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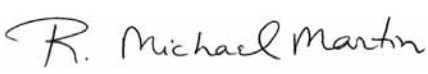
# Foreword

Lack of financial inputs and access to microfinance services is often a problem for local producers of forest products. This publication contributes to the 2005 International Year of Microcredit by focusing on finance issues for forest-based small-scale enterprises, as part of the forest sector's strategy towards meeting the Millennium Development Goals on reducing poverty and hunger.

This publication examines microfinance needs and constraints of small-scale enterprises. It analyses the different types of microfinance institutions, the role that they can play in the forest sector given the characteristics of small enterprises and forest communities, and their impact on local livelihoods and environment.

Little documentation is available on the specific subject of microfinance in relation to small-scale enterprises and forest communities. A purely "forest microfinance" approach based on microfinance institutions exclusively dedicated to financing small-scale enterprises in the forest sector is unlikely to be sustainable in itself. In any case, the income of many forest-dwelling households derives from a wide range of activities, not only forest-based. How to establish and support the provision of microfinance services on a viable basis is a key issue for the sustainable development of small-scale enterprises. This publication presents some examples of successes, aiming to provide a basis for orienting decisions when trying to expand the outreach of microfinance institutions in forest communities. It is mainly based on a literature review, studies and documents of international development organizations, documented project experiences, FAO's internal knowledge and experience, inputs from international financing institutions other relevant agencies and knowledge centres and four case studies from three different continents.

It is hoped that this book will be a useful reference point and inspiration for national and international institutions involved in designing policies and projects for the development of forestry communities, such as donors, government institutions and programme/project managers. It should also be of interest to institutions providing financial services to small enterprises in rural areas.



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# Acronyms

| | |
|---|---|
| **ACOFOP** | Association of Forest Communities of Petén, Guatemala |
| **ADB** | Asian Development Bank |
| **ADBN** | Agricultural Development Bank of Nepal |
| **ANED** | Asociación Nacional Ecuménica de Desarrollo, Bolivia |
| **ASA** | Association for Social Advancement, Bangladesh |
| **BANRURAL** | Banco de Desarollo Rural, Guatemala |
| **BIOFOR** | Biodiversity and Sustainable Forestry project, US Agency for International Development/Chemonics |
| **CARD** | Center for Agriculture and Rural Development, the Philippines |
| **CGAP** | Consultative Group to Assist the Poor |
| **CIFOR** | Center for International Forestry Research |
| **EGAPA** | Elmirehbiba Gum Arabic Producers Association, the Sudan |
| **FDF** | Forest Development Fund, Costa Rica |
| **GDP** | Gross Domestic Product |
| **IDB** | Inter-American Development Bank |
| **IFAD** | International Fund for Agriculture Development |
| **IPED** | Institute of Private Enterprise Development, Guyana |
| **LFP** | Livelihoods and Forestry Programme, Nepal |
| **MEDEP** | Micro Enterprise Development Programme, Nepal |
| **NGO** | Non-governmental organization |
| **PAR** | Portfolio at risk |
| **ROA** | Return on assets |
| **ROSCA** | Rotating Savings and Credit Association, Jamaica |
| **UNDP** | United Nations Development Programme |

# Summary

Forest-based small-scale enterprises for the purposes of this publication include enterprises whose economic activities are undertaken mainly at the individual or household level, usually employing members of the family or close relatives and neighbours, and where salaried labour is negligible. These are the forest enterprises that are most likely to face difficulties in accessing microfinance services, and would be the primary customers of microfinance, although larger enterprises may share similar constraints and needs.

Small-scale enterprises plant, purchase and process inputs, innovate, improve their productivity and modernize constantly. Their financial needs involve various microfinance services: short-term loans to finance inputs such as fertilizers and labour, storage and processing of products; medium- and long-term loans, equity finance and leasing for equipment and seedlings; savings to smoothen consumption and uneven cash flows, and to build assets to cover investment needs; insurance to protect their crops and insure loan repayment; and payment services. Most small-scale enterprises operate their forest-based activities jointly with other processing, service or agricultural activities, so they seldom occur as separate enterprises.

Limited access to microfinance services is a constraint to the development of small-scale enterprises. The riskier nature of their activities and the fact that they are generally located in areas of remote access make it particularly challenging and costly for microfinance institutions to reach out to them. Nonetheless, governments should restrain themselves from imposing ceilings on interest rates that limit the ability of microfinance institutions to attain viability and provide permanent access to their services to an increasing number of households. Subsidized targeted credit programmes, most often beset by poor loan collection rates, undermine the development of sustainable microfinance and distort the market. Rural institutions should not be forced to provide substandard financing products for smaller enterprises or to risk worsening their portfolio quality by imposing mandatory forest lending quotas. Sound financial procedures, cost-recovering rates and management autonomy of microfinance institutions should be respected.

Microfinance institutions should rather develop innovative ways to deliver their services and improve their capacity, in order to reduce transaction costs and serve their customers better. Worldwide experience shows that microfinance can be provided successfully even in remote rural areas and difficult environments.

Microfinance services can be delivered by different kinds of formal and semi-formal institutions (banks, NGOs, financial cooperatives), as well as non-financial sources (traders, buyers, etc.) and informal sources (relatives, money lenders). Different institutions carry different advantages and disadvantages in terms of outreach, governance and the services provided. When supporting the expansion of

microfinance institutions into rural areas, government and donor programmes should consider the nature of the constraints faced, the existing financial infrastructure and the needs to be addressed, and adopt the approach that best suits the local situation.

Four case studies were carried out to look at different institutions providing microfinance services to small-scale enterprises, including:

- a micro-enterprise development programme in Parbat district in Nepal;
- the provision of microcredit and microfinance services to forest concessions in the department of Petén, Guatemala by two commercial banks;
- opportunities and challenges in applying microfinance in the Sudan through an association of gum arabic producers in Elmirehbiba village;
- the microfinance services available to Brazil nut harvesters in the Department of Madre de Diós, Peru.

In Parbat, Nepal, group lending in support of micro-enterprises (not exclusively forest-based) is provided through the Agriculture Development Bank of Nepal, under a government initiative with support from the United Nations Development Programme. The programme is successful both in terms of outreach and sustainability, exceeding its original target of customers, reaching excellent recovery rates and making a profit. The positive performance shows that using groups for the delivery of microfinance services to small enterprises can be done in a sustainable manner even in rural hilly areas with difficult access. Effective provision of business development services such as selection of good potential micro-entrepreneurs, development of entrepreneurship, technical and managerial skills, promotion of market linkages, and transfer of technology are essential for the success of small-scale enterprises, and therefore for credit repayment performance.

The case of community forest enterprises in Petén, Guatemala, shows how clear forest tenure rights and the legal establishment of forest concessions successfully drew two commercial banks, Banco de Desarollo Rural (BANRURAL) and Banco del Café (Bancafé), into servicing small-scale timber enterprises. Technical assistance and business development helped micro-entrepreneurs to prepare sound annual operating plans and consolidate their financial needs, thus facilitating their access to the banks.

In the Sudan, an inadequate legal framework hinders the development of a strong sustainable microfinance industry, and subsidized credit programmes encourage the wrong kind of borrowing patterns among customers. In such an environment, inadequate professional skills, difficulties accessing long-term funding, and lack of attractive financial services hamper the success of the Elmirehbiba Gum Arabic Producers Association as a savings and credit association. The producers see the association merely as a credit delivery mechanism, and the association has failed to mobilize savings from its members. At the same time, gum Arabic traders lend to the producers with high profit margins on the basis of personal guarantees, taking advantage of their knowledge of the sector and the lack of alternative microfinance institutions available.

Similarly, the case of Brazil nut harvesting in the Department of Madre de Diós, Peru, shows how in the absence of adequate awareness support and clear provisions

regulating the forest concession system, specific economic activities requiring sectoral knowledge can discourage microfinance institutions from entering the small-scale enterprise market, even when supply chain actors are providing microcredit profitably.

Several government interventions can help microfinance services reach small-scale enterprises. These include establishing a policy framework and financial infrastructure conducive to microfinance, providing business development and market infrastructure in support of production, strengthening the economic potential of small enterprises and enhancing the capacity of microfinance institutions to serve them.

Firstly, a supportive policy environment ensuring macroeconomic stability is fundamental alongside an appropriate microfinance regulatory framework and adequate land tenure and property rights. Such an environment stimulates the development or continued availability of sound and reliable microfinance services targeted to small-scale enterprises, and promotes competition and market penetration of microfinance institutions while ensuring customer protection. Allowing for cost recovering prices and promoting competition and institutional efficiency, while focusing on transparency in pricing, will help interest rates to come down over time.

Secondly, when supporting the expansion of microfinance services to small-scale enterprises, governments and donors should never overlook the importance of accompanying microfinance facilitation with the necessary business and social backing. Small-scale enterprises must be economically viable and sound to be able to avail themselves profitably of microfinance services. This can be achieved through:

- forest extension and business development services;
- the selection of potential forest entrepreneurs;
- training in cost-effective innovations (products, business processes, applications of technology);
- the provision of marketing support.

Social mobilization can support awareness-building for small-scale enterprises on microfinance services; dissemination of information about microfinance institutions; development of basic literacy, numeracy and skills training for women, indigenous people and other disadvantaged groups; mobilization and establishment of self-help groups to participate in microfinance markets.

Thirdly, high quality, targeted technical assistance can assist institutions in adopting appropriate microfinance technology and services to meet the needs of small-scale enterprises, and in improving their management and financial performance. Governments and donors can best focus their assistance in areas such as institutional and human capacity-building of microfinance institutions, including on smaller enterprises and their activities, improved financial infrastructure, promotion of best practices, transparent information, support for reducing transaction costs, product innovation and commercial mobilization of resources. Important interventions that can significantly increase the performance of the

microfinance sector in a country or region include: upgrading and mainstreaming informal financial institutions (registration, reporting, legal status, prudential practices, supervision); supporting linkages and networks among institutions and establishing apex services; linking banks with local informal microfinance institutions; transforming agricultural development banks into sustainable providers of agricultural finance and other microfinance services.

Focus should be on providing microfinance services for rural households, and not credit for tree crops and forest production. The overall microfinance needs of rural household activities, their financing requirements and their repayment capacity should be looked at, and not only funding for specific small-scale enterprise investments. While the repayment schedule for loans for productive purposes should be based on the estimated cash flow generated by the investment, household cash flow from other activities can serve as an additional source of funds to repay the loan. Some microfinance institutions have responded to this problem by basing the lending decision on the existing repayment capacity of the rural household without making any appraisal of proposed new investments or activities. Loan appraisal methods taking into consideration the entire family business and household cash flow, rather than focusing only on the cash flow of the specific small-scale enterprise investment activities, can help expand credit opportunities.

Small-scale enterprises should be offered a choice of various financing options best adapted to possible heterogeneous investment and production strategies. For example, in marginal areas with a predominance of low return activities, self-help groups or credit cooperatives, which are savings-oriented and operate at nominal costs, or NGOs with a strong social emphasis and poverty outreach focus, may be more appropriate. In areas with high potential for good economic return and profitable smaller enterprises, larger credit cooperatives and banks (rural banks, commercial banks) with individual and group methodologies, professionally managed, may be more suitable.

Local institutions and authorities such as agriculture extension workers and foresters can play an important role in helping the microfinance institutions screen clients, understand the economic activities for which their clients intend to borrow and the risks involved, supervise loans and enforce repayment (thereby also contributing to the reduction of transaction costs and supporting the expansion of microfinance).

# 1. Introduction

The lack of financial inputs and access to microfinance services is a problem for local producers of forest products, especially in the case of small-scale enterprises. This publication reviews major issues and constraints facing small-scale enterprises in developing countries trying to access microfinance services, and identifies ways to overcome these challenges. It analyses the different types of microfinance institutions, the role that they can play in the forest sector given the characteristics of small-scale enterprises and forest communities, and their impact on local livelihoods and environment.

In this publication, small-scale enterprises are those where economic activities are undertaken at mainly the individual or household level, normally employing members of the family, close relatives or neighbours, and where salaried labour is in general negligible. This publication focuses on the smaller and less structured forest enterprises, because these are the ones more likely to face difficulties in accessing microfinance services. However, most of the issues and recommendations also apply to bigger enterprises, which may employ labourers. The enterprises' activities include harvesting and processing of wood forest products such as timber, fuelwood, forest services, and non-wood forest goods such as fruits, herbs and plants, bamboo, rattan and resins.

The analysis encompasses different microfinance institutions and approaches that can be accessed by small-scale enterprises, for the provision not only of microcredit, but of a comprehensive range of services including savings, leasing, insurance and cash transfers. It looks at comparative advantages and weaknesses of different approaches and instruments. It includes:

- a review of small-scale enterprises and their demand for microfinance services;
- a review of microfinance characteristics, services and institutions;
- four case studies;
- conclusions.

# 2. Needs for microfinance among forest-based small-scale enterprises

## FOREST-BASED SMALL-SCALE ENTERPRISES

This publication focuses on enterprises whose forest-based economic activities are undertaken generally at the individual or household level, normally employing either members of the family or close relatives and neighbours, and where salaried labour is usually negligible. Such enterprises are typically:

- small in size and often household based;
- predominantly rural and frequently seasonal;
- labour-intensive and use simple technologies;
- in need of limited capital inputs;
- accessible to low income and socially disadvantaged groups;
- of benefit to the local economy;
- reliant to a large extent on women, who often form the majority of the labour force.

The diversity of activities differs from country to country. In most cases, diversity is the result of differences in forest-based raw material endowments or availability. Products can be divided into wood forest products, fuelwood and non-wood forest products. There are small-scale enterprises based on forest services, for example using the forest for tourism and environmental services.

The largest source of labour input for a small-scale enterprise is the family, both the proprietor or manager and family members. Their forest-based activities are usually carried out jointly with other processing, service or agricultural activities, so they seldom occur as separate enterprises. Their close integration with agriculture is reflected in the seasonal pattern of operations and dependence on agricultural incomes in order to generate much of the demand for their products.

Processing and marketing are the tools with which the raw materials are converted to appropriate products to meet market requirements. Processing provides the physical characteristics of the goods, while marketing adds all the necessary services and other immaterial features to them to make them complete products that satisfy the values sought in the market.

The following conditions should be present in order to identify investment opportunities in forest-based activities at a small enterprise scale:

- Demand potential and market prospect for a product should be good.
- Technology should be available that permits achievement of low average unit production cost.

- Labour productivity should increase or have the potential to increase.
- Management capabilities and technology should be good.
- Raw materials should be ensured for the planning horizon.

Of the above conditions, demand potential and market prospect is usually the overriding one, and the only one external to the enterprise. A market analysis should include basic questions such as: What and where are the markets for these products? What means are available to transport the goods to the markets? Who are the competitors supplying the same markets? What are the specific strengths of the producer/gatherer compared to these competitors? Only when market prospects are found satisfactory or capable of improvement would further assessment of the other criteria be useful. All else being equal, the ability to achieve low production costs is likely to be the second most important attribute of potential viability.

Many small-scale enterprises operate on the informal market where the major source of finance is in the form of savings. When external finance is sought, it is normally from the informal or non-institutional credit suppliers. Also, at this level the greatest requirement is for working capital. As these enterprises develop and expand their financial requirements, the relative importance of savings decreases and the proportion of institutional to non-institutional credit increases along with the proportion of fixed to working capital.

When looking at expansion opportunities, small-scale enterprises face a wide array of potential problems, which can be summarized as follows:

- shortage of finance, in particular working capital, worsened by problems of access to available finance and its cost;
- raw material shortages due to overexploitation or other natural causes, and often compounded by wasteful processing, restrictive regulations, poor distribution and lack of working capital;
- small and insecure markets due to low rural incomes, seasonality, poor access to large markets and severe competition;
- non-availability of appropriate technology in the form of suitable tools and equipment;
- managerial weaknesses, which worsen all the other difficulties since small-scale enterprises often lack capacity to analyse situations and minimize adverse impacts of problems;
- lack of organization of the enterprises that would enable them to make effective use of available support services.

Forest-based small-scale enterprises most commonly cite finance as their principal constraint in maintaining their competitive position and developing their activities, with shortages of raw material often taking second place. A real constraint in itself, finance may also be a symptom of other difficulties. Even though the focus of this publication is on microfinance, when looking at the overall development of these enterprises it is important to take into account that their problems interact. Box 1 describes the problems of small-scale enterprises in Brazil in accessing microfinance.

BOX 1

**Small-scale enterprises and access to microfinance in Brazil**

Policies and credit instruments specifically destined to leverage smaller enterprises are lacking in Brazil. In addition to being rare and inadequate, producers are unaware of the available lines of credit, and particularly, how to access them.

Most of the finance for small-scale enterprises comes from owners or reinvestment of profits. The main impediment for such enterprises when accessing microfinance services is the difficulty that banks have in assessing the risks of lending to them, because they are ill-equipped to assess the value and cost of operations, borrowers' accounting capability, borrowers' reputation, the economic situation in the ephemeral timber frontiers, the securities or guarantees offered and the legal framework in the case of non-repayment. The difficulty in providing collateral and guarantees, and the high interest rates are also regarded as major impediments.

Financing options newly available for small-scale enterprises through the recently instituted Programa de Plantio Comercial de Florestas (PROPFLOR) and Programa Nacional de Fortalecimento da Agricultura Familiar (PRONAF) credit lines, have the potential to better integrate rural producers into forest production. They could be expanded in terms of resources and complemented with technical assistance and simplified access mechanisms. Furthermore, these lines could be extended to all regions of the country and to all forestry activities, including management and marketing of non-wood forest products.

The participation of small-scale enterprises is fundamental for the formation or consolidation of "forestry clusters". Integrating forestry activities is an indispensable condition for the socio-economic development of regional communities and of forest and industrial enterprise sustainability. The determination of the Lula Government to focus attention on making microfinancing available to informal sector enterprises through the National Development Bank is an important first step. However, social lending to date in Brazil has mainly focused on microcredit for the urban poor, leaving rural forest-reliant groups completely ignored. Efforts are therefore needed to support enterprise investment opportunities for rural producers and their enterprises.

*Source:* May, Goncalves da Vinha and Macqueen, 2003

## PRODUCTION ASPECTS

Forest-based economic activities include those relating to tree crop planting, production and processing, as well as harvesting and utilization of non-wood forest products. Ecotourism and environmental services are other possible uses of forests, based on the sustainable management and conservation of the natural resource. Small-scale enterprises have different kinds of microfinance needs, depending on the forest products and services generated and their related production aspects.

Timber and tree crop development includes activities related to nurseries, plantations and forest under management plans. Trees are long-term investments with benefits accruing over time. The main challenges of financing tree crops relate to the long-term nature of the investment, and the time lag between initial expenditures during establishment of a plantation (the gestation or immaturity period) and the time of full production. Forest products include short gestating crops such as oil palm, coffee, cocoa and tea, and long gestating crops such as rubber, coconut, fruit trees and timber species. For most tree crops, a substantial part of total development costs accrue in the first year, especially if irrigation works or fencing are necessary, in addition to the planting of seedlings, land clearing and levelling. Costs in subsequent years for weeding, fertilization, disease control, silviculture and partial replanting tend to be much lower.

