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The challenges of extension for non-wood forest products

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How can extension, traditionally standardized for large-scale crop production, be adapted for diverse, low-volume NWFPs?

Interest in non-wood forest products (NWFPs) has risen in the past 15 years or so as foresters, conservationists and development workers have struggled with the issue of promoting economic returns from forests while simultaneously conserving them. An underlying assumption of the interest in NWFPs is that sustainable economic harvest of "secondary" products will help avoid forest conversion to other economic land uses or extensive logging. However, this approach has recently been recognized as somewhat simplified; accumulated experience, including evidence of unsustainable extraction and negative socio-economic impacts, has led to a more complex view. More consideration is being given to the role of NWFPs in improving rural livelihoods and to the assistance that could or should be provided to help achieve this. As J.E.M. Arnold states in a review of trends in community forestry (manuscript in preparation, FAO Community Forestry Unit): "It is therefore often necessary to be able to distinguish between those forest products activities that feature in the survival strategies of the very poor, and those product activities that can contribute to increasing the incomes of house holds operating in a more dynamic economic environment. This can be very important in determining what support and intervention measures may be appropriate." This article briefly considers some emerging extension approaches to promoting NWFPs.

Extension activities integrate local knowledge and institutional research: consultations with local women in the Philippines

THE APPARENT PARADOX

Although forestry extension has been defined in many ways, it may be considered as a systematic process of exchange of ideas, knowledge, techniques and information leading to mutual changes in attitudes, knowledge, values and practices aimed at improved forest and tree management and rural development (Anderson and Farrington, 1996). In organizational

and operational terms, many extension systems, public and private, are based on some degree of standardization and economy of scale. Traditionally, extension has often aimed at optimizing the production or yield of a single product or a limited array of goods and services. For example, because of strong demand, large areas may be managed for fibre production using certain standardized techniques and practices. The green revolution and "training and visit" types of extension tended to view the purpose of extension as the delivery of standard technical packages developed by formal researchers to farmers in order to increase production over large areas of fairly homogenous farmland.

NWFPs, on the other hand, are often low in value, multiple and diverse. They vary greatly over time and space, and they can fluctuate strongly in response to markets. NWFPs can occupy overlapping and competing niches. Fruits, bark and leaves of the same species may provide different products and have different uses. The aim to optimize the sustainable production of an array of products greatly complicates extension approaches. Many NWFPs have not been formally researched to a significant degree and are relatively little known from technical, economic, social and environmental perspectives.

Extension for NWFPs therefore can be seen as something of a paradox: how can systematic and standardized extension approaches deal with goods and services characterized by diversity and multiplicity? NWFPs are growing in importance as income-generating products in many areas. How can the apparent contradiction be addressed so that they can be appropriately promoted?

EMERGING APPROACHES TO EXTENSION FOR NWFPs

Several complementary attempts have recently been made to address the extension challenge. The approaches, which are still being developed and refined, can be characterized under the general headings of socio-economic approaches, integrating local knowledge and networking.

Socio-economic approaches

In part as a response to the conservation and development emphasis, recent extension efforts have accentuated the need for income generation from NWFPs. This emphasis has led in turn to a focus on capacity building and small enterprise development. Lecup *et al.* (1998) mentioned three approaches: business planning, enterprise and marketing development and market analysis and development. The last is particularly interesting because it integrates social. technical and ecological as well as economic and financial considerations.

Market analysis and development (MA&D) is a methodology for helping entrepreneurs working with trees and forest products to identify products and develop markets that can provide them with income and benefits without degrading the resource base. The MA&D process consists of a series of phases focusing on capacity building and strengthening of institutions at the local level to provide the support that local entrepreneurs need to develop and run small enterprises. One of the goals of MA&D is to enable tree and forest product entrepreneurs to develop and operate their enterprises independently in the long term. The entrepreneur's role is central to the methodology; entrepreneurs are the main actors and decision-makers, even though they may need the initial support of a facilitator, e.g. a forest extensionist.

