Harnessing the Bees of the Wild

The seasonality of wild honey makes it an unstable source of income for honey hunters. They have to contend with the timing and volume of blooms in the forest. Exposed to the elements, such as forest fires and unpredictable weather, native bees can be very vulnerable. Thus, honey hunters are at the mercy of nature; they cannot plan nor manage the production of wild honey.

There is rising demand for honey in the domestic and international markets. In itself, honey produced using domesticated bees can potentially fill the much-needed local demand. However, wild native honey of premium quality produced in the tropical region commands a much higher price in the international market due to its inherent organic properties. It contains more essential enzymes and nutrients because native bees rely on the diverse floral community used as its food source.

Local honey hunters and producers now face this quandary: continue gathering honey from wild bees (hunting) or, better yet, ensure a more stable honey source by undertaking beekeeping (domestication). But there is no real paradox in this. There is a win-win proposition for those who want to get the best of both worlds—why not “domesticate” wild native bees to produce honey which fetches better prices both locally and internationally?

NTFP-TF and its Beekeeping Initiative

Beekeeping is one of the Non-Timber Forest Products-Task Force’s (NTFP-TF) key initiatives. The NTFP-TF recognizes that beekeeping is a gainful alternative livelihood for indigenous honey hunters. At the same time, it supports Non-Timber Forest Products development as a strategy towards natural resource conservation.

The forest fires in Palawan in 1998 underscore an important lesson in relation to beekeeping. The fires destroyed indigenous forest trees species, resulting in decreased sources of nectar. Nectar is the primary ingredient for wild honey production. The fires also disturbed wildlife habitat, negatively impacting on the bee population. Both directly affected the natural production of honey.

Honey has been considered as one of the main products of the country’s indigenous peoples. Realizing the over-dependence on the wild for the continued next page
supply of honey, there is a renewed local interest to augment honey gathering with beekeeping, particularly using the A pis cerana bee species. A . cerana, also known regionally as the A sian bee and locally as laywan or ligwan, has long been domesticated in South A sia.

Gearing up for Beekeeping: The Necessity of Training

B eekeeping is a specialization in itself and to successfully engage in beekeeping, information is key. O ne must thus necessarily learn beekeeping’s technicalities from bee experts, glean experiences from local beekeepers through exposure visits, and experience hands-on training.

O ne effort at arming Indigenous Peoples with beekeeping information was spearheaded by the N T F P -T F. T hrough a training-seminar headed by D r. C leo C ervancia from the U P L os B años B ee P rogram, 11 representatives from Indigenous P eoples O rganizations came together to develop their skills in beekeeping as well as learn how to conserve bees in the wild. S ome organizations include N agkakaisang M ga T ribu ng P alawan ( N A T R I P A L ), K apulungan para sa L upaing N inuno ( K P L N ), M angyan M ission, and K alahan E ducational Foundation ( K E F ).

E ntitled “B eekeeping with native bees: emphasis on A pis cerana and A . dorsata,” the training was held on 27 -29 M ay 2002 at the Institute of B iological S ciences, U niversity of the P hilippines, L os B años, L aguna.

S pecifically, the training aimed to enable participants to understand bee biology and behavior; domesticate wild bee colonies; construct various types of bee hives; and undertake proper harvesting, processing and packaging of honey from wild bee colonies.

Ready for Beekeeping

A t the start of the training, participants briefly introduced themselves and shared their own experiences and cultural practices in hunting and harvesting wild honey in the forest. Participants also gave their personal expectations for the training.

A mong the concerns of the participants were: to learn new skills in beekeeping A . cerana; to understand the advantages and disadvantages of A . cerana and A . melli fer a (exotic); how to properly domesticate A . cerana; to know the right time for harvesting; to have more literature in the roles of native bees in pollination and crop production; to know the indicators in monitoring beekeeping as a sustainable project; to learn more about the maintenance of quality product, marketing, and labeling; and, how to rear bees during off-season.