The risk of investing in tree crops increases with the length of the immaturity period. The main risks are:

- **Production risk.** Pests and fires etc. can lead to a total loss of the investment in the worst cases.
- **Marketing risk.** Economic parameters such as input and output prices, labour costs, demand and supply trends and foreign exchange rates impact on the profitability of tree crops and are difficult to predict.
- **Financing risk.** Due to their long-term nature and gestation periods, considerable resources are tied up for long periods.

In tree crop development it is also important to consider the characteristics of the harvested product. Crops such as oil palm, sugar cane and tea require immediate processing because of rapid quality deterioration after cutting.

Trees are increasingly being planted to support agricultural production systems, community livelihoods, poverty alleviation and food security. Communities and smallholder investors, including individual farmers, grow trees in shelterbelts, home gardens and woodlots, and in a diverse range of agroforestry systems to provide wood, non-wood forest products, fuelwood, fodder and shelter.

Non-wood forest products have a biological origin other than wood, and may be gathered in the wild or produced in forest plantations, agroforestry schemes, and trees outside forests. Examples include food and food additives (edible nuts, mushrooms, fruits, herbs, spices and condiments, aromatic plants, game), fibres (used in construction, furniture, clothing and utensils), resins, gums, and plant and animal products used for medicinal, cosmetic and cultural purposes. Box 2 describes the use of shea nuts in Ghana, and the constraints facing shea processing.

Non-wood forest products are extremely numerous and versatile. They comprise unprocessed raw materials and consumer products, as well as further processed consumer or industrial goods. Many of the products are seasonal and have fairly small overall markets, which means that individual producers can seldom rely on one product for their livelihood. The resource base also varies greatly from complete wilderness to plantations.

Being nature-based, non-wood forest products can never be totally uniform in their characteristics, nor can their supply be regular and fully reliable. Natural

BOX 2

**Use of shea nuts in Ghana**

Almost pure stands of shea trees are frequently seen in the typical "agroforestry parklands" in northern Ghana, together with crops such as yams, millet, sorghum, maize, cassava and legumes. A typical crop rotation starts in the first year by clearing woodland or fallow land, leaving specific individual trees of certain species on the farm after the controlled burning of cut vegetation at the base of unwanted trees. In this cyclical farming system, the management (protection, pruning and removal etc.) of the shea trees mainly occurs when fallow (rarely virgin woodland) is cleared.

Harvesting is usually carried out by women on the family land, preferably on land that has already been cleared for planting. For those women without a family, and in times of low yield, harvesting may also occur on fallow or unmanaged land. Typically, the fresh fruit is collected early in the morning, de-pulped and then carried back to the household in head-pans after farm chores have been completed. The fresh fruit are heaped until enough has been collected to justify boiling the nuts.

In spite of the high density of on-farm trees, the overall yield of dry kernel per hectare is low, preventing individual subsistence farms from producing suitable quantities for a reasonably sized commercial operation. Those women interested in processing larger quantities, either for selling to local markets for national consumption or for processing to export as butter, are therefore unlikely to have built up large stores of shea kernel from village harvests and often have to compete on the open market for purchase.

This need to purchase raw material results in the main challenge facing even the most organized of shea butter processing cooperatives; the need for "pre-finance". In the case of market sales, a group of around 30 women will usually manage to locally purchase a few bags of kernel, process them into butter and then take them by public transportation to the larger centres for sale at meagre profits. The only groups that have successfully been able to produce realistic quantities of traditionally processed shea butter of reasonable quality are those that have been helped by external agencies and are lucky enough to receive advance orders with assistance on pre-financing.

*Source:* FAO, 2004

forest-based, "non-domesticated" products and wilderness-based products in particular are less uniform in their characteristics than plantation-based products. There is therefore a tendency to move towards more uniform plantation-based production whenever potential markets become large and attractive enough and the production is found to be feasible in plantations.

Some non-wood forest products are ready for final consumption immediately after harvesting, while others need processing to be useful and acceptable to

consumers, as discussed above. Some have to go through several stages of processing before becoming a final consumer product (for example, after being extracted from wood, essential oils are first converted to fragrances and then into perfumes).

In some cases, problems of variation in products and their quality can be overcome by applying product and quality standards and related grading. Another means for solving such problems is to ensure appropriate packaging and storage. Many products consumed as food items, medicines, and health and beauty care products are subject to restrictions and regulations on their use because they can potentially affect human health.

Producers of non-wood forest products include the gatherers who collect the products from the forests. They also comprise those primary-level processors who buy the basic raw materials from the gatherers and convert them into primary products. Producers are also the ones who convert the semi-processed primary products to value-added, semi-finished products or to final consumer products at the successive stages of processing and marketing.

The resource base is usually not owned by the gatherers, who only have formal or informal user rights. There is a consequent risk that they might lose access to the land. Resource management is therefore not the responsibility of the gatherers who always have an interest in its long-term sustainability.

Forests provide a wide range of environmental services, including the protection of watersheds, wildlife habitat, amenity values and carbon storage. The private sector has not so far shown much interest in conservation, but this is changing as forest owners begin to capture revenue from activities such as tourism, bioprospecting and carbon storage. In particular, the potential of ecotourism and recreation as alternative forest uses is attracting increasing private sector investment. Some countries have drafted legislation to encourage such investment. Costa Rica's advanced approach to promoting private sector participation in the provision of environmental services is of special interest (Box 3).

BOX 3

**Private sector providing environmental services in Costa Rica**

Costa Rica's pioneering efforts to capture values associated with its forest environmental services are admired by policy-makers and academics throughout the world. Its earliest attempts focused on developing the country as an ecotourism destination, promoting private investment in infrastructure related to forest tourism and charging tourists for access to its forests.

It has also been developing infrastructure for selling rights to explore its forests' genetic reserves, for selling carbon sequestration services and, at the domestic level, for selling rights to watershed protection. Although the government has played a critical role in providing the framework for capturing finance and has been the main supplier of forests in the case of bioprospecting and carbon sequestration, the private

sector has also become increasingly involved. Currently, the National Network of Private Reserves covers 250 000 ha, equivalent to half the privately-owned natural forest area.

Fiscal and financial incentives have been a part of the Costa Rican forestry agenda since 1979. Initially, reforestation was stimulated through tax deductions, soft credit, redeemable bonds, municipal forest funds, and a forest development fund. In 1990, the incentive structure was changed to place greater emphasis on good forest management and the protection of forests for their environmental services.

For small- and medium-scale producers, the most significant fiscal instruments have been the Prepaid Forest Bond Certificate (CAFA) and the Forest Development Fund (FDF). The CAFA was introduced in 1987 as a redeemable bond worth US$520 per hectare for smallholders with plantations less than 25 ha. The FDF was introduced in 1988 and promoted reforestation by community development organizations. Only projects of more than 100 ha and involving more than 20 farmers were considered, and the grant covered about 70 percent of the cost of reforestation. Together, the CAFA and the FDF have encouraged the reforestation of 45 000 ha. Despite apparent success, the schemes have been criticized for being economically inefficient. As much as 50 percent of the area reforested did not achieve the growth rates or density levels required to be economically viable.

While carbon sequestration payments are currently made to the government, and the government pays private landowners separately under the payment for environmental services scheme, it is possible that future funds may be directly transferred to private landowners.

In addition to selling environmental services to foreign buyers, a Foundation for the Conservation of the Central Volcanic Range (FUNDECOR) was set up to organize payments of hydroelectricity companies to local forest owners in the Central Volcanic Range for forest watershed protection. Two projects, Don Pedro Hydroelectric S.A. and Rio Volcan S.A., both owned by the Global Energy Company, paid FUNDECOR US$10 per hectare for environmental services. This payment was passed on to local forest owners to ensure the protection of forests in adjoining hydropower water catchment areas.

*Source:* Landell-Mills and Ford, 1999

Small-scale enterprises engaged in ecotourism activities will utilize the forest as a source of environmental and cultural attraction, and will therefore be interested in the preservation of its natural and cultural capital. Similarly, environmental services relating to the benefits of forest conservation will entail the non-depletion of forest natural resources, and tolerate only a limited, sustainable exploitation of the forest and its biodiversity.

There are also processing activities that use the forest as a resource base, for example, sawmilling/pitsawing, carpentry/furniture-making, wood-carving and

primary manufacturing. Their main constraint is usually accessing raw materials. These enterprises will not be treated separately in this publication but in most cases it may be assumed that their financial needs are similar to those of other rural enterprises.

Other traditional forest products include wood fuels. For smaller enterprises active in wood fuel, access to finance has not been identified as a main problem in carrying out their activity, although entrepreneurs will still need microfinance services for household purposes. Box 4 gives the example of charcoal production in Asia.

## ECONOMIC ASPECTS

With the development of participatory forestry, the contribution of forests and trees to rural livelihoods has gained recognition. For many poor people in forested areas, markets for forest products and services offer one of the most promising options for reducing poverty levels. Small-scale enterprises can potentially

BOX 4

**Charcoal production in Asia**

The economic cost of charcoal production may vary significantly depending on the type of production system. In a traditional system the producer collects the wood free of cost, uses his/her labour to dig the pit to convert the wood into charcoal, and transports the final products to the market for sale. There is no cash investment in this type of operation. The production cost is virtually zero in such cases (except for tools purchased for common household use that are also used for wood cutting and pit digging), unless one has to pay a nominal fee to the forestry department as a government royalty for wood and to obtain a permit for making charcoal in the forest. This cost, which rarely occurs, would then be the only cash investment in charcoal making. The producer of charcoal under such a system simply works to convert free time into a marketable product, in the absence of other cash-earning opportunities.

As long as the market price of charcoal is high enough to encourage this type of production, poor people will see it as an attractive option to earn cash. The producer has to consider whether he/she can recover the cost of inputs to the manufacturing process from the returns when the charcoal is sold in the market. This makes the investment more risky and the risk increases as the scale of operation expands. This type of producer will try to maximize the returns from his/her investment by introducing innovations, both technological as well as managerial. Wherever this type of operation exists, the opportunity for further development will be high and desirable.

*Source:* Bhattarai, 1998

improve rural livelihoods and provide incentives to manage and protect natural resources better at the same time.

Financial requirements can be divided into fixed capital and working capital. Fixed capital refers to investment in assets such as land, buildings and equipment, the economic lives of which extend from medium to long term. Working capital, on the other hand, consists mainly of cash, inventories of raw materials, work-in-progress, finished goods, and accounts receivable. Implicit in this definition is the notion that working capital funds are "self-liquidating" over the short term, a period approximating the enterprise's production cycle, whereas funds invested in fixed capital are only recovered from cash flow surpluses over the medium to long term.

While there are significant differences between countries, regions and sectors, in general small-scale enterprises tend to have lower relative financing requirements for fixed as opposed to working capital, because of their high degree of labour intensity (or, conversely, the low capital intensity). Small-scale enterprises often have fairly long production and marketing periods, which also lead to relative high working capital demand.

The cash flow of a small-scale enterprise investment is determined by its economic lifespan, the length of the gestation period, expenditures during the immaturity period and the impact of seasonality. Large initial capital requirements (e.g. tree planting, machinery) may require longer repayment periods in relation to the annual cash flow created by the investment. Investment in multipurpose rather than single-purpose equipment is likely to produce a more even cash flow. Specialized equipment, for example harvesters, are highly capital-intensive and require higher minimum sizes of operation.

Forest communities and small-scale enterprises are mainly found in rural areas. One typical problem in rural areas is that the income sources are seasonal. Other problems might occur due to remoteness and isolation, poor communication infrastructures, poor market outlets and an unstable policy and macroeconomic framework. Living in rural areas often means limited access to institutions providing microfinance services.

The demand of smaller enterprises for microfinance will stem from the investments needed for their productive activities as well as from their development opportunities, and will be affected by the accessibility and costs of the microfinance services, including interest rates and transaction costs, which will determine the viability of the investments. Small-scale enterprises focusing on tree crops and wood forest products will in general be characterized by mainly fixed capital investment needs in the initial years, followed by working capital needs, for a duration longer than other rural activities and with economic yields starting several years after the beginning of the activity. For non-wood forest products, the demand for fixed capital is normally limited to processing equipment when needed, and financing needs of working capital are likely to be lower and with shorter returns. For smaller enterprises that are active in ecotourism, capital and financial needs will be mostly linked to activities not directly related to forestry,

such as building of amenities, working capital to run the facilities, expenditures for utilities, training and capacity-building.

From a microfinance point of view, small-scale enterprises and forest households combining activities relating to wood products and non-wood forest products will have the advantage of diluting the risks of the investments and financial needs. The existence of income sources other than the forest is also positive, since by combining different activities rural people can further reduce and diversify risk and vulnerability. In such cases, loans for forest activities can be financed by other income sources. Another positive aspect of the co-existence of various economic activities within a household is the fact that activities with shorter-term returns, such as non-wood forest products, can provide the necessary cash flow to sustain longer-term returns linked with tree crop development and finance the necessary investments. Where possible, ecotourism activities can provide sources of short-term cash revenue, which are helpful in diversifying risks and stabilizing household income, and repay longer-term investments.

Conversely, being dependent on many different activities could have a negative impact on the forest activity and increase risk, because small-scale enterprises are exposed to the risks of many markets including non-forest markets. If one income source fails, it may have a negative effect on the others when the limited resources are used to make up for the loss. For example, a loan taken out for a cow that suddenly dies must be repaid with the income from other sources, such as the forest. Dealing with many different activities, therefore, means not having a strong specialization in any due to lack of time and resources.

## SOCIAL ASPECTS

Many rural people may not have the confidence to approach banks and other financial institutions because they perceive them to be powerful institutions. In communities not used to financial services, people may be afraid of getting involved in such activities. Accessibility of microfinance services is therefore affected not only by their physical distance and the costs involved in their provision, but also by social considerations and barriers such as illiteracy, women's disempowerment, and cultural and religious factors.

Poorer women and men have different needs for financial services and different access to infrastructure that supports their income-generation or business expansion schemes. Poor women are often less inclined than men to take loans because the structure of the formal credit system tends to be very hierarchical, and they may perceive the system as even less user-friendly for them than for other prospective borrowers. Low-income women tend to be less educated and less used to dealing with officials and formal procedures. While general illiteracy, usually greater in rural areas, hinders both women's and men's ability to fill in application forms for financial services, illiteracy levels are higher among women than men in most countries worldwide.

In many countries, since men generally own land and other fixed capital, women tend to lack the collateral required by formal financial lending institutions.

Very often procedures in formal lending institutions require the signature of a male head of household, which makes it difficult for female-headed households to apply. On the whole, women tend not to know about their rights to apply for financial services, even in industrial countries and countries in transition.

Despite these difficulties, access to financial services can enable women to leverage their skills and ultimately develop their enterprises. By upgrading their skills, by gaining access to technology, raw materials, market information and business linkages, women can expand their economic role. Improving the economic position of women contributes to building their confidence and ultimately their social and political roles. It is important to stress that neither women nor men, including poor people, are a homogenous group and should not be treated as such when addressing their social constraints.

Small-scale enterprises have special characteristics since they are usually run by poor rural people and are often managed along with other farm activities. All activities are in strong competition for the limited resources. Since the enterprise and the household cannot be separated, their activities affect each other. While financing may be made available by a credit source for a particular purpose such as forest-based production, in practice it is not possible to enforce that the money lent is used exclusively for that specific purpose. Problems may therefore arise from the high fungibility of funds as micro-entrepreneurs seek to meet conflicting demands from their enterprise, household and other activities.

Small-scale enterprises provide direct benefits to local economies only when the products can be successfully marketed and when the marketing is managed by the producers to ensure that the benefits flow to the local community. Low-income and socially disadvantaged groups often lack the necessary basic knowledge and resources for efficient marketing.

Depending on the specific country, other social factors may significantly affect the provision of microfinance services, such as health considerations in the case of South Africa (Box 5).

BOX 5

**Social constraints for accessing microfinance services: small-scale enterprises in South Africa**

Finance institutions provide a range of financial services to the forest sector. In South Africa, however, lack of financing opportunities for forest-based small-scale enterprises has been identified as one of the key constraints to their development.

Many remain crucially dependent on loan finance or equity that they can access, such as private loans from the informal sector, in their personal capacity. Many emerging entrepreneurs are underskilled and lack business experience, preventing them from gaining access to capital. Furthermore, in South Africa most poor rural households do not own their land, but rather, it is held in trust or is owned

communally. This means that the land itself cannot be used as collateral to secure loans, and emerging entrepreneurs trying to establish small-scale enterprises are even further disadvantaged.

Financing institutions suggest that the AIDS epidemic creates major financial risks that have to be part of the total risk evaluation process of creditors. Specifically in a small business where the owner/manager plays such a crucial role, the impact of AIDS is bound to be far more serious than for larger companies where management and labour are more flexible. Despite all good intentions to improve the market for financing small-scale enterprises, AIDS may have a seriously adverse effect in the coming years, including increased dependence by affected households on direct access to natural resources for survival.

*Source:* Lewis *et al*., 2004

# 3. Sources of microfinance for forest-based enterprises

Microfinance is the supply of basic financial services to poor and low-income households and their micro-enterprises. Microfinance comprises several financial tools such as savings, credit, leasing, insurance and cash transfers. These services are provided by a variety of institutions, which can be broadly divided into banks, NGOs, credit and savings cooperatives and associations, and non-financial and informal sources.

Providing financial services for small-scale enterprises is a powerful tool for poverty reduction, enabling poorer households to build assets, increase incomes and reduce their vulnerability to economic stress and external shocks. Microfinance helps rural households to plan and manage consumption and investments, cope with risks and improve their living conditions, health and education by smoothing household cash flow and increasing disposable family income. Box 6 is an example of provision of microfinance to small-scale enterprises in Guyana.

To help reduce poverty effectively in the long term, microfinance services must be sustainable and have a wide outreach, and provide services and products that address and suit the needs of poor people and their enterprises. This chapter looks at different microfinance services and their characteristics, as well as microfinance outreach, highlighting wherever relevant the specificities of servicing small-scale enterprises. It goes on to consider microfinance sustainability and the impact that financing small-scale enterprises could have on the environment.

## MICROFINANCE SERVICES

The rural poor and their forest-based enterprises need a variety of financial services, not only microcredit but also savings, credit, leasing, insurance and cash transfers. To successfully address these needs, microfinance services must be convenient, flexible, of easy and rapid access, and reasonably priced. Box 7 outlines the need for financial products in Uganda.

The provision of microfinance services can be facilitated by business development services. These services can help build financial and business management capacity of rural households, improve their technical skills, provide local support services for enterprises with emphasis on marketing, and establish linkages between forest communities and microfinance services. Business development services should grow with the development of small-scale enterprises and cater to their evolving needs. Examples of useful business development services for improving access to microfinance are: training of rural households in funds management, loan application, bookkeeping and

BOX 6

**Microfinance providers for small-scale enterprises in Guyana**

Small-scale enterprises in the forest sector rely on both formal and informal mechanisms to meet their financing needs. There are a few formal microfinance institutions in Guyana, even though none is specific to the forest sector.

