Introduction

While NWFPs have a very long history of being utilised and traded in the Asia-Pacific region, there has been a recent dramatic surge of interest. Newsletters, workshops, seminars and courses are springing up throughout the region. In part the increased interest in NWFPs appears to be the result of the emerging new strategy in forest conservation: integrated conservation and development projects (icdps). The underlying assumption of icdps is that if a community can benefit from forest based incomes it will conserve the forest. While this assumption is still unproven, it has created interest in identifying the importance of NWFPs to local as well as national economies.

Interest has also been created by the recognition of the potential of "green markets" (Fricke, 1994). There is an increasing number of affluent "green consumers" who are interested in buying products that they perceive as being environmentally friendly. While green consumers were initially believed to be a Western phenomena, the prosperity and growing environmental awareness in this region has been reflected in the rapid growth of consumer interest for "ecological" or "natural" products. The continuing economic boom of this region, rising environmental awareness, and trendiness of the products are projected to provide an increasing market for at least some NWFPs as raw materials.

Can the growing demand for NWFPs and forest conservation be met? Certainly the forest communities involved in collecting NWFPs will respond to the greater demand for the products. Traditionally, forest communities have been perceived as being subsistence rather than market oriented. This perception was tenacious even as studies continued to cite the importance of forest products not only for direct household consumption, but also for cash income (Dove, 1985; Poffenberger and McGean, 1993). While the belief that forest communities are only interested in subsistence may linger, these communities are becoming increasingly integrated with national/international economies. As a result of improved infrastructure and communication, communities that were once isolated are more aware of external opportunities and products and more vulnerable to external control and destruction of local resources.

It is this vulnerability to external demands and control that creates the challenge of combining the development of NWFP markets and community income with the conservation of the forests.

Marketing of NWFPs: Following the marketing channel

Collectors, concessionaires, and traders

Forest communities in the region have historically collected a wide variety of NWFPs for domestic use and external sale. Many of the forest products that were collected and sold by community members were those that could be collected during periods of low labor input during the agricultural cycle (e.g., resins, rattans) or during a brief "bloom" (e.g., mushrooms).

In the past, the collection and marketing of NWFPs that were exported or processed into high value products (rattan, medicinal plants, essential oils, etc.) was often under a concession or license holder system. The common pattern under the concession system was for a government department or agency to grant a concession to an individual or company for products in a designated forest area in return for fees or taxes. For
one area there could be a number of concessions for different products, e.g., the timber concession could be awarded to one individual or company, the resin and rattan concession to another. The concessionaire had the right to purchase and sell all of the specified product that was collected and marketed from the designated area. Domestic use of the products by forest communities was either allowed or overlooked.

The concessions were often long term, in response to the then (and current) prevailing theory that if long-term benefits could be obtained there would be better management of the resource. Some concessionaires were good managers. In west central Palawan, Philippines, for example, the concessionaire for almaciga (manila copal, a resin collected from Agathis philippinensis), provided the men who would collect the resin with tapping gear, instructions for how to tap the tree without harming it (initial instruction was from an agent of the Bureau of Forest Development, now known as the Forest Management Bureau) and which areas of the concession to tap.

Since many forest products are scattered throughout the forest, geographically distant from settlements, and seasonal, the concessionaire needed to have a number of collectors to gather the product. One of the primary ways to attract collectors was for the concessionaire to also act as trader. In relatively isolated communities forest products were (and in such situations, still are) traded for goods. The shops often traded in two goods, manufactured goods (kerosene, matches, tobacco, liquor, cloth, etc.) and food. It was easy for a collector to fall into debt; this suited the needs of the concessionaire since it provided leverage to force collection of the product.

In west central Palawan, a majority of the forest community members were in debt to the concessionaire. Although the rainy season was the most productive time for almaciga collection, the men preferred to collect almaciga during the dry season when the paths were dry and there were few competing agricultural and fishing activities. However, the concessionaire needed more almaciga than could be collected during the dry season in order to make the concession profitable. The concessionaire used debt to force the extension of almaciga collection from the dry season to throughout the year. This form of "debt bondage" to the concessionaire was not uncommon in the region. There is still a very negative perception of NWFPs as a source of income generation in many areas because of the debt burden and exploitation that often occurred.

Currently, the concessionaire system is being restructured or totally done away with in countries in the region, although a system of a licensed agent representing a national agency or private company with rights to purchase the product (rather than products from a specified area) continues, and in some instances is being strengthened. There are increasing attempts among collectors to form cooperatives/associations, but the pattern of gatherers/collectors dealing individually with an agent is still common. The very nature of most forest products ensures that only a small amount will be collected by any one individual.