D r. C ervancia gave the participants a situationer of the beekeeping industry in the P hilippines, its biology; other products derived from honey; and their ecological importance. M s. N enita T apay dealt on the ethics, capital outlay, and its feasibility.

Hands-on: Hive construction and carpentry

T he bulk of the time during the first day of the training was dedicated to actual construction of different hives. Participants were grouped into three, namely N A T R I P A L, M angyan M ission/ K P L N, and K E F and were also asked to construct various types of hives. P rof. R ay Lucero, entomology expert, showed examples of three commonly used hives in beekeeping namely, log, box and frame hives.

P rof. Lucero discussed the advantages and disadvantages of these hives. T he cylindrical log hive is cheap, is easily built, and can be constructed using readily available materials such as the trunk of coconut palms, anahaw, and felled logs. T he box hive, on the other hand, is constructed using plywood. T he frame hive, while the most expensive, is also the most efficient in terms of bee handling and honey production.

T he log and box hives are initially practical for transferring the wild bee colony from natural hives. A fter harvesting, however, the frame hive is required to transfer any remaining young honeycomb with brood that can start-up a new batch for honey production.

Hunting and harvesting the P ukyutan (wild honey from A . dorsata)

U nlke A . cerana, there are no current techniques that allow the beekeeping of A . dorsata in the country. T hus honey produced by A . dorsata is only harvested from the wild.

D uring the second day, participants hiked the steep slopes of M t. M akiling to hunt and properly harvest honey from A . dorsata hives, locally known as pukyutan. T he local upland farmers trained and organized by the U P L B Bee P rogram accompanied the group.

I n order to reduce bee attacks, the farmers demonstrated the proper way of smoking the colonies without harming the bees. U sing torches fashioned out of grasses and lit to emit smoke, the bees swarmed another branch, thereby allowing safe harvesting of the abandoned...
pukyutan. This technique is both tedious and painstaking requiring skill and rigorous practice.

Later that day, the group went to the creek near Makban Geothermal Plant. This time, the objective was to hunt a colony of *A. cerana* and transfer it to a frame hive. These bees are commonly found in hollow tree trunks, animal burrows and abandoned termite hills. The group finally located a colony on the steep slope along the creek. The group dug up to one meter deep to locate the honeycomb. Using the smoking technique, the bees swarmed in the air and the group was able to retrieve the honeycombs one at a time. These were then placed in the frame hive in the same orientation as it naturally occurred in their hive. Then the bee colony was captured with nets and likewise transferred to the frame hive.

Despite the full day schedule, the group had learned the basics of ensuring the quality of harvested honey. A rule of thumb was minimizing all sources of possible contaminants. Processing of honey is undertaken by separating the honeycomb from the young bees, pupa and larvae as well as bee pollen. Cleanliness of containers, straining cloth, and other implements used during harvesting was emphasized.

Some significant laboratory tests for ensuring quality of honey were also demonstrated. One test is used to determine moisture content of honey. The iodine test, on the other hand, is used to detect adulterated honey (i.e., honey mixed with table sugar).

The group got a glimpse of commercial beekeeping through exposure trips to two beekeeping farms. In Calamba, Mang Cesar who had been engaged in beekeeping for almost 20 years had *A. cerana* in some 200 box hives. The other farm that was owned by the Malabanan Honey Producers, a multipurpose cooperative, was located in Balete, Batangas. The cooperative maintained 1,000 box hives.

### Beekeeping Prospects

The participants once again split into groups to draw up individual and organizational plans. After a 30-minute workshop and presentation, some identified concerns, issues and action points were: (1) the necessity of effective information dissemination on the benefits of beekeeping, proper harvesting and processing techniques that would ensure high quality honey. He means to achieve such could include participants re-echoing the training to their respective organizations or communities and the production of relevant information and education materials, such as flipcharts; (2) the need for technical and financial assistance in order to start-up beekeeping; and (3) the requirements of effective market networks.