The Institute of Private Enterprise Development (IPED) is a privately-owned non-profit organization established in 1986 to provide credit to micro-, small- and medium-scale enterprises, and technical and managerial support services to its loan beneficiaries. Its micro-enterprise programme was launched in 1993. The forest sector is a beneficiary of loans from IPED. Between 1986 and 1999, IPED provided 73 loans, or 0.4 percent of its loan portfolio, to logging, sawmilling and charcoal-producing groups/individuals, and 11 loans for the production of wooden toys. It has been noted, however, that there has been a reduction in borrowing from this institution by logging and sawmilling companies.

The seasonality of forest harvesting operations generates cash flow problems that are particularly acute for smaller-scale operations. Apart from some dedicated private microcredit schemes, there are few specific incentives for smaller enterprises. The scale of operation and lack of capital often excludes such operators from initiatives that might improve sustainability, such as membership of representative bodies, training courses and certification schemes.

*Source:* Thomas *et al.*, 2003

accounting; preliminary loan appraisal of small-scale enterprise financial planning; consolidation of small individual proposals into a bankable portfolio of forest-based enterprise plans; and support to microfinance institutions for monitoring and supervising the implementation of small-scale enterprise activities. Business development services can also help microfinance institutions to assess risks related to small-scale enterprises. Embedded services such as training to producers and quality control, provided by buyers of commodities, can also positively improve access to microfinance services by increasing micro-entrepreneurs' skills and the marketability of their products.

## Savings

As worldwide microfinance experience has shown, access to safe and flexible savings services can play a critical role in poor people's strategies for minimizing risks, mitigating income fluctuations, facing unexpected expenditures and emergencies, and building a small asset base over time. In particular, the very poor living in rural areas, who may lack investment opportunities and safe ways of keeping their savings, greatly value access to safe savings services.

BOX 7

**Financial situation for small-scale enterprises in Uganda**

For small-scale enterprises in Uganda (within and outside the forest sector), finances and financial management represent one of the greatest constraints to effective operations. Few financial products are available to Ugandans other than bank loans. There are many problems accessing finance in Uganda, due to its relatively underdeveloped financial sector, and this particularly affects sustained investment in long-term ventures such as forestry.

For many small-scale enterprises it is extremely difficult to get a loan, since it involves undertaking effective budgeting and cash flow projections, preparing business plans, maintaining solvency and liquidity, providing collateral, managing accounts and providing accurate financial records for external investors or tax authorities. Furthermore, many of these enterprises operate as one of many parallel business ventures, and their finances tend to flow between them, sometimes causing problems of cash flow and liquidity. Small-scale enterprises that cannot get a loan must resort to informal lending at very high interest rates or rely on personal connections.

Microfinance institutions typically provide short-term loans for small amounts of capital, while small-scale enterprises often need longer-term and larger loans. There is often a lack of cooperation between banks and forest sector. A better appreciation of the specific and long-term nature of forestry investment is necessary for banks to understand operating requirements for small-scale enterprises. While there may be interest in investing in tree planting, for example, there is generally insufficient widespread ability to invest in a sector that yields only long-term benefits.

A saw log production fund is being established, overcoming the problem of access to long-term finance for small- to medium-scale plantation development. The fund will be operated as an independent entity through a management agent or bank, and will provide a mix of grants and credits targeting small to medium-sized private investors and organized groups.

In a modern financial sector there are products such as asset leasing and venture capital. In Uganda, no such services yet exist, and government regulations do not allow or recognize the modern concept of leasing. If leasing were clarified and made more available, it would provide opportunities for small-scale enterprises to commence or expand operations. However, a Financial Institutions Bill (2003) is being discussed that further clarifies taxation and obligations of all parties under leasing agreements.

Equity facilities provide much-needed finance to small- and medium-scale enterprises worldwide. In Uganda, equity financing is limited, largely due to the loss of social capital stemming from years of civil unrest, which has resulted in general mistrust between lenders and receivers of credit beyond close family ties.

*Source:* Auren and Krassowska, 2004

Most poor families do save and often in a non-financial form, for example, small gold items or stockpiling goods, because they frequently lack access to good formal savings facilities. In-kind savings are suboptimal options, because they are subject to fluctuations in commodity prices, and destruction by pests, fire and theft.

While microfinance institutions offer both good loan services and good voluntary savings services, worldwide experience shows that there is usually more demand for savings than for loans. Better availability of safe savings facilities increases self-financing capacity and thus reduces the need to borrow, with its inherent risks. When a poor household needs a relatively large amount of money for an investment purpose, saving is a less risky way to obtain it than taking on a debt with a fixed repayment obligation.

Traditionally, microfinance mobilization of savings has taken place in the form of compulsory savings under group or individual lending methodologies. Often a percentage of the loan amount is required as mandatory savings and is meant to guarantee group loan repayment. Compulsory savings were also seen as a way to instil savings habits in poorer households.

Experience has shown, however, that compulsory saving is not conducive to encouraging clients' saving habits, but rather is considered as one of the requirements for accessing loans. It is the mobilization of voluntary savings, ensuring safety, flexibility and accessibility, which can have the strongest impact on poor people's lives. With the right products and incentives, microfinance institutions can rapidly mobilize very significant resources (see Box 8).

Rural households and their enterprises are likely to have difficult access to microfinance institutions, which tend to avoid areas of sparse population and remote access due to the higher costs involved. Given the importance of seasonality and deferred income for small rural enterprises, savings are very important not only to build an asset capital, but also for smoothing consumption, affording continued access to health and education services, and as an insurance against emergencies.

Ensuring the existence of safe and accessible savings services for forest-based small-scale enterprises should be a priority for any microfinance development programme. Possible ways for microfinance institutions to make the service available at lower costs include mobile banking, microfinance officers visiting rural communities on market days, and facilitating groups in collecting and depositing individual voluntary savings.

Mobilizing the savings of small-scale enterprises implies risk, however, and microfinance institutions allowed to do so should clearly show their capacity to mobilize savings safely. Accordingly, they should demonstrate strong governance and professional management, strength and reliability, adequate internal controls, financial management and information systems, the guarantee that deposits and savings are not used to cover their operating expenses and records of strong loan portfolio quality management. In most countries, mobilization of public savings is restricted to banks, where regulations should be in place for effective supervision.

BOX 8

**Mobilization of microsavings: the Workers Bank in Jamaica**

In 1993 the Workers Bank of Jamaica was looking at ways to encourage and boost savings deposits in its banking network. Competition at the high end of the marketplace drove the bank to introduce new and innovative ways to mobilize savings, motivating small savers to deposit increasingly large amounts in the bank. A new product, the Partner Savings Plan, was inspired by an analysis of the Jamaican Rotating Savings and Credit Association (ROSCA), which was created to provide an attractive form of saving for low-income Jamaicans, particularly women.

The analysis identified a number of successful factors, which were replicated in the Bank's Partner Savings Plan. These included easy access for conducting both savings and credit transactions, informality in business transactions (no taxes, no complicated forms), flexibility of informal savings arrangements and low minimum opening balances, geographical convenience, low transaction costs, and familiarity with people involved in the Partner Savings Plan.

By marketing itself as a more secure option than the traditional partner ROSCA, adding an interest that was called "bonus", and offering the chance to win big prizes, the Bank was able to mobilize 17 292 partner accounts for a total value of deposits of US$3.36 million, between May 1994 and September 1997.

*Source:* Owens, 2003

Credit cooperatives are also a very important instrument for mobilizing savings, although generally limited to cooperative members. It is important that sound provisions regulating and supervising cooperatives' operations are in place to prevent governance weaknesses that would ultimately damage depositing members.

## Microcredit

Microcredit consists of small loans provided to poor households or micro-enterprises. Microcredit is normally characterized by standardized loan products with short maturities, limited amounts, fixed repayment schedules and high interest rates. Most microfinance institutions require potential borrowers to save before applying for a loan in order to demonstrate their intention to develop a long-term banking relationship. When the amount saved reaches a specific level, the lender will consider granting a certain amount as a loan. Although forced savings might be effective in helping to control moral hazard risks, they increase the effective interest rate and restrict potential borrowing.

One of the most characteristic microcredit innovations is the use of group lending techniques. Group lending reduces information asymmetries common to most lending situations, drawing on borrowers' superior knowledge of each

other. Since a group member is far more likely to understand the creditworthiness of an individual in a village than a non-local loan officer, group techniques can be gainfully used to screen members, monitor repayments, and exert peer pressure. Groups utilize the networks of trust and relationships in the village, mutual guarantees, and shared knowledge about eligibility and performance to help ensure repayment of the loans given to the group. Group incentives and dynamics to avoid moral hazard are reinforced through regular group meetings, often required under the terms of the group loan.

Group and village credit and savings associations or village banks are usually formed following the loan from a sponsoring agency to a group or village association, which then makes individual loans to its members. The sponsoring agency can be an NGO or a bank. "Village banking" normally refers to a group of 10 to 30 individuals, while in "group lending", the group consists of 3 to 9 individuals. However, here the term "group lending" is used generically for both, as the key features are essentially the same.

Among key rationales for group banking methodology are the reduced operating costs for the microfinance institution, which provides a single loan to many small borrowers at once instead of a much greater number of individual loans, and the opportunity to substitute individual collateral with social solidarity to guarantee the loans (in the case of a solidarity group). Pooling compulsory with voluntary savings helps overcome minimum deposits and low balance fees and reduces transaction costs for the savers with representatives making the trip for many. The disadvantage is that loan officers must travel to and attend all group meetings, and that time must be spent organizing and training new groups.

Groups can be used in two ways: simply as delivery mechanisms, receiving the loan payments from the microfinance institution and collecting savings and repayments on behalf of the members, while maintaining individual responsibility; or as solidarity groups, where the group as a whole is responsible for the individual members' subloans and if one member fails to repay, the repayment will be covered by the others. The solidarity group guarantees these subloans and relies on peer pressure and peer support among members to ensure repayment. In addition to providing a group guarantee for the loan, the advantage of all group members being responsible for loan repayment is that it creates incentives to admit only responsible individuals, and to make sure that each individual borrows within his/her repayment capacity.

As a complement to the co-liability for the existing loans of fellow group members, a group guarantee fund is often established. A small fee is added to each member's loan and deposited in a fund. The money can be used in emergencies to cover the loan instalments of group members who experience temporary difficulties in making timely loan payments. The fund reduces the need for group members to use their own resources to make these payments, but raises the effective interest rate on their loans.

Group banking can offer small-scale enterprises and rural families several important services in addition to credit and savings: groups often also receive non-

financial services, and establish internal accounts. As part of their establishment and functioning, groups normally adopt bylaws, strengthen their financial literacy and learn how to keep records of financial transactions with the assistance of the sponsoring microfinance institution. Regular meetings, which are the vehicle for delivery of credit and savings services, also provide benefits such as networking, informal technical assistance on production and processing aspects, empowerment, and strengthening of social group capital. The group internal account, under which money is collected from several sources (forced and voluntary savings, interest income earned, fees and fines levied) and then used to make loans to group members, is practised by some groups as a supplementary source of credit and savings among its members.

All of these advantages make group lending particularly useful when trying to reach forest-based small-scale enterprises and poor rural households (see Box 9). However, a limitation is that group loans are rather inflexible compared to individual loans; each member receives a loan that starts on the same date and has the same term and repayment frequency, and the size of the single individual subloan is generally capped, in view of the group's solidarity. It may therefore be better suited to small-scale enterprises engaged in activities requiring limited capital and with regular and shorter-term yields.

Social capital is a prerequisite for the success of group lending. When social cohesion is weak, groups are not homogeneous and peer screening and monitoring are inadequate, putting the group's repayment at risk. Solidarity group lending however has the disadvantage of making group members responsible for co-borrowers' possible default, over which they may feel they lack control. This can

BOX 9

**Group lending in Latin America**

In Latin America, group lending has a greater rural concentration than individual lending: 29 percent of village banking clients (ten borrowers or more) and 17 percent of solidarity groups (three to nine borrowers) in the region are rural, versus only 8 percent for the individual clients. Group lending also has greater penetration among poorer households: the average loan balance of group loans, commonly used as a proxy for clients' status under the assumption that poorer households will be able to borrow smaller amounts, is far smaller than individual ones – US$150 for village banks and US$329 for groups, compared to US$980 for individual loans.

Group banking needs to become more flexible and client-oriented over time, however, in order to increase client satisfaction, retention and impact. In the case of four leading Latin American village bank institutions, client retention rates are low compared to those achieved by individual lenders.

*Source:* Westley, 2004

hinder group participation and borrowing, or cause the failure of group lending initiatives.

As clients develop economically and become more acquainted with microfinance services, and as competition in the sector strengthens, small-scale enterprises are likely to have greater demand for more diversified products, such as flexible repayment schedules, individual loans and loans with different term structures and different purposes. An example of the move towards more flexible systems is that adopted by the Grameen Bank since the end of 2002. Under the new Grameen Generalized System, flexible loan terms and repayments and new deposit products have been introduced and group liability has been discarded. Other microfinance institutions are also shedding the traditional Grameen model, or making more flexible products available together with traditional standardized group ones.

Small-scale enterprises, especially when engaged in wood forest production, may need financing for larger investments that have prolonged amortization periods. Due to the gestation period, there is normally a significant time lag between the initial expenditures and the time when investment creates a positive cash flow and the enterprise can repay the loan. While presenting the advantage of reducing transaction costs and credit risks, the traditional standardized microcredit and group lending may not match their cash flow, and may not suit their investment requirements. Small-scale enterprises with intensive capital needs to finance fixed-term investments and that are engaged in higher risk activities are likely to face difficulties in accessing microcredit that matches their demand, given its shorter maturities, limited amounts and fixed repayment schedules.

Innovative lending practices and financial products can be adapted to suit small forest-based enterprises and household cash flows. Innovations that can facilitate access to credit include the use of collateral substitutes and the graduation of clients to larger loans and longer maturities. Equipment loans or leases with maturities of two or more years are other examples of new loan products that have emerged from the increasingly competitive microfinance sector and that would allow small forest-based enterprises to overcome the constraint of short-term working capital loans.

A critical constraint for these enterprises and poor forest households in accessing credit is often the lack of fixed assets and collateral. Appropriate land tenure policies and property rights can have a major role in helping overcome the constraint, as in the case of the project in Nepal shown in Box 10.

Microfinance institutions can also play an important role in enhancing smaller enterprises' ability to finance tree crop investments by offering them a mix of short- and medium-term loans, which enable them to bridge critical periods in their cash flows during the establishment and gestation periods. Such an approach is most feasible in the case of short gestation crops such as tea or coffee, and for enterprises that have also other sources of income. The promotion of practices such as intercropping, staggered planting of tree crops and planting of species with different gestation periods can ease cash flow constraints and make it possible to use other income sources for loan repayment.

BOX 10

**Leasehold forestry for small-scale enterprises in Nepal**

In Nepal, a government project, the Hills Leasehold Forestry and Forage Development Project, with support from the International Fund for Agriculture Development (IFAD) and the Government of the Netherlands, has addressed poverty reduction and restoration of degraded land by leasing small blocks of degraded public forest land to the poorest households for 40 years.

The long-term lease provides poor people with long-term security of tenure and the incentive to invest in order to regenerate, protect and manage the degraded forest areas. At the same time, land tenure facilitates access to microfinance services and credit.

*Source:* IFAD, 2004a

Even the simple expansion of microfinance institution outreach, where possible, may not be sufficient to ensure that rural and especially poorer households can take advantage of the available microfinance services and in particular access microcredit. Small-scale enterprises often lack financial management and business planning skills, and this hinders their development into bankable customers of microfinance services. The availability of non-financial government support services such as input and equipment supply, output marketing, extension and business development can play a major role in facilitating their access to longer-term finance, because they reduce the high risks and transaction costs, and increase the profitability of the investments.

## Leasing[1]

A lease is a transaction in which an owner (the lessor) of a productive asset allows another party (the lessee) to use an asset for a predefined period against a rent (lease payment). The lease payment is calculated to cover all costs incurred by the lessor, including depreciation interest on capital invested, insurance, administrative costs and profit margin. During the lease period, the lessee is responsible for all operational costs including the maintenance and repairs of the asset. The leased asset is assumed to generate the main source of income for the lease payment.

The main types of leasing are:

- **Financial or full payment lease.** Payments are spread over a longer period and often represent the asset's full value.
- **Hire-purchase lease.** The lessee assumes increasing ownership of the asset with each payment made and at the end of the lease period the ownership of the asset is automatically transferred to the lessee.

[1] Based on Bamako, 2000

- **Operational lease.** The ownership of the asset is not transferred and is therefore more like a type of rental.
- **Leaseback or retro lease.** This is a type of pawning. The client liquefies an asset by selling it to the financial institution for an amount agreed on in the leaseback contract. The leaseback contract specifies leasing rates and the date when a client has the option to buy back the item.

The main advantage with leasing compared to traditional loans is the elimination or reduction of collateral requirements, because the leased item itself stands as security. As the lessor remains the legal owner of the asset, repossession is easier. In addition, the lessor has greater control over the disbursement of the funds, avoiding the risk of diversion. The possibility of becoming owner of an asset also provides a strong incentive for the lessee to make timely payments. There might also be tax advantages related to the fiscal depreciation of the asset.

Leasing can be provided by banks, non-bank financial institutions such as leasing companies and other financial institutions. It can also be used by equipment suppliers as an alternative to supplier credit. Close collaboration with equipment suppliers facilitates technical training and after-sales service.

The selection of the asset is crucial for success because it constitutes the main source of payment and the security of the transaction. Suitable lease equipment should:

- generate a regular income flow;
- be easily sold on the second-hand market;
- have multiple uses rather than a single use;
- have a clear title of ownership for ease of repossession and liquidation.

Due to its characteristics, leasing is particularly suitable for small enterprises engaged in wood and non-wood products processing, intending to finance the purchase of equipment. Although the selection of clients takes into account the experience of the customers and their skills in handling the asset, their credit history and their ability to make a down payment or deposit, a client can qualify for a leasing contract based on generated cash flow. This makes it particularly attractive to forest-based small-scale enterprises without extensive credit history, assets or capital base.

By financing the acquisition of fixed assets, this alternative to credit circumvents one of the greatest bottlenecks that forest-based small-scale enterprises face in expanding their production and productivity possibilities, and gives those with scarce financial resources the opportunity to start businesses or make new capital investments even in the absence of collateral. At the same time it lowers portfolio risks for microfinance institutions.

In spite of its advantages, leasing is not fully developed as a financial instrument for small-scale enterprises in developing countries. Leasing is sometimes unavailable for them due to the high risks and transaction costs in dealing with small clients, especially in a rural context, limited access to long-term funding sources at a reasonable cost, and the lack of awareness of the technology and specific skills to adapt it to the requirements of the target market. However, leasing can be an

BOX 11

**Microleasing: ANED in Bolivia**

The Financial Leasing Programme of the Asociación Nacional Ecuménica de Desarrollo (ANED) is an innovative microleasing mechanism for the small producers of Bolivia's rural areas to finance investment capital, which emerged in 1997 as a response to the needs of many rural producers to have fixed assets to enable them to significantly increase their productivity and income.