**Services provided by the middleman**

Because of the small amounts of forest products of the individual collector, very few forest products are sold directly from the collector to the wholesaler or processor. Middlemen, the first in a series of middlemen, initially buy the product and then move it to the next stage in the marketing channel. This is true in either a concessionaire/agent system or in a more open competitive marketing system. In a recent study of the marketing of medicinal plants in eastern Nepal, for example, roadhead traders give funds to village traders who in turn distribute advances to collectors (Edwards, 1993) (figure 1). The relationship with the village trader is "a serious life-time relationship" of which the cash advance is but one component. Several village-level traders may have dealings in the same village, so there is competition between the traders which inhibits the development of a more exploitive "debt bondage" relationship.

The village traders in eastern Nepal, as do middlemen throughout the region, provide important services to the collector. The trader not only advances money during the period of food shortages before the monsoon, but also arranges for the transport - "bundling, weighing, portering and temporary storage" (Edwards, 1993). It is through providing these services that the village trader is able to attract collectors, and it is through his ability to store (and thereby speculate on product prices) that enables the trader to obtain (if he speculates accurately) a fairly high return on his expenditures.

**Gaps in the chain**

But what happens after the product leaves the concessionaire, licensed agent, or initial middleman? Although initial agents may deal in a number of NWFPs, each product may later enter separate marketing channels. If it is a product used by local communities, a portion or all may be used by the household or marketed locally. If the product is primarily for external markets, most of the market channel (and income) will be elsewhere.
While case studies provide in-depth community-level information, the marketing analysis usually ends at the community or perhaps the initial middleman. For example, in a thorough study of a community forestry management in northeast Thailand (Poffenberg and McGean, 1993), it was found that gum from *Shorea obtusa*, one of the dominant trees in the local forest, provided income for nearly every household during the dry season when other forest products were less available. The gum collectors were predominately "older, retired men and women who can no longer work in the fields or participate in other off-farm employment," but through gum collection could generate "a substantial supplement to the household income" (Poffenberger and McGean, 1993). Traders came to the village to buy the gum and then sell it to another agent. Since the focus of the study was on the community, what happened to the gum after this transaction was beyond its scope. Yet this information is critical for a marketing analysis of the product.

**Figure 1. Marketing in the Hile-Basantpur Roadhead, East Nepal (Edwards 1993)**

It is this part of the marketing channel - after the product leaves the community or initial middleman and before it arrives at the processor or final consumer - that relatively less is known, especially if the products are illegal, taxed, or regulations ban harvest or export. The information is often fragmented into "bits and pieces" with accurate information very difficult to obtain. In order to fill in the gaps current marketing analysis often estimates product (and income) flows by taking information obtained from a community and projecting it through a sequence of exchanges until it reaches the final consumer, or taking information obtained from the retailer or processor and projecting it back to the collector.

For example, based on information from a sample of households or villages the total flow of products from the region will be estimated: one village sells $X$ amount, so if there are 40 villages and each sell $X$ amount than a
total of X is collected and sold in the region. Or the analysis may take the total amount of a product exported and then divide it by the average amount of the product that a household is estimated to collect to arrive at an estimate of the number of collectors. While this form of analysis may provide a rough (often very rough) estimate of the amount of the product in the marketing system, it does not explain the process of the marketing system, including such important factors as who does the collection, level of household dependency on the product, sustainability of current harvest levels, and sharing of income and benefits. Such analysis will not, for example, reveal the important role of the middleman in providing cash advances, transport, etc. nor additional or preferred marketing channels of the product.

Barriers to information

There are barriers to filling in the gaps between producers and the consumer or large processor. While the marketing channel can be determined, other information concerning the amount of the product, prices, and destination are more difficult to obtain. One of the primary barriers in obtaining information is the difficulty of gaining access to the major wholesalers or processors. It is a well-known phenomena that the poor are more accessible than the wealthy. While a villager might be willing to sit and chat with a researcher, a busy wholesaler will be less so, especially if there are product taxes to be paid or regulations to be met. Accuracy of information is also a problem and more difficult to ascertain. In the village or the initial assembly points (i.e., the roadhead) observation combined with an interview can provide fairly accurate information. However, when interviewing (or attempting to interview) a wholesaler, the large quantity and variety of products on site may make verification of information difficult.

Regulations that encourage the flow of products into illegal channels also make it very difficult to do an accurate analysis. Most countries in this region, for example, do not permit the export of unprocessed rattan, yet the largest rattan furniture producers (Hong Kong, Taiwan, and Singapore) do not have domestic sources of rattan. Where the rattan comes from is a matter of speculation.

Information can be obtained on legal exports from official documents, although it should be recognised that products that are carried by porters across a border rather than on a freighter or airplane will go unreported. The amount sold, benefits/income distribution, etc., of what is not “formally” exported, but sold in local markets, or utilised by the forest community is therefore based on estimates from case studies, and the “bits and pieces” of information that are available.