The recently concluded training reaffirms that beekeeping is indeed a sustainable and lucrative option. All it takes is to be equipped with the expertise and skills to ensure its success. By way of its beekeeping and bee products initiative, the NTFP-TF is committed to supporting upland forest dwellers in improving incomes derived from beekeeping activities and bee products.
Marketing with a Unique Selling Point

By Rene Guarin
Executive Officer, Upland Marketing Foundation Inc. (UMFI)

The world of marketing is dynamic, diverse and exciting. While it is full of opportunity, it is also loaded with pitfalls and dead-ends. In UMFI's years of experience in assisting communities in the marketing of their products, we have learned to respond to these obstacles. This article aims to capture the common problems and misconceptions people have on marketing. By gaining a practical understanding on how marketing works, the benefits for community-based enterprises can also be better grasped.

For communities desiring income from their produce, marketing is both a boon and a bane. For UMFI, marketing is crucial in addressing poverty in communities. While many groups have failed at marketing and incurred losses, marketing also provides an opportunity to better earnings. Before undertaking any intervention, let us first find out the market situation at the community level.

The Dynamics of Trading

For many, marketing means selling crops or produce in their raw form. Thus farmers talk about selling rice, corn, bananas, fruits, rattan, and unpacked processed food or those commonly produced in the areas.

Farmers often utter “failure ang market” or “walang market.” Though farmers often complain that there is never a market for their products, in reality, there is always a market because there are always buyers for commodities. Trading posts abound along highways, at public markets. When farmers say there is no market, they mean that there are no buyers that will give them a good price. In most cases farmers cannot control the price and price shifts are not always in their favor.

While business relies on the nature of the product, to a large extent it revolves around the purchasing pattern or buying behavior of the customer. There isn’t much else, except price, that differentiates products from each other. Thus the same variety of corn in the market is pretty much the same wherever it may come from.

Furthermore, when there is excessive supply like during a bumper harvest of corn or rice, the price becomes the main product feature and thus buyers will look for the cheapest product. Producers are forced to lower their prices so that they can at least dispose of products and recover their capital.

It is very different for the traders. Traders always win because whatever the market price, traders always have a margin of profit. The margins are often small amounts, for example the profit margins of corn range from 5¢ to 25¢ per kilo. However, because the margins are small, traders buy at levels lower than market prices in order to increase their margins. If they do not increase margins then they have to buy and sell big volumes over a short period of time in order to make money. This is what is called velocity of trade or how fast trade is conducted. To illustrate, with a targeted margin of 15¢ per kilo, the trader must trade 100,000 kgs of corn within a month to recover P15,000 for operating expenses.

Other rules do come to play but these two are the main forces behind trading. These may be termed as the two Ps of trading, PRICE and PLACE, and is reflected in the main rule of trading: buy low, sell high, and sell the biggest volume within the shortest period of time.

The Five Ps of Marketing

UMFI understands and works with the trading dynamics in order to deal with the difficult realities of trading operations. UMFI therefore decided to engage in value adding activities or marketing. While the rules of marketing also revolve around the nature of the product being bought and sold, it more importantly highlights a Unique Selling Point (USP) or the distinct feature that makes a product stand out from similar products. Items with a USP are packaged/branded products and because they offer more than just a good price, buyers have more reasons to buy them. UMFI believes that by transforming locally available raw materials into packaged products, it increases the chances of community-based enterprises of winning in the mainstream market.

Traditionally, marketing involves only four Ps: PRODUCT, PRICE, PLACE, and PROMOTION. UMFI has added a 5th P: PEOPLE. In trading,
PRICE determines the fate of the producer. In marketing, PRICE is only one among the factors that can be controlled and manipulated, at least to a certain extent, to benefit the producers. Marketing also involves looking more closely at the behavior of the buyer.

The First P: PRODUCT

It is often said that the customer is always right. Customers choose the product they think and believe is the best for them. A good product should be able to provide not only what the customer needs, but also what the customer wants.

For example, people will always have a need for food products. But as more people become health conscious, they want food products free of sugar or chemical additives. If one can offer a product with low sugar content or all-natural ingredients, while highlighting the clear benefits of it being a safe or healthy food product, chances are it will sell better than commercially-produced food products.