The Programme faced several difficulties in its beginning. First, it needed to develop a methodology through which the products could be used simply, considering that most of them had only basic education levels. Another difficulty was operations management since the software used by the organization had to be adapted to Bolivian financial leasing conditions. In addition, hard work was needed to identify suppliers who could provide the appropriate machinery to answer the needs of the target customers, as well as to train clients in handling the machines and equipment.

Until October 1999, in over two years of operation, equipment had been financed for over US$623 000, 95 percent of which was agricultural machinery and the remainder for traditional handicrafts, with an average contract amount of US$1 895, confirming that the financed machinery was meant for small rural producers. The Programme delinquency rate was nil in December 1998. Although it was not possible to obtain separate data on this Programme's profitability and sustainability, information available on the income, costs, disbursements and profits generated by the Programme indicate that it could generate net positive profits while operating in market conditions.

*Source:* Alvarado and Galarza, 2003

effective instrument to finance forest-based small-scale enterprises, helping reduce lending risks and the need for collateral. Microfinance institutions should take full opportunity of its advantages. The case of ANED (Box 11) shows that this can be done successfully in rural areas.

## Equity finance/venture capital[2]

Equity finance means the provision of external capital to an existing enterprise for investment purposes. As opposed to loans, the investor does not receive a fixed return such as interest payments, but has a residual claim on the company profits. Venture capital means the use of equity finance for capitalizing extremely risky investments such as start-ups, which might not be able to attract traditional microfinance and may not provide sufficient collateral.

[2] Based on FAO, 2003

Equity finance often involves high transaction costs related to screening and evaluating investment opportunities, developing feasibility studies, business plans and exit strategies, and monitoring and supervising enterprise management. Equity finance has not traditionally been part of microfinance services, therefore, and is normally confined to medium and large enterprises. However, there is a renewed interest in using equity finance and venture capital approaches for the financing of small-scale enterprises. Some funds and programmes have been created for capitalizing joint ventures between small-scale enterprises and the investors. The equity investor buys shares on behalf of a target group and then gradually divests by selling the shares to this group.

There are two key advantages for the investors providing equity finance. Firstly, it can be adjusted more flexibly to volatile conditions and changing profitability and liquidity positions. Secondly, the investor participates in the management of the enterprise, which reduces moral hazard problems caused by asymmetric information and helps provide additional management inputs.

Equity finance and venture capital are valuable tools to finance long-term risk investments because they do not involve fixed financial charges for small-scale enterprises and provide a means for sharing risk. They are a suitable mechanism, acting as an alternative to matching grants, and are more appropriate than subsidized interest rates for governments or NGOs that are willing to support particular environmental practices while developing small forest-based enterprises.

In the case of forest-based small-scale enterprises, however, there can be several difficulties in using equity finance and venture capital. The profitability in forest-related activities often does not compare favourably with many other economic sectors when adjusted for the risks. Knowledge of forest production and its risks may not be readily available. Therefore, traditional microfinance institutions are often reluctant to engage with such enterprises.

## Micro-insurance[3]

Micro-insurance is a risk management tool for poor people. Insurance protects people and businesses against financial loss by spreading the risks among large numbers. The contract indicates the amount of a specific potential loss covered by the insurer and the insured person or enterprise pays a premium that is directly related to the likelihood and the cost of the particular risk.

Micro-insurance traditionally started as loan insurance, but is now expanding to address the needs of the low-income market and to cover a variety of insurance products such as:

- **health insurance** covering medical costs for illnesses and injuries;
- **annuities, endowment and life insurance** providing savings accumulations for retirement and in case of death;
- **crop insurance** against poor yields due to specific causes such as natural disasters;

[3] Based on CGAP, 2003

- **property insurance** against damage, destruction and theft of assets;
- **a death insurance fund** providing benefits for the members and their legal dependents and loan redemption for member-borrowers.

Micro-insurance provides a safety mechanism against negative events: it is therefore particularly useful for rural and poor families, and for forest-based small-scale enterprises where the nature of the activity and the return periods expose the enterprises to greater risks. Since it is costly to create new distribution channels, micro-insurance has greater chances of reaching these enterprises viably when it is integrated into existing microfinance institutions, using the existing delivery mechanisms and clientele. If provided at a reasonable cost, micro-insurance can be a powerful poverty reduction mechanism with great expansion potential, and at the same time, can significantly contribute to microfinance institution profitability.

### Remittances[4]

In many disadvantaged areas, migrant remittances are a major source of income for households. The transfer of money back home from seasonal and long-term migrants is a very valuable financial service and can add up to a large volume and number of transactions. In 2003, migrant workers' remittances to developing countries were estimated at more than US$90 billion. If the informal, unrecorded ways of transferring money on which many immigrants rely were taken into account, the estimated total value would probably be considerably higher. In-country transfers of funds are also important, especially for rural families living in poorer regions, often supported by a member working in the city.

The remittances are mainly used to cover household expenses of migrants' families in developing countries, such as food, housing and education. Immigrants from Latin America send an average of US$300 to their families up to eight times a year, while workers from Southeast Asia transfer about US$800, but less often. Although the amounts are often small, in many cases they constitute the main source of disposable income for the poor families of the migrants, and can therefore be fundamental for rural households. In the district of Parbat, Nepal, remittances amount to 38 percent of the total district GDP. Remittances can also play an important role in building financial assets and facilitating kick-starting of small livelihood activities such as forest-based enterprises.

Up to 15 to 20 percent of the value of remittances can be lost in transfer because of the high financial and transaction costs. Supporting greater competition among banks and money transfer agencies can reduce inefficiencies and fees, and give a wider choice of alternative services, with an impact on the cost of sending money. This would particularly benefit rural households, since they are more likely to depend on migrant remittances and to have limited alternatives of service providers.

[4] Based on IFAD, 2004b

## MICROFINANCE PROVIDERS

Formal and semi-formal microfinance institutions fall into three categories:

- banking institutions (formal);
- NGOs (semi-formal);
- cooperatives, savings and credit associations (with varying degrees of formality).

Formal and semi-formal microfinance institutions present different advantages and disadvantages, linked to their outreach and social focus, on the one hand, and to the extent of effective regulation and corporate governance, on the other. Their comparative advantages or weaknesses are outlined in Table 1.

Government and donor programmes in support of rural microfinance expansion usually avail themselves of these formal and semi-formal institutions in order to reach out to rural households, depending on specific local constraints and the prevailing situation. At times, development projects provide money or establish revolving funds for microcredit initiatives, usually managed by a selected microfinance institution. In some cases, the revolving funds may be directly administered by one administration agency, which may be assimilated to the provision of microfinance services by NGOs, or devolved to specifically created savings and credit associations or credit unions, which are the least formal type of credit cooperatives. Provision of microfinance services under government projects is therefore not treated separately here, but is looked at from the point of view of the institution used.

Experience shows that the performance of microfinance government and donor projects is usually better, and the sustainability prospect higher when existing and efficient microfinance institutions are utilized and possibly strengthened through specific technical assistance. When new credit associations are established, or government agencies used for credit provision for project purposes, the lack of specific financial management skills is likely to endanger the soundness and performance of the initiative.

In addition to the formal and semi-formal microfinance institutions, pawnshops and other non-financial and informal sources of microcredit such as money lenders, traders, relatives and neighbours also play a very important microfinance role, especially in areas little penetrated by more formal institutions.

### Banks

A variety of banks may provide microfinance services, such as state-owned banks, commercial banks, savings banks, postal banks, regional banks, rural banks and thrift banks. With microfinance proving to be a profitable business (e.g. Robinson, 2002), many banks have been expanding the scope of their operations into microfinance by downscaling and establishing linkage programmes with semi-formal sources of different types.

Depending on the size and network of the institution, banks may follow a strategy of direct provision of microfinance services, or act as wholesaler providing apex services and refinancing to smaller local microfinance institutions.

TABLE 1
**Advantages and disadvantages of different categories of microfinance institutions**[a]

| Advantage/disadvantage | Banks | NGOs | Credit cooperatives |
|---|---|---|---|
| **Advantages** | | | |
| Microfinance services | Public mobilization of savings<br>Provision of financial professional management and management information system<br>Access to commercial funds, greater linkages with financial system provided<br>More equipped to potentially provide services such as leasing and micro-insurance | More socially and environmentally focused<br>Tradition of operating on the basis of social capital and with groups<br>Experience of providing non-financial support<br>Potential interest in providing equity finance | Close to customers/ members<br>Easy access to internal funds |
| Outreach | Focus on sustainability<br>Extensive network of branches (for national state-owned or commercial banks) | Greater flexibility for expansion<br>Wider outreach, mission of maximizing coverage of disadvantaged communities | Low operating costs<br>Social capital |
| Governance | Regulation and supervision ensures prudential operations | | Member-based ownership<br>Democratic, participatory |
| **Disadvantages** | | | |
| Microfinance services | Profitability focus, less attention to social and environmental goals<br>More formal loan application and procedures, mostly collateral-based | Insufficient professional management, inadequate management information system | Lack of financial management skills and inadequate management information system<br>Practices and standards often underdeveloped |
| Outreach | Constraints in expansion due to prudential regulations (e.g. capital requirements for branching)<br>Reluctance to enter microfinance, or service disadvantaged communities | Financial constraints to expansion (limited sources of funds, donor dependence)<br>Viability concerns | Outreach limited to membership<br>Viability concerns |
| Governance | | Possible governance and ownership weaknesses | Weak supervision and governance |

[a] Actual situations will vary according to the specific microfinance institution and national financial regulatory framework.

Bank downscaling into microfinance can either take place directly by launching a microfinance service, by creating a division within the bank to deal with microfinance services, or by creating independent specialized subsidiaries (as seen in Chile where the Banco del Desarrollo created Bandesarrollo Microempresa Asesoria Financiera de Interes Social).

Through their often large rural networks, fund transfer systems, access to multiple funding sources, trained staff and modern administrative accounting and management systems, banks often have a comparative advantage in reaching large numbers of poor people in a cost-effective manner. If regulated and supervised, banks are generally also a reliable means for the public mobilization of savings, which in many countries is actually limited by law to licensed banks.

The postal infrastructure is also used in many countries to provide financial services, taking advantage of the fact that staff time may not be fully occupied by handling mail. Postal banks usually do not make loans; their services are limited to savings and payments/transfers, with accounts and transactions sizes tending to be quite small.

Given the low-density population, difficult access and poor infrastructure that usually characterizes rural areas, banks may be reluctant to adequately service small-scale forest-based enterprises and answer their financial needs. Credit products offered by banks are seldom adapted to the longer productive cycles of rural and forest activities, and most banks only provide credit against collateral, which may not be available to poorer households. Other major weaknesses of banks entering the microfinance market have been identified as: a potential lack of institutional commitment, organizational and administrative structure that are inadequate for microfinance services, the need to adapt personnel and financial methodologies, and the lack of knowledge about the microfinance market and best practices.

The outreach expansion of sustainable microfinance institutions to service large segments of the population, especially remote communities and poor households, requires substantial and effective social intermediation support. Banks, or more generally, private sector microfinance institutions, are not likely to invest in social intermediation (including awareness and record-keeping of basic financial services), given the externalities associated with such investments. Unless coupled with parallel government social intermediation interventions or business development services, banks may therefore be unable to reach the desired level of coverage.

Although banks may be seen as a second best option for providing microfinance services to forest-based small-scale enterprises due to lesser social focus and expertise, the advantages of their greater supervision, public mobilization of savings, more financially sound operations and customer confidence should not be overlooked. As a result of such advantages, a microbanking approach has been adopted in Papua New Guinea to expand the provision of microfinance services (see Box 12). A similar approach has been followed in Timor-Leste. The conflict following the independence referendum in 1999 caused all Indonesian banks to be closed, and only two foreign banks established offices in the capital, providing limited banking services. Faced with the need to support the development of

BOX 12

**Microbanking: Papua New Guinea**

In Papua New Guinea, a country with a large rural population, scarce population density, difficult access to remote areas, a forest-dependent economy and customary land tenure, the approach adopted by the Government in the past, building on savings and loans credit societies, has proved unsuccessful. This is because the poor governance and management of these institutions resulted in a loss of confidence on the part of the people. The Government has therefore decided to pilot a microbanking scheme for the sustainable delivery of demand-driven microfinance services, starting with the establishment in 2004 of Wau Microbank, with funding from the Government and international donors. A microbanking approach is felt to present several benefits: greater sustainability prospects, better governance, and more effective adoption of financial technology, systems and procedures.

Wau Microbank has the advantage of being regulated and supervised by the central bank, managed by a qualified staff team, open to the general public, and allowed to collect savings. Under its special licence granted by the Central Bank, Wau Microbank is exempted from the general banking regulations, and is authorized to perform limited banking functions for the public, namely, accepting savings deposits from the general public and granting small loans to its target populations.

With its adherence to established corporate standards of practice and the Central Bank supervision, Wau Microbank provides an adequate instrument to address the need for safe savings deposits, which is a priority among the local population given limited investment opportunities and the hazard of keeping money at home due to crime problems. In addition to demand and term deposits, the bank offers business and all-purpose loans, payment and payroll services, as well as limited non-financial services (business orientation to borrowers).

Upon reaching full sustainability of the delivery of microfinance services, the government plans to transfer the bank ownership to the local community and to replicate the model in other areas.

*Source:* Asian Development Bank, 2004

microfinance in rural areas, in 2002 the new government established a microfinance bank, at the same time developing a policy and legal framework within which it could operate.

## Non-governmental organizations

NGOs widely comprise institutions that are not regulated by banking laws and provisions, and which usually have a developmental or social objective in addition to a financial objective. Most often, a solid financial performance is a means and not an end in itself. The primary objective is non-financial; extending outreach

in areas or to families not normally served by banks and bank microfinance institutions. Such institutions tend to be focused on poor people and low-income households, and not only those without access to banks.

Given their social objectives, expansion of outreach among poor people is often rapid, limited only by the availability of resources. NGOs may have several other advantages: they are grassroots-based and therefore have an information advantage and network benefits; they have expertise in forming groups, introducing disciplines, transferring know-how and skills; and they can undertake vocational training activities at the same time.

NGOs may also offer the advantage of greater attention to environmental concerns. Banks are in general not equipped for supporting or monitoring the use of microfinance services for economic development through the sustainable exploitation of natural resources. NGOs may have greater experience and expertise in ensuring environmental protection, while supporting economic development through microfinance services.

As worldwide microfinance experience has shown, NGOs are a powerful tool to provide microfinance services for poor people living in remote rural areas, maximizing outreach by using successful, innovative techniques for providing such services, and in particular, making and recovering tiny uncollateralized loans. Box 13 presents an example of a successful NGO microfinance institution in Bangladesh.

Because of their social and environmental focus, NGO microfinance institutions are often better suited to cater to the needs of forest-based small-scale enterprises. They may have the expertise to build and strengthen groups and to help such enterprises adopt profitable economic activities that do not have negative impacts on the forests. In rural areas characterized by very high costs of delivery of microfinance services and where smaller forest-based enterprises are engaged in sector-specific production activities that are unfamiliar to more formal microfinance institutions, NGOs may be the only institutions equipped for the sustainable delivery of these services.

NGO microfinance institutions' dependence on grants, their financial viability, management and monitoring capacity, and their repayment performance may occasionally pose problems. Their internal governance may also be a concern. A strong independent apex institution capable of exercising financial discipline, with good training capacity, which would help link the NGO to the formal financial network may help NGO microfinance institutions to overcome such weaknesses. In Nepal, for example, the Rural Microfinance Development Centre was established as an apex organization in order to support the many NGO microfinance institutions in the country.

To ensure sound and sustainable operations, it is important that NGOs strengthen internal controls, risk management, transparency and disclosure of financial information, while at the same time paying more attention to the cost side of providing the services, and particularly to their sustainability.

BOX 13

**NGO microfinance institutions: the ASA Foundation of Bangladesh**

The Association for Social Advancement (ASA) was organized as an NGO in 1978 with the vision of creating an enabling environment to establish a just society. In 1991, ASA was restructured and shed all other services to become a specialized NGO, committed to large outreach, cost-effective lending and to achieving financial self-sufficiency through efficiency.

The basis of ASA's success, which has led it to be considered one of the fastest growing, most cost-efficient, sustainable and best-managed microfinance institutions in the world, are its focus on cost-efficient and sustainable microfinance services with a large outreach, its shift from donor dependency to commercial borrowing for funding its operations and its innovative ways of providing microfinance.

ASA operations have four simple key organizational norms to achieve their central objective of sustainable outreach: standardized loan products; basic voluntary deposit services; simple, effective and rigid procedures allowing for cost-effective delivery of microcredit and limited deposit services; and zero tolerance on late repayments of loan instalments.

ASA follows a unimodel branch system based on the standardization of procedures described in a detailed operating manual, allowing for maximum delegation with minimum level of discretion; the standardization of all ASA branches (staff, buildings, furniture, etc.); and simple, uniform accounting systems, which have facilitated the rapid expansion of its branches. There is no group liability and groups are used solely to reduce operating costs. It offers its clients rapid and easy access to its standardized micro-loans (with amounts increasing with each new loan), charging cost-covering interest rates and open access to savings.

By the end of June 2004, ASA had 1 725 branches (compared to 159 branches in 1992), with over 2.3 million loans disbursed annually serving over 2.5 million active clients (more than 95 percent women), 2.8 million savers, US$345 million disbursed yearly as loans, US$48.8 million in savings, an adjusted return on assets of 11 percent in 2003, and an average of 419 active clients per loan officer and 1 654 active clients per branch in 2003, which is one of the highest of the region. On-time recovery rates have exceeded 98 percent over 1999–2003, and ASA has been financially self-sufficient since mid-1990.

The ASA model shows how tight cost control, including systematically cutting down costs and minimizing transaction costs, together with a lean administrative structure and high loan officers' productivity can efficiently deliver financial services to millions of poor clients.

*Source:* ASA, 2003

Most of the NGO microfinance institutions are credit-focused, with deposits often limited to obligatory cash collateral for loans. Their inability to publicly mobilize deposits and their limited links to financial markets make it difficult for them to expand without continued access to wholesale funds from governments and international donors. Legal restrictions on the scope of services provided by NGOs may also limit the effectiveness in addressing heterogeneous needs of poor people. Some of the more successful NGO microfinance institutions manage to obtain funding from commercial banks, but rarely in amounts exceeding their own equity. At some point, therefore, growth-oriented NGO microfinance institutions find themselves constrained by lack of funding. A debt to equity ratio of 1:1 is fairly typical for NGOs, while banks and other regulated financial institutions operate with leverage ratios of about 10:1.

The need to overcome their dependence on funds from international donors or governments for their lending, which restrict their growth, is a fundamental reason behind the transformation of many NGO microfinance institutions into bank microfinance institutions. By becoming licensed and supervised by governmental financial authorities over time, NGO microfinance institutions can fund themselves with savings accounts and term deposits captured from the public, and use the capital to provide financial services to far greater numbers of poor people over longer periods of time. Upgrading into regulated banking institutions also allows NGOs to seek other commercial funding from bank loans and increasingly through capital markets in the form of bond issues (see Box 14).