Using market analysis and development to help plan local tree and forest product enterprises

As growing numbers of rural households are becoming more involved in producing NWFPs for the market, it is necessary to shift the focus of planning from subsistence to income generation. However, insufficient attention is often given to the process and methods of identifying income-generating enterprises. In many instances it is important not only to consider what is currently produced and how it is marketed, but also to look critically at current and potential markets (including export markets) and to

appraise whether a potential product *is* suitable for development. The market analysis and development (MA&D) approach can be very useful in this situation.

The Community Forestry Unit of FAO, the Asia component of the Forests, Trees and People Programme, the World Conservation Union (IUCN) and others are collaborating on the preparation of a field manual on the use of the MA&D approach in planning sustainable tree and forest product enterprises. The manual, to be published next year in FAO's Community Forestry Field Manual Series, will provide facilitators assisting tree and forest product entrepreneurs with a step-by-step practical framework that can be adapted to a wide variety of potential real-life situations. The approach involves continuous monitoring and evaluation of opportunities and constraints, the development of hypotheses about the costs and benefits of a product and finally the testing of the hypotheses so that recommendations can be made about the product, market and means of market development. This approach helps identify profitable products and strategies and, through early identification of constraints, prevents the waste of resources on the wrong product.

The manual will help tree and forest product entrepreneurs develop the skills needed to gain income and benefits within the context of sustainable forest utilization and rural development.

The methodology enables field staff, facilitators and planners to integrate social and resource management issues in their support to entrepreneurs. MA&D helps the facilitator and the entrepreneur to take a multifaceted approach to investigating the market environment with a view to avoiding potential failure.

Government agencies and programmes and development organizations also benefit from the MA&D approach. The methodology reduces the risk of time and funds being spent on unsuccessful enterprise development. MA&D is a cost-effective process which assists in the development of viable enterprises.

Integrating local knowledge

Since local people and groups often know more about specific NWFPs than many formal scientific institutions, integration of local knowledge with institutional research results improves the effectiveness of extension. Participatory research and extension help to ensure that the empirical local knowledge built over many years of living with the forest is captured and used. In addition, scientific methods can be applied to systematize and expand local knowledge. Participatory extension can help build methodological capacity at the local level for critical analysis of trends and action. The combination of the knowledge resources of the various parties facilitates innovation.

A participatory study on the role of NWFPs in a conservation and development strategy in Pará, the easternmost state of the Brazilian Amazon, provides an example (Shanley, 1999). Attempts were made to make the data collected as accessible as possible to local people, for instance through the use of or conversion to local units of measurement, through workshops with local people and through song and theatre, in order to facilitate a dialogue with local forest users. This effort also served to break down the barriers between research and users (including extensionists). The extension team developed illustrated booklets presenting the ecological and market data, posters, songs and lore used in workshops, which could be used to reinforce outreach efforts, could serve as a training tool for extensionists and could reach distant communities beyond the team's travel. Shanley concluded: "We need to question... who the primary beneficiaries of our research really are, as well as the common assumption that our research is complete once the scientific article has been sent to press. Rural extension is an underutilized, cost-effective way to ensure that hard-won field data not only land on the desks of other scientists but are also given back to the forest-based community who need [them] most."

Some NWFP networks

Many NWFP networks have emerged recently, many with overlapping regional or product focus. The following list is presented in alphabetical order and does not pretend to be exhaustive.