When a product serves only a need, it cannot command high price. But once a product serves a want, then it justifies the higher price because people are more willing to pay the premium.

A product’s unique selling point is seen in its features, be it in the ingredients used, technology used, flavor, style, etc. These features offer benefits that address the needs and/or the wants of the customer. Table 1 contains some examples.

In most communities, products are undeveloped and are dismissed as simply something that they have cooked or processed. These may be considered as the beginning of a product but until its target market is identified, its USP determined, its information included on its proper packaging and a price structure developed, it is just a processing or production output.

USP and Packaging makes a Difference for Ginger Tea

Ginger tea is a common product in many communities because ginger is so abundant. Communities process this into powder form, place it in plastic or glass bottles, and label it “GINGER TEA” with basic information about the producer on it. This is then sold arbitrarily and to no one in particular. As a result, most producers end up with lots of unsold products or with very minimal sales.

By capitalizing on ginger tea’s therapeutic properties as its unique selling point, however, could change its dismal sales. Ginger tea relieves fatigue, cleanses the body, and is a good anti-nausea treatment. Unfortunately these benefits are often not communicated to the buyers nor are these benefits used to determine target markets.

Another aspect in promoting a product is through proper packaging. Ginger tea is commonly packed in plastic or glass bottles of 120 gms or more. Unfortunately, ginger tea spoils easily, becoming less appealing in its storage jar because powder coagulates once in contact with a wet spoon. In most instances, the contents of the jar are not used up and the owner decides to throw away the remaining product. Even if s/he is to blame, the customer tends to blame the producer, viewing it as a defective product. Eventually, this determines whether s/he will purchase the product again.

The big packaging size also limits the use of ginger tea. Some customers would like to drink the ginger tea at their offices or during their travels but are unable to do so because of the bulky size of the glass or plastic bottle.

A simple solution is to package ginger tea in sachets, good for one time use. This will ensure that unused ginger tea will not spoil while making it convenient to bring along as well.

UMFI has assisted a women’s farmer association in Nueva Vizcaya in packaging their ginger tea in colorful, attractive sachets. Sales have picked up. Even more surprising is that despite the packaged ginger tea is selling more than twice the price of bottled local tea, the consumers preferred to buy the ginger tea in sachets.

Technology and Packaging for Duhat Wine

UMFI has also experienced that value addition in combination with proper packaging is an effective tool in increasing economic returns for the communities. A concrete example of this is the duhat (purple plum) wine. Duhat is abundant in Pangasinan province during the summer months of March to June. Only local children used to enjoy these fruits as the owners of the trees did not see any commercial value in duhat.

Some people in the community started making duhat into wine, storing it in empty softdrink or liquor bottles and selling it to local tourists, friends and government visitors. While this generated additional income for the community, it was not maximized since the wine was sold at only PhP30-50/liter. UMFI assisted the Malimpin Multi-purpose Cooperative in perfecting the processing technology by standardizing the recipe and introducing proper processing equipment, thereby ensuring higher and stable quality wine.

Packaging was also improved. The wine was put into 350 ml bottles and an additional label was attached to the bottle saying “Malimpin Duhat Wine.” It has a beautiful logo, a message about the fruit, together with an interesting story about the tree. This will ensure that unused ginger tea will

continued next page
an attractive label complete with important product information was designed. The product was marketed to those willing to pay a higher price for a quality local wine. The bottled wine sold to the local and even Metro Manila market at a still affordable price of P 90/350 ml (roughly P 270/liter). The income per bottle is the largest for all the processed foods UMFI has come across. Duhat now provides at least P 150/kilo directly to the processors when transformed into wine.

Despite the almost 10-fold increase in price, the community is now selling more than ever. For the December market alone, current orders have already reached in the thousands. The community is trying its best to deliver this demand.