### Financial cooperatives and credit unions

Credit unions and cooperative financial institutions collect savings and provide loans to their members. In many rural areas credit unions are still the only source of deposit and credit services, apart from the informal financial market. Because membership is usually based on some common bond, such as living in the same village or common employment, credit unions tend to be relatively small. Groups with longer traditions of mutual trust and close-knit communities that enable resource users to reciprocate in behaviour are more likely than others to succeed in devising and sustaining successful credit unions. At the same time, successful cooperatives are likely to strengthen the social capital of their members.

Credit unions start with shared capital or shared savings and do not normally take saving deposits from the public, but only from members. The main purpose of credit unions is to make attractively priced loans to members, achieve affinity to overcome asymmetric information, and develop group dynamics to provide an incentive to repay.

Governance is usually based on a one-member-one-vote principle, with no board of directors representing ownership interests, and the annual assembly of all members democratically deciding on key issues. A potential risk is that strong managers with broad authority can be inefficient and lead credit unions into abuse, fraud and failure, while individual members have limited ownership incentive and power to prevent such an eventuality.

BOX 14

**NGO microfinance institution upgrading to a commercial bank: BancoSol Bolivia**

In Latin America, microfinance, which had started in the 1950s with the establishment of credit unions, began rapidly expanding in the 1980s with socially-driven NGOs making loans to poor micro-entrepreneurs. The growth of these NGO microfinance institutions was largely funded by grants and soft loans from international donors and governments of the region. By the early 1990s a few leading NGO microfinance institutions had reached full sustainability. As a result, in 1992 one of the leaders among these pioneering microfinance institutions, the Bolivian NGO Fundación para la Promoción y Desarrollo de la Micro Empresa (PRODEM), converted itself into the first regulated microfinance institution in Latin America, BancoSol, a regulated commercial bank.

By transforming itself into a bank, BancoSol was allowed to mobilize savings, outgrowing donor and government funds and obtaining a cheaper source of funds than commercial borrowing from other financial intermediaries, and to respond to the demand of clients for one-stop shopping. By 1997, only five years after its commercialization, BancoSol already served over one-third of the total clients of the entire Bolivian banking system, despite charging high real interest rates, and surpassed other Bolivian banks in profitability thanks to cost-effective lending methods and its experienced and motivated staff. Interest income paid its full operating and financial expenses, and the expansion of its operations was funded by capturing commercial loans and deposits from the public, under the prudential supervision of the Bolivian authorities. At the end of 2001, more than 75 percent of its overall financing was in the form of deposits from the public and the remaining 25 percent was from other financial institutions.

To meet the financial challenges of rapid growth and compensate for the related rising costs, BancoSol started increasing loan sizes and maturities, thereby producing more interest income with little increase in operational cost per loan. This increase in portfolio efficiency allowed BancoSol to remain financially viable without having to raise its interest rates.

Following the BancoSol example, some 40 NGO microfinance institutions in the region have since upgraded to become regulated commercial microfinance institutions, relying ever less on subsidized funds and increasingly on deposits from the public.

*Source:* CGAP, 1997

Credit unions often face outreach constraints, because the demand for loans often exceeds the supply of savings, so member loans are typically limited. Opening membership of credit unions may be a way to expand outreach, but it risks weakening credit unions by diluting the members' social capital and information. Credit unions may also suffer from lack of financial training and management

skills, and a varying quality of supervision and governance, which may expose them to potential risks. Two other possible weaknesses are a permissive attitude towards loan delinquency rooted in misinterpreting cooperativism and the concentration of loans since small, single community-based credit unions may not be able to diversify their portfolios adequately.

These potential weaknesses mean that credit unions risk providing uncompetitive products and services, and confusing financial information, as well as undertaking undisciplined financial operations. Loan analysis may be based more on membership considerations, and the credit provided on a pro rata basis rather than on revenue prospects.

To address weaknesses and potential risks and to ensure sound and sustainable credit union microfinance institutions, it is important that the financial system ensure tight operational standards for financial cooperatives, effective off- and on-site supervision, improved accounting and reporting standards, and enforcement of capital adequacy ratio requirements and external borrowing limits. Box 15 shows an example from the United Republic of Tanzania where credit and saving cooperatives have been successfully supported.

For forest-based small-scale enterprises, local credit cooperatives and local forest NGOs may have the advantage of having detailed knowledge of the characteristics and constraints of their activities, technical as well as economic and social. This may help them to identify the most suitable financial services and develop the most effective guarantee systems. Credit cooperatives also assist in overcoming the constraint of high transaction costs to service such enterprises.

BOX 15

**Credit and savings cooperatives in the United Republic of Tanzania**

In the thinly populated areas of Tanzania, the country's commercial banks are unwilling and the development banks unable to serve the rural poor in a sustainable manner. To address this void, the government, with support from IFAD, has facilitated the transformation of almost 200 rural savings and credit cooperatives from credit channels into autonomous, self-financed and self-managed institutions functioning like private rural banks.

Strengthening rural savings and credit cooperatives has led to annual increases of 70 percent in savings deposits, the diversification of loan products to finance micro-enterprises, in addition to agriculture, including petty trading by women and an increase in membership of women to 40 percent. The repayment rate reaching 91 percent is still not fully satisfactory, but represents a substantial achievement. By mobilizing their own resources, lowering their transaction costs and raising repayment rates, the cooperatives have embarked on the road to sustainability.

*Source:* IFAD, 2004c

There are examples of more informal cooperative arrangements among forest communities, such as the cash box system in the Gambia (outlined in Box 16), where common funds are successfully used for small-scale enterprises.

Microfinance institutions that fund exclusively forest or agricultural portfolios are extremely vulnerable to external shocks. Given the greater needs of small-scale enterprises for investment financing at the beginning of tree planting activities, credit cooperatives focused on forest production activities may often find their funds becoming quickly insufficient to finance the local credit demand.

## Non-financial or informal sources

***Pawnshops.*** Pawnshops can be a very important source of microcredit for low-income and poor households. The major reasons for their success among poorer families are their easy access – no loan application forms to fill in but only an identification card and the item to be pawned – and the very quick processing

BOX 16

**The cash box system in the Gambia**

Some villages in the Gambia are using the cash box system. The sources of income flowing into the community forest cash box are:

- 85 percent of all proceeds from the community forest by the various interest groups;
- 50 percent of the fines collected from offences committed in the community forest and violation of internal by-laws;
- income from projects financed from the cash box, e.g. the timber and log enterprise in Berefet, which partly funded the ecotourism camp.

A community forest committee manages the cash box. Any withdrawal from the cash box must be decided by at least two-thirds of the committee members and should be used for either forestry development activities or other community development activities. The committee keeps proper records of the income and expenses of the cash box and must prepare and forward to the district forestry officer a statement of the accounts for each financial year. The community forest auditor internally audits the cash box as is the right of any forest officer designated by the Director of Forestry.

In Kafuta village, proceeds from 2003–2004 logging were deposited in the village cash box. The community forest committee unanimously agreed to use part of this money and the balance from the village development committee funds to finance the production and marketing costs for 2004–2005 for log and fuelwood enterprises. In addition, these enterprises financially supported the village water system and the construction of a mosque.

*Source:* Forestry Department, the Gambia, unpublished.

of the loan. For rural households, especially those engaged in non-wood forest product activities with little access to assets and collateral, small pawn loans can be a valuable means to address emergency shortages in family cash flows, being less expensive and more reliable than money lenders. Strengthening sound and efficient pawning institutions, and supporting the development of products targeted to poor people, can therefore be an effective means of expanding microcredit outreach and serving rural households (see Box 17).

***Agreements with non-financial institutions.*** Equipment suppliers, processors and traders are among the non-financial institutions that might be interested in providing finance and who are able to do so. They might have advantages compared to financial institutions in terms of reducing risks and transaction costs, namely:

- **Equipment suppliers** often have a strong presence in rural areas in order to sell their products there. This allows them to supervise clients more frequently at comparatively low costs, while helping to ensure the productivity of the investments through the supply of parts and service.

BOX 17

**Pawning financing: Perum Pegadaian in Indonesia**

In 2001 Perum Pegadaian, the state-owned Indonesian pawnshop company, was the largest microcredit supplier in the country, accounting for almost half of all microfinance borrowers, with more than 15 million customers. Nonetheless, given the very small loan sizes, with its total outstanding loans of US$150 million, it represents only 7 percent of the total microcredit loan amount outstanding.

The importance of Perum Pegadaian as a provider of microcredit for poor and low-income households is confirmed by its average loan size of less than US$10 (40 percent of its customers borrow less than US$5; 88 percent of its customers borrow less than US$56), compared to an average loan size of more than US$80 for cooperatives and credit unions, and more than US$300 for banks. With a return on equity of 17 percent and a return on assets of 4.5 percent, the company is financially sound and profitable. Among its key success factors with poorer families are its simple and fast processing of micro-loans (which can be made available generally within 15 minutes); the presence of products specifically addressed to poorer customers through the acceptance as collateral of simple items such as fabric, clothes and small appliances; and its extensive outreach through its 772 branches and 14 regional offices throughout Indonesia. To strengthen its microfinance focus, Perum Pegadaian is currently developing micro-loans that do not need the actual deposit of assets as collateral, which is substituted by titling papers (for example of motorbikes) or even marriage certificates.

*Source:* Perum Pegadaian, 2003

- **Buyers, traders and processors** may be able to deduct loan repayments from the sales proceeds through interlinked transactions. This arrangement reduces transaction costs for loan recovery and default risk, and helps reduce marketing risks.

In comparison to most microfinance institutions, suppliers, traders and processors have a greater knowledge of small-scale enterprises and their economic activities and products because they are their regular customers. Therefore, they are in a better position to assess their economic potential and financing risk. They may also face fewer transaction costs than most microfinance institutions, because of the already existing regular business contacts. From the point of view of the credit delivery, non-financial institutions can therefore be a cost-effective mechanism.

There are different types of company-community partnerships:

- outgrower schemes;
- joint ventures;
- community enterprises;
- other types of contracts.

Outgrower schemes occur where companies contract communities or individual landowners within their concessions or in nearby areas to plant trees and to supply a given amount of timber to the company for an agreed price. The details of outgrower schemes and the balance of rights and duties vary. In some instances, the company is not obliged to purchase the landowners' timber, but has the first right to do so. In others, the landowners can choose to sell to a third party if the company does not match the market price. Box 18 outlines an example of one of the first outgrower schemes employed by Sappi in South Africa.

The primary benefit to the company or licensed concession holder is the increased supply of naturally grown timber. The schemes also reduce the company's plantation supervision costs, for example, in preventing forest fires, since the local people have a vested interest in protecting the plantations.

Research findings show that the most successful collaborations occur when companies negotiate transparently with communities to achieve a win-win situation. This helps secure a long-term commitment from outgrowers. Local groups also need secure land ownership, which would result in little competition for the use of land. The company needs to deliver clear information on the potential risks and consequences to the tree growers as well as planning reinvestment mechanisms well. They must be able to offer a fair price for the timber, because the long-term viability of the schemes will depend on tree growers making a good profit from the first harvest.

Joint ventures are basically partnership arrangements. In general, the company and community participants share equity and split the profits in proportion to their respective shares. Communities in joint ventures may be involved in the operations' management.

Other arrangements between companies and communities vary from simple contracts where communities are paid to protect trees in lands already allocated to

BOX 18

**Sappi and outgrower schemes**

Sappi is an international pulp and paper company and the second largest private forest owner in South Africa. It was the first company in South Africa to experiment with partnership arrangements with local communities as a way of increasing its access to forest resources.

The original scheme, "Project Grow", was initiated in Kwazulu-Natal in 1982 and has since been managed by the Lima Development Foundation, an NGO with a track record in community development. Under this scheme, local communities sign a contract with Sappi, which entitles them to free expertise, training and seedlings, advanced payment for work, and a guaranteed market for their trees at current market prices. When the trees are finally ready, Sappi pays the participants the value of the produce, deducting any advance payments.

This scheme has worked well, despite farmers not owning the land they plant. In general, individuals are granted rights to community-owned land for plots averaging less than one hectare per family. By 1999, 6 800 ha had been planted by 7 600 farmers, generating 2.4 million rands (R) (US$545 000) per year. Participants earn about US$205 per hectare per year, which compares favourably with the alternatives such as ranching or sugar production.

In 1990 Sappi introduced a second outgrower scheme for title deed holders called the Management Associated Programme (MAP). MAP offers free seedlings and technical advice, a loan of up to R1 200 (US$275) per hectare at the prime bank interest rate, and a guaranteed market price for timber. Up until 1999, 28 000 ha had been planted. The average income is US$115 per hectare per year. The grower must follow the harvesting practices prescribed by Sappi and cannot sell the timber grown to anyone else.

*Source:* Landell-Mills and Ford, 1999

the company, to arrangements whereby companies deliver contributions to local development (e.g. schools and health care) in return for community cooperation. Informal agreements vary considerably.

Agreements with non-financial institutions may involve high costs for setting up and managing the loan administration and monitoring system, and a lack of transparency in account management. Because of the greater bargaining power enjoyed by informal suppliers in general, the lack of alternative sources of credit and the often limited literacy and financial skills of their customers, the terms and conditions under which services are provided may not enable the clients to fully harness economic opportunities, and interest rates charged are often considerable. Limited funds can also pose a problem and limit outreach, often to better off and more promising forest-based small-scale enterprises. An advantage with regulated

and supervised financial institutions is their ability to offer additional financial services such as savings, a greater variety of typologies of loans, and payment services.

***Informal financial arrangements.*** For most poor and low-income households in rural areas, microfinance services are supplied mainly by informal sources, such as self-financing through family and relatives, friends and neighbours, or borrowing from money lenders and traders. Poor people tend to be too wary of risks to borrow for promotional measures (that is, investment in the future). They prefer gathering their own resources or resources from family and close friends first in order to finance most rural investments.

Self-financing is investment within a particular household or enterprise of savings accumulated in that household or enterprise. Among poor people, most investments are made through self-financing, which has the advantage that no external information, collateral, contract or form is required. However, self-financed resources may not match those required by the investment opportunity and therefore may limit the scale of activity. This may be a particular constraint in the case of indivisible investments (such as buying cattle, equipment, or a bag of fertilizer), and considerably reduce the possibility of introducing productive innovations and technologies.

Informal suppliers of credit, such as money lenders and middlemen providing credit, are often the only available source of credit in remote areas, supplying mainly short-term credit and charging higher interest rates than semi-formal and formal sources. Their contribution to financial intermediation and the improvement of resource allocation is also limited because they operate mostly in limited localized areas and seldom allow movements of funds over larger distances and beyond well-known clients.

## MICROFINANCE OUTREACH

Despite the substantial worldwide expansion of microfinance in the last two decades, an overwhelming number of poor people continue to lack access to basic financial services. This expansion has reached mainly urban households and micro-enterprises with regular income flows. With activities that may require comparatively larger loan amounts, forest-based small-scale enterprises and rural households have less frequent revenue flows, need longer repayment terms and are still largely unserviced. Even rural microfinance institutions still focus mainly on trading and other non-agricultural activities that have a shorter turnover.

Successful outreach expansion can be achieved through the entry of financial intermediaries not previously serving micro-clients, or through the broadening and deepening of the coverage of services by already existing microfinance institutions.

In rural and remote access regions, strengthening and expanding operations of existing microfinance institutions may work better than trying to lure urban commercial banks to rural areas. The lack of rural lending experience of these banks

may constitute a formidable barrier to their entry in rural markets. Microfinance experience shows that the forced expansion of lending operations under supply-led regimes typically leads to poor microfinance institution performance, with declining repayment rates as the quality of the borrowers and the loan portfolio are sacrificed in favour of quantity. In the forest sector, due to the peculiarities of the investments, microfinance institutions without experience in the sector or without support from government specialized agencies will likely lack the necessary expertise to understand and assess small-scale enterprise investments.

Limited branch networks are a bottleneck to the outreach extension of already operating microfinance institutions. This is often a greater constraint for banks when restrictive banking legislation imposes high capital requirements for opening new branches, and for limited funds, especially NGO microfinance institutions that are excessively dependent on government and donor financing. Establishing a network of partnerships among microfinance institutions, and between them and other financial institutions can help overcome both constraints, and allow for the necessary growth and expansion. For integration to take place, microfinance institutions must adhere to financial best practice standards and transparency in their financial and operational performance. The increasing availability of microfinance institutions' appraisal mechanisms and rating institutions should facilitate the establishment of such partner networks. Examples of specialized microfinance rating agencies are Microcredit Ratings International Ltd. and Credit Rating Information Services of India Ltd. for Asia, MicroRate for Latin America and Africa, and Microfinanza Ltd. and Planet Rating worldwide. The Consultative Group to Assist the Poor (CGAP) and the Inter-American Development Bank (IDB) have launched the pilot phase of a joint initiative called the Microfinance Rating and Assessment Fund, aimed at improving the quality, reliability and availability of information on the risk and performance of microfinance institutions in all developing countries.

Simple systems and procedures are often key to increasing the outreach of microfinance institutions, especially in rural environments such as those of forest-based small-scale enterprises where costs of providing microfinance services are high (see Box 19).

When viable, for example through mobile branches or visiting loan officers, doorstep services enhance accessibility to microfinance institutions and support outreach expansion for remote areas, especially for low-income and illiterate households. Information communication technology has also a very high potential for breaking geographical and other barriers to outreach expansion, and may therefore represent a great opportunity for forest communities.

In forest areas, where communal ties are likely to be stronger, social mobilization and shared and respected cultural values can be drawn upon to minimize costs and accelerate microfinance outreach. Traditional informal organizations, collaborative practices, cultural values such as honour, solidarity, integrity and serving others are social assets that can be profitably tapped to both expand the coverage and reduce the costs of microfinance services.

BOX 19

**Outreach expansion: Center for Agriculture and Rural Development (CARD NGO), the Philippines**

After adopting the ASA methodology (see Box 13) in late 2001, CARD NGO, an NGO that had already been active in the country for more than ten years, registered a steep increase not only in client outreach and portfolio, but also in terms of savings by the end of 2003. The total number of clients increased by 134 percent, portfolio by 102 percent, savings by 110 percent, branches by 148 percent, and technical officers by 185 percent. This was accomplished while maintaining a repayment rate of 99 percent and a financial sustainability of more than 100 percent.

The factors identified by CARD NGO as key for achieving such rapid expansion in two years using the ASA methodology are: very simple bookkeeping, forms and filing systems (a typical branch has no cashier or bookkeeper and no computers); branch staff that can track loan status at any time without waiting for inputs from the microfinance institution head office, therefore enabling the staff to take immediate and appropriate action in case there is a deviation from targets; simplified staff training and recruitment procedures; promotion of flexible withdrawal savings; and strong head office monitoring through a simplified monitoring checklist.