Marketing and sustainability

Information on the flow of products is important not only for marketing analysis, but also for an assessment of the sustainability of both the market for NWFPs and forest conservation. If icdps are to be effective in providing income and promoting forest conservation then the sustainability of the continued harvest (off take) of the product must be considered. In order to determine sustainability (“products can be harvested indefinitely from a limited area of forest with negligible impact on the structure and dynamics of the product population being exploited” Peters, 1993), information must be gathered on current and past harvest patterns, communities perception of whether the product is more or less prevalent than in the past, and future market demand.

External markets exert the greatest pressure on forest resources. Without external markets, communities utilise forest resources, but there is little "push" to harvest more of a product than can be utilised by the household or community.

When marketing opportunities do appear, the community may have difficulty in effectively managing the resource. Community based mechanisms to monitor its own members may be weak, while mechanism to protect its resources from other communities may be totally lacking. In the community in northeast Thailand mentioned above, it was reported that "the forest serves as a primary supermarket to the majority of resident families. Excluding rice, about 80 percent of the average Dong Yai household diet is derived from the forest" (Poffenberger and McGean, 1993). In this community the majority of the households are involved in mushroom collection for sale - about 30 percent of the mushrooms collected are sold and provide a significant portion of the household income. However, members of other communities, some as far as 50 kilometers away, now come to Dong Yai to collect mushrooms. The result is that "availability of forest mushrooms has been steadily declining" as more collectors enter the area. (Poffenberger and McGean, 1993)

Control of resources

What is occurring in Dong Yai is similar to what is happening throughout the region. While there might be traditional mechanisms to regulate access and harvest of forest products, these rights of control (including the right of exclusion) are frequently no longer recognised by other communities who want access to the resources.
or by the state or state agencies. Forest communities are often minorities and/or the poorest in the country with little political power. The communities rights to live in or adjacent to the forests is frequently in question, especially with the current regional concern about deforestation.

The dependency of these communities on the forest resources is often overlooked or ignored. The degree of dependency by a community on NWFPs depends on the condition of the forest (biodiversity, maturity), its proximity to the community, access (rights and restrictions), local and external demand on forest products, and income earning options. In the past, if in close proximity to the forest with little or no hindrance of access, a common pattern was for a community to grow the bulk of its staples (rice, maize, etc.) and gather NWFPs to supplement the cultigens, to provide food during times of scarcity, to add variety to the diet, and to provide income. Forest products such as gums and resins, rattan, and bamboo were utilised by the household as well as sold.

However, when the income from a product increases, then competition within a community and between communities may increase as well. Within the community, the dependency on forest products will be related to the other resources of the households. It is common to find that it is the poorest households, with less agricultural land, livestock, adult males, etc. that are the predominant collectors of forest products (Malhotra et al., 1992; LeCup, 1994; Falconer, 1990; Hegde and Daniel, 1992; Saowakontha et al., 1992) While the actual amount of income earned from NWFPs may be small, it may provide the largest portion of household income. These are the households that are the most vulnerable to competition both within and between communities

Valuation and pricing

In a perfect market there are:

- many independent producers, none of whom produces enough to be able to affect market price by offering or withholding his product
- many independent buyers, none of whom can individually affect price
- the product in any one market is similar (in quality and kind)
- all buyers and sellers always have full knowledge of the current market price

It is not surprising that perfect markets are more a concept than a reality! While there are many independent producers, the number of wholesalers or processors may be very small, and there is often cooperation between the wholesalers (figures 1 and 2).

In NWFPs the buyers usually set the price and the collectors respond to the price. Theoretically, if the price for a product is regarded by the collector as being high (a good price), more will be gathered. If it is low, less will be gathered. However, forest communities often have few options for generating income. The lack of alternatives for income results in forest products being gathered and sold even when prices are relatively (based on price history for the product) low. It is this lack of alternatives that results in the depressed prices of NWFPs in many forest communities.

The collector may not know what the consumer wants or needs. While products flow out, little information may flow in. The longer the marketing chain, the less likely that this information will be available. The longer the marketing chain, the less likely that this information will be available to the producer. The middlemen may not know what is desired by the final consumer and may not effectively get this information to the producer. Lack of fit between what the final consumer wants and the actual product results in wastage and low prices. LeCup (1994b) found, for example, that the medicinal plant collectors in the mountains of Nepal were not processing the plants (proper drying, sorting, etc.) in the manner desired by the final consumer. The long chain of middlemen (products were literally carried through a series of middlemen in Nepal and then into India) served as a barrier for the flow of information.

Price information also may not flow back to the collector. Few collectors (or middlemen) may know the final price paid by the consumer or processor. While this may in some instances be intentional (in order to keep the profits at the other end of the marketing chain), it is also the result of the distance the product may travel as well as the lack of awareness that the current system may be changed.