Bicol Express and Peanut Butter: additional income thru distribution and retail

UMFI has also learned that incomes to labor can also be expanded through marketing functions. In trading operations, profit margins are small and income opportunities are limited to gains in the sale of raw materials. Through marketing, income generation can be extended from the labor cost of processing to the labor cost of distribution and retail functions as well. The producers could themselves perform these functions at the local level (Table 2).

Additional income is gained in other income sources from processing and marketing functions for Bicol Express and P 13.5 or 90% for peanut butter. Furthermore, while the prices of sili (chili) and peanuts may fluctuate, depending on the supply, the suggested retail price of Bicol Express and peanut butter remain constant and can even improve if overall cost of production increases.

Up Next

How much should a product be? This concern is the 2nd P of marketing: PRICE. How a product’s USP should be conveyed to the customer is the focus of PROMOTIONS and where to sell the product is addressed by the PLACE element. Finally who will do this will be the crux of the 5th P of marketing—the PEOPLE. The details of each and how all of these will come to play will be discussed in the next issue.

Table 2. Income sources from additional activities involved in processing and marketing Bicol Express and Peanut Butter.

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Bicol Express <em>(chili based delicacy)</em></th>
<th>Peanut Butter*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Raw Materials</td>
<td>5.60</td>
<td>15.00</td>
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<tr>
<td>Labor/ Coop Mark-up</td>
<td>4.40</td>
<td>3.50</td>
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<td>Local Distribution</td>
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<td>5.00</td>
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<td>Retailer</td>
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<td>Total</td>
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<tr>
<td>Other Materials</td>
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<tr>
<td>Overhead</td>
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<td>1.00</td>
</tr>
<tr>
<td>Packaging</td>
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</tr>
<tr>
<td>Total</td>
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<td>Suggested Retail Price</td>
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<tr>
<td>Cost Benefit (Max)</td>
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<td>1:2.47</td>
</tr>
</tbody>
</table>

* products from Agrarian Reform Cooperatives of Bicol Province currently being assisted by UMFI
NTFP development as an alternative forest resource utilization

Benedicto Q. Sánchez
Program Coordinator, BIND

The magnitude of forest loss in the Philippines dictates the need for an alternative upland livelihood to forest timber utilization. In 1997, only 18% of country’s total land area, or approximately 5.4 million hectares of forest cover remained. Negros Occidental’s forests are among the most rapidly declining. In the 1950s, the province had only 235,000 hectares of tropical rainforest, a mere 30% of its total land area. In the 1980s, the province was losing its rainforests at an average of 3,000 hectares annually. By 1989, forest cover had been reduced to 4.7%, or 39,630 hectares. These were largely limited to the Mt. Kanlaon Natural Park (MKNP) in central Negros and the Northern Negros Forest Reserve (NNFR).

The precarious situation compelled the Department of Environment and Natural Resources (DENR) to enforce a total commercial logging ban in the Western Visayas region, to which Negros Occidental belongs. Checkpoints were established along the highways to accost and impound the transportation of undocumented “hot” timber. High on the list of contraband timber are dipterocarp species from the province’s natural rainforests. DENR, local government units and NGOs organized community-based Bantay Bukid Brigades (Forest Guard Brigades) to patrol primary and secondary growth forests. They accosted slash-and-burn farmers and arrested timber poachers, illegal charcoal makers and wildlife traffickers.

Despite many lapses in enforcement, the concerted efforts paid off. MOUNTAIN SPORTS WERE ANTIMIP MOUNTAIN FOREST DEGRADATION WAS ARRESTED AND THE LATEST SATELLITE MAPPING SHOWS THAT FOREST COVER HAS EXPANDED TO 7.9% OF THE PROVINCE’S LAND AREA. YET THE CRISIS IS FAR OVER. STRICTER LAW ENFORCEMENT IS NEEDED TO BRING A COMPLETE REVERSAL.

Paradoxically, strict enforcement of a total ban on all forest resource utilization worsens natural resource depletion. The total ban penalizes even those who responsibly and judiciously use these community-based resources. They are indiscriminately lumped with illegal resource extractors. This only strengthens the open-access management over mountain forests and a “free-for-all” forest resource exploitation!