*Source:* Alip and Dimaculangan, 2004

## Gender outreach[5]

Microfinance programmes have generally targeted poor women. This is because experience has shown that targeting poorer households through women is more effective, as they are more risk-averse, look for more productive loan utilization, are better credit risks and ensure higher repayment rates than men. Women are reputed to possess more unrealized entrepreneurial capacity, to have higher savings propensity, and to be more inclined to use income that they control for improving children's nutrition and education. The small credit amounts used in microfinance seem to suit women better than men, and women can also be used as vehicles for credit delivery. Microfinance is generally viewed as a powerful tool for empowering women and improving their livelihoods.

Addressing gender issues in microfinance interventions, however, means more than targeting a programme towards women, or counting the number of loans made to women. A gender-sensitive approach would imply examining both women's and men's economic and social position in the family and the community. It also implies analysing how their position is reinforced through the institutions that they deal with and how it is governed by national laws and customs.

[5] Based on FAO, 2002

Government programmes that help women to overcome the constraints of accessing credit and other financial services through specific policies, programmes, and/or legislation can improve microfinance outreach, building on their general repayment performance and underused economic potential.

### Outreach through groups

Most microfinance institutions provide savings and loan facilities and other microfinance services to groups, thereby reducing the number of individual transactions. Through group outreach microfinance institutions can also avail themselves of the groups and their representatives for a number of activities such as the disbursement of individual loans, the collection of individual savings and repayments, peer monitoring, and repayment pressure.

Transaction costs may be too high to provide microfinance services individually, both sustainably and often enough, especially in areas of difficult access and sparse population such as forest regions. Although bigger and stronger forest-based small-scale enterprises may afford to visit the microfinance institution branches when needed, group outreach can be a successful mechanism for microfinance institutions to expand their outreach with limited increases in costs.

## FINANCIAL SUSTAINABILITY

Financial sustainability is necessary to reach significant numbers of poor people in a stable and durable manner. Sustainability is the ability of the microfinance provider to cover all of its costs, and is therefore the only way to reach significant scale and impact beyond what donor and government agencies can fund. Sound, efficient and sustainable microfinance institutions should ensure high loan recovery rates, charge appropriate interest rates, increase productivity and the number of borrowers, and reduce operating costs with efficient delivery systems. Sustainability is closely linked to outreach since most poor people are not able to access financial services due to the lack of strong financial intermediaries, which are the only way to guarantee continued provision of microfinance services for poor people.

To achieve the viability and good financial performance necessary to service small-scale enterprises reliably and continuously, microfinance institutions should be able to charge cost-recovering rates and at the same time ensure transparency in pricing to protect consumers. Viable and sustainable microfinance institutions, focusing on reducing transaction costs and developing new products and services, will be able to better provide microfinance services to poor people. Promoting competition and institutional efficiency will facilitate the reduction of interest rates over time.

Several microfinance indicators, benchmarks and rating systems have been developed to assess microfinance institutions' performance and their sustainability (Table 2). Transaction costs, including credit and economic risks, and interest rates are the main financial factors, together with the cost of funding, affecting the viability and sustainability of the institution.

TABLE 2
**Microfinance institution financial indicators and performance benchmarks**

| Performance criterion | Indicator | Performance benchmark |
|---|---|---|
| Capital adequacy | Capital adequacy ratio | Minimum 20% (however, it depends on the size and typology of microfinance institution: the ratio may be lower in bigger and more regulated microfinance institutions) |
| | Loan loss reserve adequacy | 100% |
| Portfolio quality | Portfolio at risk (PAR) | Maximum 10% (applied to 31 or 91 days PAR) |
| | Loan loss ratio | Maximum 4% |
| Profitability | Return on assets (ROA) (subsidy adjusted) | Minimum 2% |
| Cost-efficiency | Operating self-sufficiency ratio | Minimum 120% |
| Financial self-sustainability | Financial self-sufficiency ratio | Minimum 100% |
| | Subsidy dependency index | Maximum 0% |
| Productivity | Average number of daily transactions/ teller | No standard benchmark |
| | Number of active clients/operational officer | No standard benchmark |
| Outreach | Number of delivery units (branches, sub-branches, mobile units) | No standard benchmark |
| | Number of savers or savings accounts | No standard benchmark |
| | Average savings balance | No standard benchmark |
| | Number of borrowers or loan accounts | No standard benchmark |
| | Average loan size | No standard benchmark |

*Source:* IFAD, 2004c

The adjusted return on assets (ROA) and the portfolio at risk (PAR) are among the most significant indicators of overall financial performance. The adjusted ROA shows the profitability of the microfinance institution, after discounting possible grants and subsidies from government or donors, and therefore its sustainability. The PAR tells how well the microfinance institution achieves its basic goal of lending money and receiving it back. More detailed indicators are provided in CGAP (1999). Detailed microfinance benchmarks, for example, by lending method, by region, by target market, are provided in the *MicroBanking Bulletin* (www.mixmbb.org).

## Transaction costs and credit risks

Transaction costs are those connected with the provision of microfinance services, such as the collection of savings, disbursement of loans, collection of repayments and provision of other services such as insurance and transfers other than the cost of funding.

Provision of microfinance services to small-scale enterprises is likely to entail greater transaction costs than the already costly provision of traditional microfinance, because the population density is generally low and households generally live in remote access areas. The higher transaction costs of microfinance institutions are largely a result of the need to travel long distances to reach a dispersed rural clientele, the poorly developed rural transport and communication infrastructure, and poor knowledge of heterogeneous rural households, their economic activities and their financial needs. Normally, labour and transportation costs represent more than 60 percent of the total administrative costs of the microfinance institutions. It should be noted that for the clients, in addition to the costs of borrowing, there are other high additional costs: opportunity costs (working time), transport costs, fees and unofficial payments, delays, excessive paperwork and collateral documentation.

The delivery mechanism for microfinance services also has important consequences on transaction costs; in order to achieve greater outreach, some microfinance institutions provide doorstep services to the client, whereby their staff visit households instead of requiring clients to come to the branch. This reduces the costs for the clients and facilitates access to services, but entails greater transaction costs for the microfinance institution.

Although most investments in forest-based small-scale enterprises are expected to yield benefits in the medium and long term, forest activities are perceived to be subject to uncertainties. The larger the size and the longer the term of the loan, as is the case for initial fixed investments such as tree planting and purchase of equipment, the more important are frequent contacts with and supervision of the borrower. This should control the risk of loan default, which is costly and time-consuming. Microfinance institutions will therefore tend to incur greater costs and require higher collateral when servicing forest communities than in the case of other clients.

Providing microfinance to poor individuals is deemed to involve high risks. The management of these risks contributes to the transaction costs, both in acquiring information on the borrowers and their economic activities, and in making the necessary provisions against possible non-repayment. Credit risks relate to moral hazard, which is the possibility that borrowers may skip the repayment, while external economic risks relate to the future economic and financial viability of the investment financed. Lenders must carefully screen and select borrowers in order to reduce moral hazard risks, and to ensure that the entrepreneur has sufficient management skills and that the economic activity will generate enough profits to repay the loan.

Credit risks are normally assessed by creating a client profile including track records, range of experience, existing assets and labour force. Credit risk is normally higher for a client that the microfinance institution has no previous experience of, so usually new borrowers receive smaller loans with shorter repayment periods, while borrowers with good loan repayment can gradually receive larger amounts for longer terms. Frequent payments in small instalments

are a strong tool for maintaining contact with the borrower and the lender, thus controlling this risk, although they increase transaction costs. If repayment is based on the projected cash flow generated by the investment, supervision should ensure that the disbursed loan is used for the purpose stated in the loan contract. Mobilization of savings is an alternative way to build additional ties between borrowers and lenders, reducing credit risk and providing for partial loss coverage in case of non-repayment.

***Collateral.*** To a certain extent, risks and information-related problems and costs can be reduced by the use of collateral. Collateral serves two important functions: it acts as a screening device to reduce wilful defaults on loans, and it reduces lending risk by providing the lenders with an additional source for repayment. Due to costs and risks involved in liquidating the collateral, the lenders tend to require collateral valued at 1.5 to 2 times the loan amount. The collateral requirement has a negative impact on poor people because it tends to limit loans to wealthier individuals.

Forest-based small-scale enterprises are likely to face greater requests for collateral because of greater uncertainty about their ability to repay given the longer-term nature of the investment being financed and the higher probability that some negative unexpected event will occur during that time. This is a problem in many developing countries, and in particular for enterprises and households living from forest activities, given that forest land is in many cases government-owned, and households often lack formalized ownership titles and registers for real estate assets. Examples of external risks that can affect forestry activities are: natural disasters such as storms and fires; technical production failures such as tree crops damaged during the immaturity period or equipment breaking down; and changes in economic conditions, for example, a lower demand leading to a lower price for the product.

Investments for immobile assets such as land and buildings are generally less risky for the lender because the assets (along with the borrower) cannot easily disappear and can be used as collateral. Semi-immobile assets such as tree crops share many of these characteristics but need more supervision. In order to reduce financing risks, mobile assets such as certain types of machinery may require either additional collateral or a proper registration system and a legal framework that facilitates repossession.

## Interest rates

To achieve sustainability, interest rates of microfinance institutions should cover all costs including costs of funds, administrative costs and provision for loan losses and inflation. Microfinance institutions often charge interest rates of 2 to 3 percent per month or even more; these rates are mainly a result of high transaction costs and risks in financial intermediation. Loan administration costs in terms of personnel and resources are approximately the same irrespective of the loan size, and thus have a higher impact when dealing with small loans. To cover these costs

and allow for their growth, microfinance institutions should therefore be allowed to charge interest rates that are above the average bank loan rates. When servicing forest-based small-scale enterprises they may have to charge interest rates even higher than average microfinance rates, given the higher transaction costs involved in rural areas. For most rural people the alternatives to sustainable microcredit are money lenders, input suppliers, inflexible and risky local savings circles, or nothing at all. Although the rates of interest charged by microfinance institutions to cover the costs of microcredit are relatively high, they are still below what poor people usually pay to money lenders and middlemen. Ensuring transparency and competition among microfinance institutions will, on the other hand, help prevent those excessive rates and other fees from being passed on to the clients to cover operational inefficiencies.

The interest rate directly affects the financial costs of loans for small-scale enterprises and therefore the viability of the investments. High interest rates have a significant impact on profitability, particularly that of longer-term investments such as tree crops, given the large loan amounts to be repaid over a long period. If high interest rates are applied to larger loans with longer maturities, then the resulting financing costs may exceed the profitability of the specific term investment opportunities. On the other hand, longer-term loans have the primary advantage of spreading amortization payments over a longer period, making these loans more affordable.

Although high interest rates may be a disincentive for forest-based small-scale enterprises in investment and economic development, in order not to compromise the sustainability of microfinance institutions, more favourable interest rates should be pursued by increasing efficiency, strengthening financial performance, ensuring high productivity of staff, introducing innovations that reduce transaction costs, facilitating access to cheaper commercial sources of funds and promoting greater competition.

Microfinance institutions that offer savings facilities, generally banks, have a cheap source of funds for further lending. Since poor clients are usually not very sensitive to interest rate incentives, especially where alternative savings services are unavailable, but rather to savings flexibility and accessibility, savings have the advantage of usually being an inexpensive source of funds. Mobilization of savings is therefore an important means to reduce microfinance institution costs, leading to more sustainable operations while charging lower interest rates. Efficient wholesaling or apex institutions, and a developed network of linkages among the various layers of financial institutions are also important to reduce provisioning costs for microfinance institutions that rely on commercial sources of funds.

To allow efficient microfinance institutions to reach sustainability and facilitate their growth it is important that governments do not impose interest rate ceilings or provide unsustainable, subsidized credit programmes. Such programmes distort the markets and are often plagued by very poor repayment records, undermining the operations of sound microfinance institutions. Past experiences with subsidized targeted credit have generally been unsatisfactory, with low repayment

rates, and have shown that it is difficult to target subsidized credit due to rent-seeking behaviour of larger or better-off customers, political patronage, and an easy diversion of loan funds for other purposes. A problem with subsidized credit is that borrowers tend to feel less compelled to repay government-subsidized loans. Default rates of over 50 percent are common worldwide in subsidized rural credit programmes. If loan defaults are tolerated, borrowers may confuse loans with grants, which will undermine their future credit discipline.

Microfinance institutions administering government lending programmes with low interest rates or facing interest rate ceilings will never recover their costs and will therefore always require government or donor subsidies (with fiscal implications). While benefiting borrowers who manage to obtain loans, interest rate ceilings will negatively affect a larger number of potential borrowers. This is because microfinance institutions will often retreat from the market, grow more slowly and reduce their operations in rural areas where they cannot recover their transaction costs, leading to a general limited access to credit.

Many microfinance institutions started with international donor funds, local government money, or a combination thereof. In order to encourage microfinance institutions to become sustainable, any resources provided in the form of subsides from donors should be momentary and transparent, and should not be linked with lending, but instead support institution and capacity building.

## IMPACT ON THE ENVIRONMENT

In addition to its economic impact, microfinance may have an impact on the environment. Changes in the physical, human and social assets that arise from microfinance activities will affect a community's production, consumption, and management of resources. The net effect of increased demands on forests and on the quality of forest resources – possibly including physical capital and production effects, income and income diversification effects, and social and human capital effects – may be negative or positive. Microfinance and in particular microcredit can influence forest resources through the direct, intentional efforts of lenders, or indirectly through changing the constraints faced by forest communities and enterprises.

Examples of direct links between microcredit and environmental goals are microfinance institutions (normally NGOs) that tie environmental management explicitly to lending or that include environmental practices among the conditions for lending. Conservation or development NGOs may also use microcredit to promote their environmental agendas.

The indirect environmental consequences of extending microcredit to poor people generally include economic effects brought on by the availability of credit. Such consequences include increase in physical capital, income growth and diversification. There are also soocial effects (greater empowerment of women, building and strengthening social capital through group lending), which generally improve the use of common forest resources. The combined net impact of all these factors on deforestation rates and on the use of environmental resources is

ambiguous, depending on borrowers' responses to the set changed opportunities, their adopted behaviour, the local condition, and how the composition and not simply the level of activities change.

Although much needs to be understood about the connection between microfinance, the environment and the use of natural resources, it is clear that the nature of the microfinance institution and the extent to which the provision of services is linked to environmental goals may differently affect forest resources.

Microcredit incentives linked to the sustainable use of natural resources, supported by appropriate education and training for environmental protection by the government or sensitized microfinance institutions, will help minimize negative impact and ensure sustainable forest management. Careful attention should be paid in ensuring that environmental objectives and safeguards do not compromise the viability of the microfinance institution. Mechanisms such as government matching grants or subsidized provision of inputs to forest-based enterprises committing to environmentally sustainable practices may be preferable to the provision of targeted credit with subsidized interest rates, which have often proved inefficient and undermine the long-term sustainability of the microfinance institutions.

# 4. Nepal: the micro-enterprise development programme in Parbat district

With a total forest area coverage of about 39.6 percent as at the end of 2002, Nepal is extremely rich in many forest-based resources such as high value timber, medicinal and aromatic plants, fuelwood, grass, fodder, leaves, wildlife, hunting resorts and forest-based tourism. To manage its resources, Nepal has been successfully applying a community-owned forest management approach with the establishment of 13 079 community forest users groups, representing more than a third of the country's total population of 23 million.

Although community forest users groups are emerging as grassroots-level organizations to conserve, manage and utilize the forestry resources, these vast resources are still largely unutilized. Furthermore, there is a tremendous potential for establishing and developing environmentally friendly forest-based small-scale enterprises. With 30 percent of the population in 2004 still living below the national poverty line, the government has recognized that not only is forest conservation and management by the community essential, but also the sustainable utilization of forest resources by poor and socially excluded rural families through the development of small-scale enterprises for poverty alleviation.

Until now, private sector entrepreneurs have been averse to investing in forest-based small-scale enterprises. The development of such enterprises faces many issues and challenges:

- Although sector legislation and policies on community forestry and non-wood forest products are trying to promote community ownership of resources, there are still restrictions imposed at the implementation level, especially on commercial utilization, enterprise development and marketing of forest resources, all of which are not conducive to private sector investment.
- There is limited information available on the market potential for the products of these enterprises, and micro-entrepreneurs face difficulties in developing linkages with national and international markets.
- The quality of forest-based products often does not meet required standards, leading to difficulties in marketing.
- These enterprises are heavily technology-dependent. Since there are very few institutions working on appropriate technologies for them, entrepreneurs depend on importing such technology.
- Since the community forests are managed in small patches of land, the amount

of raw material available is not always viable to run small-scale enterprises on a commercial scale.

- Access to microfinance institutions is limited. The extension of microfinance services to rural areas is challenging since overhead costs are high. Microfinance institutions have little experience and knowledge of these enterprises and therefore have not realized their potential as customers. The lengthy and cumbersome procedures for accessing microcredit from microfinance institutions are a disincentive for private sector investment.
- Micro-entrepreneurs and microfinance institutions often feel uncomfortable investing in these enterprises because the renewable provision of forest inputs is linked to the conservation and sustainable harvesting of resources, of which they feel that they have little control and knowledge.

There are a number of formal and semi-formal financial institutions in Nepal, some of which solely provide microfinance services and others that also provide additional services. In mid-January 2004, the total number of microfinance institutions and microfinance programmes was 2 861, of which 2 800 were represented by savings and credit cooperatives. The total disbursed microcredit reached 727 000 households, which is only 45 percent of the estimated families living below the national poverty line, or 17.1 percent of the total households in Nepal. With a remaining 55 percent of poor households still unserviced, the country's potential demand for microcredit appears very high.

## PARBAT DISTRICT

Parbat district is one of the 75 districts of Nepal, lying in the hills of the Western Development Region. The total population of the district is around 157 826, with 53.8 percent female. The altitude ranges from 1 700 to 10 700 feet above mean sea level, and the total area is 536.86 km$^2$. The district is characterized by great ethnic and caste diversity.

Agriculture is the mainstay of Parbat district, on which 90.82 percent of the population depend. The local economy is also heavily dependent on remittances and pensions, which amount to 38 percent of the total district GDP. Agriculture and livestock activities represent 64.5 percent of the total district production, followed by forest production (mostly non-wood forest products) at 11.5 percent. Data show that the vast forest resources available are not being fully utilized economically.

Although there are several bank and NGO microfinance institutions and credit cooperatives operating in Parbat district, together with informal financial organizations and groups, very few microfinance institutions provide credit to small-scale enterprises, virtually only three government-owned banks. It is important to underline that the lack of microfinance is clearly not the only hindrance to the development of such enterprises and the uplifting of Parbat's poor. For an long-lasting impact, provision of microcredit alone is not enough, but should be accompanied by appropriate forest sector policies, information and accessibility to market linkages, basic communication infrastructure, and business capacity building and skills training.