- African Ethnobotany Network
- African Network for the Industrial Utilization of Medicinal and Aromatic Plants
- African Rattan Research Programme
- Andean Network of Sustainable Alternative Products
- Arab Association of Beekeepers
- Asia Network for Small Scale Bioresources (ANSAB)
- Asian Network on Medicinal and Aromatic Plants (ANMAP)
- Asia-Pacific Information Network on Medicinal and Aromatic Plants (APINMAP)
- Avenir des peuples des forêts tropicales
- Environment Liaison Centre International
- European Tropical Forest Research Network
- Federation for the Revitalization of Local Health Traditions (FRLHT)
- Forests, Trees and People Network
- Identification, Conservation and Use of Wild Plants in the Mediterranean Region (MEDUSA Network)
- IDRC (International Development Research Centre) Medicinal Plant Network
- International Neem Network
- International Network for Bamboo and Rattan (INBAR)
- Internet Global Palm Network
- Interregional FAO Cooperative Research Network on Nuts
- Natural Products Network for West Africa (NAPRWA)
- Natural Products Research Network for Eastern and Central Africa (NAPRECA)
- Overseas Development Institute (ODI) Rural Development Network
- People and Plants Network
- Plant Resources of South-East Asia (PROSEA)
- Regional Research Network on Tropical Fruit Trees in Asia and the Pacific
- Réseau africain bioressources-énergie-environnement-développement
- Russian Far Eastern Association for the Use of Non-Timber Forest Products
- Silva Mediterranea research networks on *Pinus pinea, Quercus suber* and multipurpose species
- South and Southeast Asian Countries NTFP Network, India
- Tribal Cooperative Marketing Development Federation of India Limited (TRIFED)

- Underutilized Tropical Fruit Trees in Asia Network (UTFANET)
- Women's Association for Natural Medicinal Therapy (WAINIMATE)
- World Conservation Union (IUCN) Medicinal Plant Specialist Group
- World Conservation Union (IUCN) NTFP Network for South and Southeast Asia
- World Wide Fund for Nature (WWF) Mediterranean NTFP Network

FAO's* Non-Wood News *an example of networking efforts on NWFPs

Networking

Another approach has been to emphasize networking, especially between technicians working on NWFPs and potential producers and markets. Since technical knowledge about an individual NWFP may be held by disparate partners, technical networking may be an effective way of combining and systematizing technical knowledge and making it more widely available. An example is the work carried out by FAO's NWFP programme (see article in FAO Forestry section of this issue).

Networks are usually viewed as a flexible and often informal means of improving information exchange. Although they may cover wide areas of expertise. NWFP networks often focus on rather specific topics (see Box).

With the advent of Internet facilities and e-mail, which allow simultaneous contact with a large number of people at low cost, the capacity and efficiency of some networks have been greatly enhanced. Electronic newsletters (e.g. ntfp-biocultural digest, an e-mail list for announcements and facilitated discussions on topics related to non-timber forest products [NTFPs]; Tropenbos NTFP mailing list) and e-mail conferences are effective and cheap tools for exchange of views and animated discussions on specific topics.

WHAT DOES THE CHALLENGE MEAN FOR EXTENSION?

The problem of developing systematic extension approaches for the numerous and diverse NWFPs strikes at the heart of the question of what extension is and what it does. The development of approaches for cases that initially appear to be difficult, such as NWFPs that are not traded internationally, can inform and enhance extension for more traditional forest products such as timber and fuelwood. Many of these products share characteristics with NWFPs: their value fluctuates over time and space, and local knowledge systems are often essential to understanding issues regarding their sustainable management. As diversification and differentiation of markets continue, approaches developed for NWFPs may well be important for other products in the future.

Bibliography

Anderson, J. & Farrington, J. 1996. Forestry extension: facing the challenges of today and tomorrow. *Unasylva,* (41)184: 3-12.

Lecup, I., Nicholson, K., Purwandono, H. & Karki. S. 1998. Methods for assessing the feasibility of sustainable non-timber forest product-based enterprises. *In* E. Wollenberg & A. Ingles, eds. *Income from the forest: methods for the development and conservation of forest products for local communities.* Bogor, Indonesia. Center for International Forestry Research (CIFOR) and World Conservation Union (IUCN).

Shanley, P. 1999. Extending ecological research to meet local needs: A case from Brazil. *In* T. Sunderland, L. dark & P. Vantomme, eds. *The non-wood forest products of Central Africa -*

current research issues and prospects for development and conservation. Rome, FAO. (in press)