Among the worst hit by the total ban are organized tenured farming communities and Bantay Bukid Brigades members that are dependent on non-agriculture based natural resources for additional sources of income. During the lean months when they had nearly exhausted their food crops, communities normally extracted forest resources such as salvaged timber, rattan or bamboo. They would then sell these as primary products or as processed goods like baskets or mats in the community market. Outright bans forces these forest resource users to go underground and sell “contraband” items at lower prices to unscrupulous urban-based buyers.

Learning from BIND’s experiences

A way out of this dilemma is to develop non-timber forest products as a viable alternative to timber extraction. BIND’s experiences demonstrate how NTFP development was principally based on cultivated and domesticated bamboos within agroforest systems and wild bamboos in natural forests.

The upland tenured residents of Barangay Marcelo, Calatrava and the buffer zone areas of Mt. Kanlaon N atural Park harvested cultivated bamboos from their agroforest farms and nearby secondary growth forests for production of bamboo crafts. Linking up with Bacolod-based artists for marketable designs, they produced various handicrafts using wild buho (Schizostachyum lumampao [Blanco] Merr) and domesticated and wild varieties of Chinese bamboo (B. dolichoclada Hayata). Production is household-based with women contributing about 70% of the labor requirements.

Its potential as an alternative source of income was demonstrated during the 12-21 April 2002 Panaad Festival. Started in 1993, the annual festival brings together 13 cities and 19 municipalities of the province to showcase arts, culture, commerce, trade and industry as the province is diversifying into world class furniture and exquisite handcrafted items.
New Handbook on Ancestral Domain Out

Learning from the Experience of Palawan Indigenous Communities

The Non-timber Forest Products-Exchange Programme for Southeast Asia and the United Tribes of Palawan (NATRIPAL) have developed a handbook describing the experiences of the Batak, Tagbanua and Pala’wan tribes of the province of Palawan in their bid to gain recognition of their ancestral domains and natural resources. The booklet shares these groups’ valuable insights with other indigenous communities and their support organizations faced with similar challenges.

The handbook is entitled Pamamahalan ng Lupaing Ninuno: Karanasan ng Katutubong Pamayanan sa Palawan” (Management of Ancestral Domains: The Experience of Indigenous Communities of Palawan). It highlights how the Batak, Tagbanua and Pala’wan tribes delineated the boundaries of their claim, formulated their management plans, and how they are currently utilizing the natural resources found within their domains.

The booklet briefly discusses earlier policies on ancestral domains, principles of which are now embodied in the Indigenous Peoples Rights Act. The IPRA gives indigenous communities in the Philippines a legal handle for the recognition of their rights to their lands and the natural resources found therein. To be awarded their Certificate of Ancestral Domain Claim/Title (CADC/T) under the IPRA, requisites are the delineation of their ancestral domains and the development of their respective resource management plans. While 181 CADCs have been awarded to indigenous communities across the country, few have sufficiently completed their management plans and many are struggling to implement them.

Special attention is paid to actual experiences and tools used during delineation, planning and management phases, as well as insights useful for communities conducting these procedures in their locales. Finally, the handbook focuses on the planning and management of non-timber forest products within the context of ancestral domains.

Published in late 2001, the handbook was made possible with the help of the Community Empowerment and Partnerships for Sustainable Development, De La Salle University. It has since been distributed to indigenous communities around the country. It has already been used as a reference material in management planning in several sites.

An English version, currently being prepared for an international audience, shall be released in August 2002. While this version will cater primarily to NTFP-EP partners in Southeast Asia, it is also a potent briefing tool for policymakers regarding Philippine laws and programs on Indigenous People. This is especially important given that other countries have relatively weak policies and programs regarding indigenous peoples rights.

To request a copy of the booklet, please get in touch with Crissy Guerrero, NTFP-TF c/o UNAC #18 Marunong st., Central District, Diliman, Quezon City, Philippines; Tel. Nos. (+632) 9254772 or 4360706; crissyg3@hotmail.com.