The major constraints in accessing microcredit are the lack of collateral available to forest micro-entrepreneurs and the risks linked to great uncertainties regarding government sector policies, the small-scale market and the supply of raw materials. Because of the limited access to funds other than their own savings and family sources, small-scale enterprises commonly finance their commercial activities through money lenders or local business community groups (*Dhukuti*). Money lenders usually charge extremely high interest rates, much higher than commercial rates; their loans are small and usually given to locally well-known and better-off people. *Dhukuti* also usually charge higher interest rates than microfinance institutions and have to auction their lending funds to ration their limited resources.

A number of donor-funded and government-supported projects are working in the district for poverty alleviation, several of them being active in the area of microfinance. As a result, many small-scale enterprises are being established by poor households with the support of enterprise development and financial services. The experience of two major innovative programmes targeting poor forest-dependent communities in Parbat district are described below: the Micro Enterprise Development Programme and the Livelihoods and Forestry Programme.

## MICRO ENTERPRISE DEVELOPMENT PROGRAMME (MEDEP)

MEDEP is a government initiative with support from the United Nations Development Programme, which started in 1998 and covers 20 districts, including Parbat. The programme has adopted a comprehensive business development services approach to micro-enterprises, targeting families living below the poverty line. MEDEP starts with entrepreneurship development, followed by market study, skills development, microcredit, access to appropriate technology and business counseling, linkages to market, and development of the subcontracting system.

MEDEP provides microcredit through special partnering arrangements with the Agriculture Development Bank of Nepal (ADBN), building on the bank's existing network of branch and sub-branch offices. Microcredit is provided on a cost-sharing basis of 30 percent contribution of MEDEP and 70 percent by ADBN, and is managed jointly by both partners.

### MEDEP microcredit product

For accessing microcredit, MEDEP has developed simple procedures and guidelines to be followed by micro-entrepreneurs:

- The potential entrepreneurs, selected on the basis of poverty targeting through participatory rural appraisals as well as their business potential and several other eligibility criteria, form micro-entrepreneur groups.
- The micro-entrepreneur groups are trained for business planning and start generating savings in the group account on a monthly basis. The groups prepare business plans based on their own selection of enterprises and decide on how much loan is needed from the bank.

- The group fills out the loan request form provided by ADBN Branch Office in Parbat.
- The business plan, loan request application form and copies of citizenship certificates are submitted to MEDEP through an Enterprise Development Facilitator.
- MEDEP Enterprise Development Officers verify the documents, and following their endorsement the entrepreneurs submit them to ADBN.
- An ADBN Loan Officer reviews the documents and submits the application to the Manager for approval or rejection. As the process to select the entrepreneurs is short but stringent, loan applications are usually of good quality, and seldom is a loan request rejected by the bank. The loan is approved and disbursed within three days on a group collateral basis.
- The loan size is normally small, but increases with the loan cycles. It can also be increased upon recommendation of the District Programme Implementation Committee, depending on the nature of the small-scale enterprise in question.
- The credit is monitored very rigorously by MEDEP Enterprise Development Facilitators and Officers, as well as the ADBN Loan Officer.
- Entrepreneurs repay the loan in one year on a monthly instalment basis.
- The interest rate was initially fixed at 16 percent, but has been reduced to 12 percent, a level competitive with other commercial banks and significantly lower than other microfinance institutions (8.5 to 12.5 percent was the 2004 interest rate applied by government banks, while regional rural development banks and NGOs charge interest rates of 20 to 24 percent).

A simple credit operation guideline has been prepared for and implemented by the district level offices. MEDEP has also made computers available to the ADBN Branch Offices to link them to its management information system for reporting and monitoring purposes.

To manage credit risk, the mechanisms followed by MEDEP and ADBN in Parbat are:

- selection of proper clients;
- group-based solidarity or peer pressure for repayment;
- support for business planning and loan disbursement to feasible business proposals;
- disbursement of the loan amount in several instalments;
- guarantees (provided by MEDEP to ADBN);
- regular monitoring;
- technical assistance from MEDEP for capacity building of entrepreneurs, enterprise management, and market information and linkages.

### MEDEP's performance

In the past five years since its inception, MEDEP has made significant achievements in Parbat district. The programme has identified approximately 673 micro-entrepreneurs, exceeding the original target of developing 600 and

creating employment in the rural areas of the districts. Around 36 percent (242) of the enterprises created were forest-based, which is a significant achievement considering that there is no lending quota or target for them. The forest-based small-scale enterprises supported were mostly based on non-wood forest products such as beekeeping (98 entrepreneurs), bamboo and *nigalo* crafts (45 enterprises), *lapsi* processing (33 entrepreneurs), *allo* processing (33 enterprises), *ketuky* (agave plant) processing (7 enterprises), soap manufacturing (6 enterprises), *chiraito* cultivation (1 enterprise), incense stick-making (1 enterprise).

The total microcredit disbursed from the ADBN Branch Office in Parbat as of September 2004 is around 2.9 million Nepalese rupees (NR), equivalent to US$39 800, already exceeding the total amount allocated to the district by the programme (NR2.7 million or US$36 980). This has been made possible thanks to the recycling of the repayments, which are over NR1.8 million, and the interest generated by the loans. The average loan size is approximately US$60, and the recovery rate is high at 95.8 percent.

The total amount disbursed to forest-based small-scale enterprises is around NR1.1 million (US$15 300), or around 38 percent of the total loans approved, and their interest rate is 12 percent. These enterprises register an excellent recovery rate of 99.7 percent, which is higher than the rate for non-forest based enterprises (93.7 percent), showing a very good prospect for promoting forest-based enterprises in the district.

Since there are a large number of small borrowers, the operating costs of ADBN are high. MEDEP supports the bank by providing the district Enterprise Development Facilitators and Officers with the salary, travel, daily allowances and other logistic support needed to select enterprises and entrepreneurs, develop and review their business plans, and monitor business operations and loan management. MEDEP is providing its support on a grant basis since it only works with households below the poverty line.

In terms of financial sustainability, detailed calculations show that even after including the present MEDEP subsidy of the salaries and other overhead costs to ADBN, the net profit is still high at around 4 percent, including a provision of 1 percent for default risks. The model appears sustainable even after the phasing out of MEDEP. This is particularly significant because most of the microfinance institutions in Nepal are not making a profit but are actually making losses, and every year the government allocates funds to rescue them.

## Key factors for success

MEDEP has identified the following key factors behind its success in Parbat district:

- The selection of proper target participants by applying scientific and stringent selection criteria to identify potential micro-entrepreneurs who are well motivated and can take the risk to start micro-enterprises;
- A proper comprehensive and sequential delivery of business development services, including entrepreneurship development, skills development and

market promotion, microfinance being one of the services that should come at the end of the sequence;
- A demand-driven approach, with MEDEP responding systematically and sequentially to the demand for business development services by potential micro-entrepreneurs;
- Accurate monitoring, follow-up and business counselling after enterprise establishment.

Selection of proper target beneficiaries with adequate business potential is the most important factor for the success of the forest-based small-scale enterprises, as is shown in the case study on the sal leaf-making enterprise called Gupteshwar Samudayik Ban Upabhokta Samuha, established by one of the Community Forest Users Groups in Parbat. This enterprise, formed with the support of MEDEP and the Livelihoods and Forestry Programme, was operational for only one month before closing down. The reasons identified behind its failure include the inadequate market assessment before setting up the enterprise and difficulties in the provisioning of sal leaves.

Supporting the capacity of poor forest households to efficiently run their enterprises, as well as training and linking with appropriate technology institutions are fundamental in enhancing forest households' capacity to efficiently utilize microfinance and ensure the repayment of loans.

## LIVELIHOODS AND FORESTRY PROGRAMME (LFP)

LFP is a ten-year programme funded by the UK Department for International Development and implemented by the Ministry of Forest and Soil Conservation of Nepal. It aims to reduce vulnerability and improve the livelihoods of rural poor people by promoting a more equitable, efficient and sustainable use of forest resources. The programme started in 2001, building on a previous community forestry project, and covers 15 districts including Parbat. Focusing on community forest management, LFP is working with the Parbat District Forest Office and Community Forest Users Groups, also providing financial assistance to these Groups for developing small-scale enterprises.

LFP and Parbat District Forest Office follow a sequential order in providing business development services to targeted beneficiaries. The assistance starts with subgroup formation, followed by a feasibility study, business creation training, business plan preparation, skills development training, implementation, networking and reporting. In addition to capacity building, LFP provides financial assistance (seed money) to Community Forest Users Groups for developing micro-enterprises to support poorer households. These Community Groups then provide microcredit to their members at 10 percent, with priority given to poor people to establish micro-enterprises.

The procedure for small-scale enterprises to access loans from LFP/District Forest Office takes into account the following:
- The Community Forest Users Group requests funding based on a common interest in enterprise development among its members.

- LFP conducts a feasibility study of the enterprise and helps group members prepare a business plan.
- The amount of the investment is decided jointly by the group members and LFP/District Forest Office.
- LFP/District Forest Office contributes 50 to 70 percent of the total investment, provided as revolving funds to the Community Forest Users Group.
- The Community Forest Users Group contributes the remaining amount and disburses the total loan to the entrepreneurs, either on a group or an individual basis.
- The interest rate is fixed by the Community Group and is usually 10 percent in Parbat district.
- The total group loan amount has no fixed limit.
- The loan term also varies from one Community Group to another, but in most cases the repayment is within one year.

LFP in Parbat district has provided a total of NR458 156 (US$6 300) microcredit to 331 entrepreneurs. More than 66 percent of this sum (NR304 000 or US$4 200) has been provided to 210 forest-based entrepreneurs.

Unfortunately, since LFP has not maintained records on repaid, outstanding and default amounts, it is not possible to assess the microfinance performance of the programme, its profitability and its sustainability prospects.

## CONCLUSIONS

At present, economic sustainable use of forests is still at an initial stage in Nepal, and several Community Forest Users Groups seem to be interested in obtaining technical and management skills to develop small-scale enterprises. Awareness of the potential of forest resources for poverty reduction is increasing, which will certainly boost the demand for microfinance services in the future.

The MEDEP approach of developing micro-entrepreneur groups and facilitating their access to microfinance, and the LFP approach of taking advantage of existing Community Forest Users Groups to provide microfinance services to their members, can be successful mechanisms in overcoming many of the constraints faced by small-scale enterprises. Some concerns may arise in the case of LFP, where lack of financial performance data undermines a complete assessment of the microfinance scheme. However, the positive performance of MEDEP shows that using groups for the delivery of microfinance services can be done in a profitable and sustainable manner in Nepal, even in rural hilly areas with difficult accessibility such as the Parbat district, as confirmed by ADBN's participation in the programme with its own resources.

It should be emphasized that microfinance is just one aspect of developing small-scale enterprises. Effective business development services, such as training in entrepreneurship, technical and managerial skills, market promotion and linkages, and appropriate technology transfer are essential for the success of these enterprises, and therefore for their credit repayment performance.

Provision of microcredit under MEDEP and LFP is limited by the programmes' allocated resources, and loans are not easily accessible to community households other than MEDEP and LFP target groups. Another concern is what will happen after programme completion. For the longer term, it will therefore be important to develop linkages between the micro-entrepreneur groups or Community Forest Users Groups, and microfinance institutions, building on the proven success of initiatives such as MEDEP.

# 5. Guatemala: BANRURAL and Bancafé in Petén

The forest concession system in Petén, Guatemala is unique in Latin America for its accessibility to community-based associations and cooperatives in addition to industrial timber mills. The establishment of the community forest concession system involved a series of institutional development challenges within the government, civil society and enterprise sectors. Regulations and capacities in the management of the concessions, authorizations, and certifications had to be developed at the governmental level. Most community enterprises were accompanied by an NGO and/or international cooperative agencies throughout their development process. In addition, new community-based alliances have been formed, which are playing a key role in the community forest enterprises and policy regarding the biosphere reserve. As part of the evolutionary process, more sophisticated financial services are now being directed toward these enterprises.

The microfinance sector in Guatemala is served by commercial banks, savings and loans cooperatives, NGOs, and informal money lenders. Two commercial banks, Banco de Desarrollo Rural (BANRURAL) and Banco del Café (Bancafé), are actively involved in microfinance, with special programmes for micro-, small- and medium-sized enterprises. Savings and loan cooperatives in Guatemala are relatively well developed and distributed throughout the country. The National Federation of Savings and Loan Cooperatives has 28 members, although only seven report their statistics to the Ministry for Micro, Small and Medium Enterprises. Most of their portfolio is concentrated in individual loans, and in 2003 they reported an outstanding portfolio dedicated to microfinance of approximately US$34 million.

There are 35 NGOs providing microfinance services, working mainly through village banking and solidarity groups; over 75 percent of their loans are backed by fiduciary, solidarity or community guarantees. In general, their geographic scope is limited. Twenty of these NGOs participate in the Guatemalan Network of Microfinance Institutions. The network reports that in 2003 its members together had 143 offices and/or branches throughout Guatemala and approximately 100 000 clients of micro and small enterprises. The outstanding portfolio was approximately US$54 million.

A key advantage of the two banks compared to the other microfinance institutions is their national coverage. Bancafé has 172 branches throughout the country and BANRURAL has 275 branches. None of the cooperatives reporting to the Vice Ministry of Micro, Small and Medium Enterprises has an office in Petén, and only two NGO microfinance institutions have branch offices there.

Notwithstanding the existence of these microfinance institutions, the Guatemalan rural sector continues to be relatively underserved by financial services. A national study found that two out of three entrepreneurs in rural areas have no relationship with formal or non-formal microfinance institutions. Of the one-third that do, 51 percent work with commercial banks, 27 percent with savings and loan cooperatives, 12 percent with state-owned banks, 9 percent with NGOs and 1 percent with money lenders.

## DEPARTMENT OF PETÉN

The Department of Petén has been strongly colonized during the last 40 years, with its population growing from 11 000 in 1941 to 500 000 in 1996. The population is composed primarily of first-, second- and third-generation immigrants from other regions in Guatemala, who cleared large areas of forest for seasonal agriculture and pasture. They also engaged in the extraction of fine woods from the forest as well as non-wood forest products.

Several policies have been developed for the protection of the natural resource base of Petén. However, with 59.3 percent of the population living below the poverty line, and 22.15 percent in extreme poverty, any sustainable strategy for conservation must incorporate livelihood alternatives for the local population.

Following the creation of the National Council for Protected Areas in 1989 and of the Maya Biosphere Reserve in 1990, 12 community forest enterprises have been formed in the Reserve by neighbouring communities or stakeholders. All of the enterprises are legally established and carry out regular planning as part of the concession process. In addition, due to the requirement that concessions become certified within three years, ten of the community forest enterprises have already achieved certification by the Forest Stewardship Council, which opens up additional marketing opportunities.

Given that the community forest concessions are long-term, and subject to long-term management plans (from 25 to 70 years), the community forest enterprises harvest a small portion of their area each year (approximately 1 percent). This helps to guarantee the regenerative capacity of the forest. Initially, the concessions principally harvested mahogany and tropical cedar – high value woods with an established demand. They have begun to explore marketing options for other woods and are now including these in their annual operating plans.

Donors have supported the start-up of the community forest enterprises, in particular through the provision of technical assistance for the development of forest management plans. Donor support continues to be available to a certain extent for the forest certification process and for developing annual operating plans.

Finance needs vary among the community forest enterprises depending on the amount of timber to be harvested, the distance of the concession from the community, internal decisions regarding salary levels and the quality of equipment owned by the enterprise. The productive capacity of each concession varies according to the density of commercially viable timber found.

Given the relative youth of the community forest enterprises, most have not been able to capitalize themselves to a sufficient extent and therefore seek financing to cover ongoing operational costs, as well as to purchase fixed assets. Most of the enterprises therefore take advantage of a combination of the following resources to cover operating needs:

- **Partnerships with the timber industry.** Relationships with the timber industry consist in forming partnerships whereby the community forest enterprises supply the raw material, and the industry partner supplies capital and equipment to complete the sawing process. These partnerships have been positive for the community forest enterprises in their early stages of development. However, the general trend is for the community enterprises to move toward more independence in the entire production process in order to achieve higher returns for its members.
- **Advanced payments from buyers.** Advanced payments from buyers allow community forest enterprises to finance their extraction activities. However, they also lead to fixed prices for the wood, limiting the enterprises' opportunity to seek out the best offer.
- **Local money lenders.** Community forest enterprises in Petén continue to use the services of local money lenders. These loans are attractive because of their accessibility and agility. Their interest rate is high, however, reaching up to 20 percent monthly. In at least one case, a community forest enterprise used this source to purchase a fixed asset. The enterprise is currently seeking a commercial bank loan to pay off this high interest debt.
- **Association of Forest Communities of Petén (ACOFOP).** ACOFOP counts among its members 22 community associations related to the Maya Biosphere Reserve. It has a small fund available to provide bridge loans to its members in special circumstances.
- **Commercial banks.** Bancafé and BANRURAL began to offer loans to the community forest enterprises in 2003 and 1999 respectively.

## BANCAFÉ

Bancafé was established in October 1978 with the mission of providing financial services to clients in order to help them integrate more fully into the modern economy. In 2003, Bancafé had an outstanding portfolio dedicated to micro-enterprise in village banks, solidarity groups and individual loans of approximately US$17.8 million.

Bancafé began its relationship with community forest concessions in 2003. It was approached by institutions supporting the concessions and was asked to consider the possibility of financing the annual operating plans of a group of concessions. Loan applications were backed by the promise of support from the local office of the US Agency for International Development/Chemonics Biodiversity and Sustainable Forestry project (BIOFOR) and ACOFOP.

The loans provided to the forest concessions follow a type of institutional solidarity group. Forest concessions must have a formal legal status and be

members of the AFOCOP. Loans are based on the annual operating plans developed by each of the forest concessions. These plans describe the quantity and type of timber that will be harvested and provide a detailed breakdown of costs involved in the extraction. This breakdown serves as the basis for establishing the overall amount and schedule of disbursements, which are generally monthly or once every two months. The guarantee for the loans is the ACOFOP agreement to cover any non-payment, a lien on harvested wood and the psychological effect of possible non-payment on the international prestige achieved by the concessions.

Loans to the concessions are for approximately 10 months at 18 percent interest, with interest and capital due in one final payment. When loans enter into arrears, interest is capitalized. Requirements for the loans include: current legal status and legal documentation, financial statements and/or projections for the coming harvest year, approval of the annual operating plan by the governmental forestry department and ACOFOP's solidarity guarantee. Bancafé carries out inspections every three months and requires that the loan recipients manage their accounts in Bancafé. The ACOFOP also plays an important role in monitoring loan use and payment.

In 2003, the first year of servicing community forest concessions, Bancafé approved eight loans for a total of US$1.3 million. Of the eight concessions loans, four were repaid on time, while the four remaining concessions required loan extensions. After a one-month extension, 9 percent of the total portfolio continued in arrears. All loans were paid within six months of the due date. In the case of the arrears for the 2003 loans, the ACOFOP actively worked with the affected concessions to guarantee repayment. In one case, the ACOFOP provided a bridge loan to a concession in order to guarantee repayment to Bancafé.

The four concessions that repaid their loans on time without extension qualified for new loans in 2004. Of these, three decided to continue the relationship with Bancafé and one decided not to take a new loan, based on having sufficient cash flow from other sources.

