP commercialisation in that particular community. Each report will provide an introduction and context for the community, land use, organisation of resources, income and expenditure, labour; information specific to the NTFP collected, commercialisation from the community perspective, and the various social, political, environmental, and gender-related impacts of changes in commercialisation. Although predominantly qualitative, some of the data included in the report are of a quantitative nature

and can be codified for entry into a database. One of the final aims of the report is to show how representative these communities are in relation to other communities and, hence, each report is to be in a standard format to enable comparative analysis.

### Who are NTFP traders?

	NTFP actors	Control
Percentage female	(data from community reports)	(data from community reports)
Average income	(data from questionnaires)	(data from surveys, possibly also from secondary sources)
Etc...		

A market report will be written for each product with a focus on the overall marketing chain for the product, concentrating in particular on elements outside the study communities.

Four questionnaires have been developed with our NGO partners, all with the same basic structure. One is directed at community members involved in any aspect of NTFP production or sale, with a second directed at a control group of community members not involved with NTFPs. A separate form of the questionnaire targets people outside the community involved with the NTFP case study (e.g., processors and traders), and a final version targets a control group of non-community members.

With regard to our data analysis methods, we have attempted to achieve methodological integration with survey tools solidly based on results of community, household, and market-level research and provide data for a multidisciplinary research team. Simple tabulations and charts have been used to assess the characteristics of those involved in NTFP trade. Such characteristics may include female participation in percentage terms, average income, access to finance/land, etc, for NTFP actors, such as the chart shown below.

Charts also help to obtain associations between average income and access



### Importance of NTFP Activities by Household Characteristics

		Household characteristics			
		Gender	Access to finance	Average income	Etc.
Share (%) of income from NTFPS	0–25				
	26–50				
	51–75				
	76–100				

to finance/land and gender, on the one hand, and the share of NTFP activities in total income on the other. This is important, as we would like to know the characteristics of the workers (e.g. poor, female, etc.) that derive a large share of income from NTFP activities. The table below does this.

The findings in the above two tables can then be combined to test certain hypotheses, such as:

- if it is found that NTFP actors are generally poor, female, lacking finance/land
- that these traders derive a relatively high share of income from NTFP activities,
- then, it would confirm hypotheses 1 and 2 above: “Changes in trade in NTFPs have a greater impact on the poorest producers, processors, and traders, and on women’s livelihoods.”

In addition, the project cycle has been planned to facilitate some triangulation of our results, including research with small working groups at the community level. This helps towards a better understanding of how women perceive successful commercialisation and helps us explore how much control women have over the expenditure of their own income and to measure less tangible and/or coincidental or non-linear benefits (children receiving better education or better nutrition, for instance).

## Conclusion

For the purposes of executing a multi-disciplinary and multi-partnered research project, the researchers believe in the value of jointly developed hypotheses as integrating factors for the wider project research team and the value of early and frequent joint analysis. They acknowledge the need for intensive management to achieve ‘consistency’ between research partners in terms of research implementation and interpretation of data. While this can be time-consuming, the benefits of a full-time project leader providing a constant point of contact and acting as a vital intra project link (having visited all the fieldwork sites) can clearly be seen in the quality and quantity of social capital that has been developed over the last 18 months of the project cycle.

It is worth mentioning the importance of transparency in what we will deliver as a research project, and acknowledging the sometimes less tangible outputs of the study of forest communities. A research project is much more about delivering long-term benefits rather than immediate solutions, both directly as outputs and indirectly through the design and implementation of future projects and policy changes.

There is also the issue of recommendations for future policy formation to be considered when analysing how far-reaching our outputs (as research methodology and decision-making tools) can be. It is hoped that, through the

careful selection of our case study communities and products and the sensitivity of our research tools, the adaptive decision aids will work successfully in many forest-dependent, poor communities throughout Latin America.

Much of the research findings to date emphasise the importance of the social aspects of sustainability, which requires that natural resource use does not disrupt social harmony beyond the capacity of social structures to tolerate such change. It is worth noting that, whereas the increased empowerment of women might seem a logical and desirable outcome of developing the NTFP resource, there may be social costs in terms of disunity within the community. As a result, a cautious approach to resource management and change is to be valued more highly than increased economic returns.

Any external assistance to communities recommended via the research outputs and our policy briefing paper will need to be very carefully planned and executed. However, such support could enable the rural poor, especially women, to benefit more fully from forest resources, and this will prove to be one of the most rewarding and environmentally benign ways of fighting rural poverty.

This paper sets out to capture and explain the importance of mainstreaming gender in natural resource research. It illustrates the value of rigorous planning and iterative development of research questions and data analysis approaches between project stakeholders to ensure thematic coverage. It describes how our research methodology, compiled of flexible participatory techniques and more structured research tools, has generated both qualitative and quantitative information that will provide a valuable insight into the impact of change in NTFP commercialisation.