Without this information it is difficult for a collector to determine what is a "good" price and the "real" value. Not only does the collector not have information as to the current market price, but as mentioned above, the collector often does not have access to information as to what the consumer wants, so receives a low price. Also, without information as to the value (determined by what a customer is willing to pay) of the product, the collector cannot negotiate for a larger portion of the final price.
Marketing: issues and constraints

Marketing a product is more than selling a product.

"Marketing is the process of exploring which products potential customers will purchase and then producing, processing, promoting and distributing the products at a profit" (LeCup, 1994a).

In reality, the collectors of NWFPs do not market their products, rather they sell the products to a customer (the middleman). If the goal is for the communities to retain a larger portion of the income generated by NWFPs, the task of both the producer and those involved in assisting market development of NWFPs is to transform the current process from selling to marketing at the community level. However, there are obstacles inherent in NWFPs, the collectors, and the current marketing system that will hinder this transformation. These include:

1) Small quantities/many collectors. The small quantities from each collector depresses the price received from the middleman and prevents the collector from receiving a larger portion of the total income generated from NWFPs.

2) Services provided by the middleman. One of the unfortunate results of the lack of information as to what occurs in the marketing channel from when it leaves the collector and reaches the final consumer is that the role and the services provided by the middleman are misunderstood or distorted. The middleman is often perceived as being the villain, and while exploitation such as debt bondage does occur, the services provided by the middleman should not be overlooked. Nor should it be assumed that the middleman is taking the greater portion of the final price. When vigorous studies have been conducted, the amount the middleman (not the final processor) receives is not disproportionate to his investment (Edwards, 1993).

If the middleman is cut out of the marketing chain, then the services that the middleman provides (cash advances, transport, storage, etc.) must be assumed by other organizations or agencies. As noted above, cooperatives of collectors are being established in the region. The lack of capital and resultant inability to provide these services have led to the collapse of many cooperatives. These services provided by the middleman/trader are proving to be vital.

Information: There is a lack of information on current marketing channels, amount of each product, price variation, etc. Without this information collectors cannot be effective in negotiating for a higher portion of the product price.

However, beyond the information of the current status of product price, information is also needed on future supply and demand of the product, processed product development, and future price projections. This is the information that is needed to transform the current selling into a marketing system. This information is not readily available to the community, or to economists, planners, and technicians involved in NWFPs.

Policies and regulations

International treaties and conventions (and NGOs and environmental advocates) are largely concerned with tropical timber not NWFPs. Policies designed for timber conservation can, however, impact on NWFP collection. Natural resource laws and regulations frequently take the form of difficult to enforce regulations, rather than effective incentives. Regulations based on restrictive policies can create hurdles to effective (and equitable) marketing of products by producers. Bans on logging, for example, can close access to the forest for the gathering of other products. The current ban by countries in the region on the export of unprocessed forest products, can lead to a thriving black market with little of the benefits being channeled to the producers. While the goal of a ban may be to stop the harvesting of a product, the opposite often results.

Price controls also often have the opposite effect of the original objective. Price controls may be created to either keep prices down or keep prices up. The usual goal is to keep prices down, especially if the buyer is a state agency or board. Price controls rarely benefit the collector.

What is needed?

To develop marketing systems that provide greater benefits to the community (and might lead to conservation of the forest, the following are needed:
Local management of forests. The current state management of resources in the region have not been effective in stopping deforestation. Local or joint management of resources is a promising strategy for the region. For this to occur, policy and legislation must be redesigned to allow communities to take a greater role in forest management (Warner and Wood, 1993).

Cooperatives/community organizations supplied with good market information. In order to get a higher price, collectors can form an organization, whether it is a cooperative, community user group, etc., that will assemble the individual members' small amounts of NWFPs. In the development of marketing systems, the goal should be that such organizations have good market information, not only for the current, but also for future markets.

One of the major roles that government agencies should play in the development of marketing systems is in collecting and analyzing this information and making it available to collectors.

Removal of regulations: One of the roles that government agencies should not play is regulator of collections, prices, transport, and handling of NWFPs. Such involvement has usually not benefited the collectors, nor has it assisted in conservation of the resource.

Competition: The more buyers the better. If price information is available to the producer/collector, competition between middlemen, government agencies or businesses will result in a better price and better services.

Market analysis: There is an urgent need for market (also called sub-sector) analysis of NWFPs. The flow of each product from collection to consumer must be studied so that the information needed for sustainable management, fair prices, and efficient markets can be made available to those involved in developing the marketing system.

Final caution

While the development of the marketing system can help the collector, it should be recognised that there are few examples of sustainable collection of a product or resource when it receives a high price. The more successful the marketing system, the greater the pressure to exploit the product. For icsps, more efficient equitable marketing systems will provide opportunities for both great success and failure in forest resource conservation.

References