While working through the ACOFOP as the principal client is attractive to the bank in order to lower its transaction costs, there have been some drawbacks for the community enterprises and for the ACOFOP. Some of the community enterprises have complained that their loan disbursement process was delayed because the documentation for the applications of all of the enterprises had to be presented as a package. If one enterprise did not have its documentation in order on time, the entire package was delayed. The sustainability of ACOFOP is also a concern, because while it incurs costs in managing the loan process and monitoring loan use and repayment, it does not receive any portion of the interest rate or a handling fee for this service. Moreover, in the case of massive default by forest concessions, the ACOFOP would not have sufficient assets to cover the losses.

Loans to the forest concessions represent an important part of Bancafé's portfolio in the Petén region, reaching 45 percent of the portfolio in 2003 and 50 percent in 2004. In order to attract these clients, Bancafé offers preferential rates for money transfers and a favourable interest rate for loans (18 percent) and makes

individual credits available to members of the concessions. Financial disaggregated data are not available; however, Bancafé reported an overall portfolio in arrears of 6.6 percent in October 2004 and the bank is consistently profitable.

## BANRURAL

BANRURAL was formed in 1997, as a result of the transformation of the former state bank, Banco de Desarrollo Agrícola. BANRURAL was formed with mixed capital, including among its shareholders the Guatemalan Government, cooperatives, indigenous groups, NGOs, businesses and the public at large.

During 2003, it had an outstanding portfolio dedicated to micro-enterprises in village banks, solidarity groups and individual loans of approximately US$53 million. By law, BANRURAL is permitted to accept unconventional collateral such as family assets, machinery and other instruments in order to facilitate microcredit. It also participates in second-tier lending to NGOs and cooperatives, and works with microfinance trust funds (*fideicomisos*).

BANRURAL began to work with the community forest concessions in 1999, providing loans of up to approximately US$13 000 to three concessions. These loans were backed by collateral guarantees on equipment, as well as evidence of sales contracts. In 2002, the bank experimented with larger loans, up to $52 000 provided to four concessions, backed by a letter of credit from an importer in the United States. The latter experience was less than successful, however. The importer was unable to purchase the wood that it had ordered and asked the concessions to find alternative buyers. The concessions asked for an extension from the bank in order to identify alternative buyers and the bank agreed. All the concessions eventually paid the loan, but payment was delayed, and in one case, the concession had to sell assets in order to cancel the loan.

Following this experience, BANRURAL was reluctant to provide larger loans in 2003. While it continued to provide smaller loans up to US$13 000, no more letters of credit were accepted. In 2004, it began to grant larger loans again, reaching up to US$65 000, and it plans to continue granting larger loans in 2005. Previous limits on overall loan amounts seem to have been overcome as competition is developing with Bancafé.

As in the case of Bancafé, the annual operating plans for the concessions represent an important part of the loan application. Additional requirements include copies of sales contracts, legal status in order and copies of financial statements. Loans are given in February, and interest and capital are due in November or December. Two monitoring visits are carried out to the enterprises – one previous to the loan and one during the loan period. Financial disaggregated data are not available; however, BANRURAL reported an overall portfolio in arrears of 2.1 percent as of October 2004, and the bank operates with a clear profit.

## CHALLENGES FOR THE FUTURE

Non-payment of loans to date has principally been due to problems in the timely sale of products. In some cases, loans have been diverted for non-designated

uses. Some of the decisions regarding the use of the funds have not been the most appropriate, such as the purchase of obsolete equipment. Given that the enterprises will continue to require technical and managerial support at least in the near future, and the fact that the US Agency for International Development/ Chemonics BIOFOR project is drawing to a close, sustainability of the support structure is a key issue. In the longer term, a challenge will be to ensure the increasing capacity and independence of the community forest enterprises.

As part of BIOFOR's exit strategy, a local enterprise has been formed, Forescom, which is specialized in commercialization and marketing processes. Forescom is a limited liability company whose shareholders include 11 of the community forest enterprises. The company was legally constituted in July 2003, but began operations in April 2004. Forescom will serve as a market intermediary for its shareholders, with the goal of achieving better market conditions by negotiating as a block.

Forescom is also exploring options for the creation of a fund that would allow it to provide more favourable financing conditions to its members. An additional role for the company would be to serve as the contact point for loans provided by commercial banks. The company would cover its costs through an interest rate margin or a margin charged as part of the commercialization process. Forescom may also be able to answer the need for joint purchasing of equipment to achieve economies of scale, such as dryers to improve the quality of the wood sold.

Community forest enterprises require credit not only for activities stipulated in their annual operating plans, but also for the purchase of fixed assets and for short-term cash flow shortfalls. To this aim, they often employ diversified funding strategies and utilize informal sources. In many cases, at least a portion of the production is sold through advance payments from clients at fixed costs. In addition, short-term needs are often covered through accessing loans from local money lenders. In spite of their high interest rates, these informal sources continue to provide the most agile services when enterprises are faced with immediate cash flow needs.

The above seems to indicate that the commercial banks still do not meet all of the community forest enterprises' financing needs. As the enterprises develop and their repayment record is strengthened in the banking sector, more flexible financing opportunities are expected to become available, such as lines of credit that could be accessible where necessary and paid off in regular payments.

## CONCLUSIONS

The case of Petén illustrates that with an appropriate institutional environment and support structure, community forest enterprises can successfully access microfinance services from commercial banks. Several factors have contributed to the bankability of the enterprises, namely, clear forest rights and the legal establishment of the concessions, sound annual operating plans, provision of technical assistance and business development services, loan guarantees and lowering of transaction costs.

While the community forest enterprises do not hold titles to the forest that they are harvesting, they have clear rights to their concessions. The extent of their capacity to exploit the concession is established in their general management plan and annual operating plans. The census carried out as a basis for the latter provides a clear indication of production levels to be expected and there is little risk that this production will not be achieved. While the community enterprises are new and continue to have significant management weaknesses, their financial viability is ensured to a certain extent by the existing demand for many of the products they offer, minimizing the risk for the banks.

The technical assistance and business development services provided by civil society organizations and international cooperation agencies have given an additional guarantee to the banks to offer larger loans to the community enterprises. The scale achieved by the group of community forest concessions and the scale of financial services required make the credit product an attractive option for the banks. Consolidation of financial needs of micro-entrepreneurs members of the forest concession and solidarity among the group also clearly facilitate access to the commercial banks and reduce supervision costs. Achieving this scale also leads the banks to offer other services, such as money transfer services at discounted rates and individual loans to community enterprise members in order to compete for clients.

In the case of Bancafé, the BIOFOR project and ACOFOP actively marketed the group of community forest enterprises to the bank as a package. The guarantee offered by ACOFOP and the monitoring assistance they offered together with Chemonics/BIOFOR were key in establishing a lending relationship with the enterprises. Bancafé was able to lower its transaction costs by treating the group of loans as a package, and by dealing with one overall client, ACOFOP.

Community forest enterprises require credit not only for activities stipulated in their annual operating plans, but also for the purchase of fixed assets and for short-term cash flow shortfalls. Currently, these needs are covered by sources that are much more expensive than the commercial banks. As the enterprises develop and their repayment record is strengthened in the banking sector, one would expect that more flexible financing opportunities would become available.

# 6. The Sudan: Elmirehbiba gum arabic producers association

The forest sector in the Sudan produces 12 percent of the GDP. Gum arabic is an important non-wood forest product obtained from *Acacia senegal* (known in the Sudan as the *hashab* tree). The *hashab* occurs naturally on sandy soils, mainly in the 300 km wide "gum belt" in central Sudan where annual precipitation is around 300 to 600 mm. The traditional agroforestry system, in which natural or artificially regenerated *hashab* trees are managed and tapped for gum during the fallow phase alternating with agricultural crops, is considered one of the best examples of sustainable dryland agroforestry. Apart from gum, *hashab* also yields fuelwood, charcoal, local construction timber, tanning material and dry season fodder from leaves and pods.

With a total annual gum arabic production of 20 000 to 40 000 tonnes, the Sudan is the global leader in supplying this commodity, which is widely used in an enormous range of industrial and medicinal applications and as a stabilizer and natural additive in the food industry around the world. The current trend of consumer preferences for more natural and plant-based products (for instance, gum arabic instead of beef gelatine) in sweets and other foods is favouring its increased use and production. This has created new interest in traditional *Acacia senegal* agroforestry.

Gum arabic production begins with Sudanese farmers who tend and protect the trees throughout the year. At exactly the right time of year, usually around mid-October, determined by local conditions and expertise acquired over many years, the farmers "tap" their trees and the gum exudes where the bark has been cut. Six weeks later, the first gum collection is made. Up to four or even six further pickings are made at three-week intervals. Farmers then transport the gum to sell it in one of the gum auction markets.

Local merchants buy the gum at an agreed floor price or higher. The gum is then delivered to cleaning sheds, where it is selected and graded into three distinct grades: clean amber sorts, siftings and dust. The graded gum is then sold by the merchants to the Gum Arabic Company. The gum, packed into 50- or 100-kg burlap sacks, is then transported to exit ports from the Sudan, mainly Port Sudan on the Red Sea. The Gum Arabic Company provides different grades from the two distinct types of gum arabic: *hashab* or *kordofan* derived from *Acacia senegal* trees, and *talha* gum derived from *Acacia seyal* trees. However, gum arabic is traded in processed forms as well – mechanical or sprayed dried forms, and more sophisticated application-specific forms.

## MICROFINANCE IN THE SUDAN

The state policy to promote microfinance in order to mitigate poverty in the Sudan is mainly reflected in the National Comprehensive Strategy 1992–2002. One major objective of the Strategy is to encourage microfinance as a tool to combat poverty. However, the recognition of microfinance as one of the priority sectors for credit policy in the Sudan started only in the mid-1990s. The financing regulations of the Bank of Sudan are still being revised, and lack proper identification of microfinance activities.

Traditional Islamic financial instruments play an important role in the country. They include the *murabaha*, the *salam*, the *musharaka* and the *mudaraba*. The *murabaha* is a buy and resell contract, under which the bank purchases the goods ordered from the client and resells it to the customer at a higher price (mark-up), usually on a deferred payment basis. This is the preferred instrument from the bank's point of view, and is also the closest to conventional interest-bearing financial contracts. The *salam* is also a buy and resell contract, but the opposite of *murabaha*, in the sense that the bank purchases the goods from its client, but the client delivers the goods at a later point in time. This contract is used mainly for agriculture. The bank pays the farmer on the day the contract is signed and the farmer delivers the crop to the bank after harvest.

The *musharaka* is a partnership contract whereby the bank and its client share a project and its profit. Profits are shared according to an agreed ratio, but losses are shared according to ownership. The *mudaraba* is also a partnership contract whereby the bank and the client share a project, but the bank provides the capital and the client provides labour. The profit is shared according to an agreed ratio, but if there is a loss the bank loses its financing.

A number of institutions have been involved with microfinance in the Sudan, and can be broadly classified into three categories: banks, NGOs and social funds. A plethora of social schemes to provide microcredit for poor people have historically been in operation in the Sudan. There are government initiatives and funds within national efforts to combat poverty, including some local social funds and NGOs, which are engaged in providing microcredit for home-based livelihoods, among other activities. Over 100 local and foreign NGOs, in direct coordination with the official authorities, are active in providing microcredit, emergency loans, medical care and educational services to poor people in the Sudan. In addition, many rural development projects include components of microfinance support.

Banks are required by the Central Bank to channel at least 10 percent of their total loans for microfinance. Although mandatory, in practice this is not enforced but left to the discretion of individual banks; from 1999 to 2002 the credit to small producers reached almost US$133 million, which is only 8.8 percent of the total bank credit. Some of the major weaknesses hindering the banks' effective role in microfinance are: lack of a conducive national policy; lack of exposure and training in microfinance facilitation and management; lengthy and conventional procedures; requirements to provide adequate and conventional collateral; reluctance to enter rural markets; limited experience in fieldwork, and limited

links with grassroots organizations, hence limited outreach. The banking system is structured to serve the formal sector, with little emphasis on mobilizing savings, and without any consumption/emergency loan products.

As far as micro-lending is concerned, NGOs have been much closer to grassroots operations than have the formal lending institutions. In 2003 the seven main NGOs active in microcredit totalled around 8 300 clients and registered repayment rates from 70 to 100 percent. Some common features of these NGO operations are: they are community-based; they tend to have simpler procedures; they can adopt flexible collateral; some have created successful links with the formal banking system; they finance a variety of activities, i.e. they are not confined to "productive activities"; and they adopt different microfinance mechanisms and approaches (although not all successful). NGO microfinance institutions face problems, however, in shifting from providing grants to providing credit, when credit is newly introduced to customers after a period of charity-based operations. They also face sustainability problems when moving from donors to commercial sources of funding.

Social funds such as pension and social insurance funds are being used by the government to combat poverty in several different ways, including microfinance. In 2001 this resource amounted to US$130 million for a total of two million beneficiaries. Some common features of these social funds with respect to microfinance are: most are largely or even entirely grant- or charity-based; those with a window for credit target their members only. Furthermore, the share of credit is negligible in the use of social funds (with the exception of the Social Development Foundation in Khartoum State, which has grown over the years and refined its operations by absorbing experiences from others) and those working with the funds related to microcredit have a limited exposure to microfinance practices and management.

Among informal sources of microfinance, *khatta* or *sanduq* (a savers'/investors' self-administered revolving fund) is the most popular and widespread social effort. Village traders provide another way in which micro-enterprises are funded, representing one of the most flexible and traditional financing institutions. They require personal guarantees only, but operate with high profit margins. Another form of this small enterprise funding is the "traditional partnership" in the means of production. With this system, a relatively poor small-scale entrepreneur can gain access to the means of production. Returns are distributed equally between the factors of production. Provision of microcredit in certain parts of the Sudan is made via kinship and tribal norms. Members of the same clan/tribe or area provide flexible financial help to start businesses without any additional costs. Another form is the collective help action (*nafir*), where village inhabitants contribute to poor families in the form of collective work.

## ELMIREHBIBA VILLAGE

Elmirehbiba village is located in low-rainfall savannah woodland, the *Acacia senegal* savannah. The village is still without an electric power supply or telephone communications of any kind, and drinking water supply remains a problem. The village lies 37 km from the urban centre Umruwaba, a large gum arabic market

and urban centre in North Kordofan State, but it is not linked to the city with tarmac-paved roads. Market connection with Umruwaba is ensured by one daily scheduled private lorry trip, or donkeys and camels. Kordofan State produces more than 50 percent of the best Sudanese *hashab* gum arabic.

The land-use model of Elmirehbiba is dominated by forestry and agricultural production. The major crops produced are gum arabic from *hashab* trees rotated in shifting cultivation with sesame, groundnut and sorghum. Minor crops are also produced such as roselle, millet, okra, cowpeas, senna pods and watermelon. In Elmirehbiba, the fodder and fuel benefits of *hashab* trees are important to local farmers because of the resource-scarce sandy soils. Moreover, given the quality of the soil, *hashab* trees assume an environmental stabilization value in addition to the productive one.

Elmirehbiba gum-producing areas are tribally owned lands, regulated by customary tribal tenure systems. Long-inherited tribal practices of organizing land property by applying local laws and conventions still prevail and are used for settling land conflicts. Gum arabic producers belong to tribes, with each tribe inhabiting a territory, and each producer having the right of use of these land resources through usufruct practices.

This system works under the control of the village headmanship and the *Gawamaa* tribe chieftainship. Smallholder tenure of 5 to 50 feddans (1 feddan = 0.42 ha) predominates, with a limited number of families owning large size *hashab* areas of 100 to 200 feddans. Gardens are intermingled with cultivated pockets because of the alternating use of land between cropping and *hashab* rejuvenation on abandoned plots. Individuals come to resolve their conflicts over *hashab* by turning to the *Sheikh* (village headman) and the leaders of the village.

At the village level, gum is produced by farmers themselves and some may use hired labour. Off-farm jobs are limited due to the agrarian nature of the economy and weak industrial development. Gum arabic production is the main activity from October to January. During the slack period, crop production provides the alternative occupation from May to October. Other occupations include fuelwood collection, charcoal making, selling of construction materials, and wage labour in casual jobs such as well digging and water extraction.

Local traders in Umruwaba play a significant role in the gum production and marketing processes. Some traders also provide credit to gum producers for consumer goods to ensure that the gum will be delivered to them as first choice buyer.

Access to microfinance institutions is constrained by the remoteness of the villages, as well as their inability to meet the conventional collateral requirements and inexperience with banking requirements. The demand for microcredit is fragmented and has been corrupted by the practice of providing capital and interest rates subsidies.

In the absence of institutional loans, farmers resort either to share-cropping or *shail* credits from gum arabic manufacturing companies to meet their commercial and livelihood financing needs. The *shail* system is essentially a system of crop mortgage under which the borrower sells in advance a certain part of the future

crop in exchange for a loan from a village trader, a landlord, a relative or a friend; sufficient knowledge about the borrower is a prerequisite, and hence there is no collateral. Informal loans may be in cash or in kind, but repayment is usually made in kind at lender-set prices that are significantly lower than harvest prices.

## ELMIREHBIBA GUM ARABIC PRODUCERS ASSOCIATION (EGAPA)

EGAPA is a multi-purpose joint liability group of 300 members based on common trust. The group was established in 1993 with support from the multi-donor Gum Arabic Belt Restocking Project and the Forest National Corporation to promote self-reliance using native Sudanese concepts such as community-based frameworks with revolving funds or *sanduq*. Group leaders are elected by members to act as liaisons to the Forest National Corporation officer.

Gum arabic producers who live in Elmirehbiba qualify for membership after paying a one-time registration fee of 100 Sudanese dinars (SD) (US$0.40). The low registration fee is intended by the Forest National Corporation as an incentive to attract producers. The General Assembly elects three members for the leading posts of President, Secretary and Treasurer. EGAPA was first registered as a cooperative but the producers rejected the cooperative management structure as an unsuccessful exercise in their experience.

Some of the major activities carried out by EGAPA so far are:

- administration of the credit activities concerning price negotiation, credit delivery and repayment collection;
- supervision of the inputs delivery and distribution systems, including the drinking water distribution;
- participation in several village school development activities.

To carry out their activities, EGAPA members need microcredit:

- to buy input supplies such as improved seeds, hand implements, pesticides and sacks and seedlings of *hashab* trees;
- to pay for labour to sow, transplant, cultivate and harvest the crops;
- to finance the transportation, storage and marketing;
- for consumption and livelihood supplies.

The main financial product provided by the EGAPA is microcredit under the Islamic finance instrument called *salam*. The producer receives the credit in cash for the tapping and collection stages, and repays later in kind with gum arabic. The committee distributes the credit to the EGAPA members based on their *hashab* tree areas. Special interest-free topping credit is also provided to members for mourning ceremonies. Loan rationing occurs given the limited EGAPA resources and the high credit demand. The credit is guaranteed by the Forest National Corporation and the village Sheikh, as well as by the crop to be harvested.

EGAPA's risk management tools include personal knowledge of the customers, peer monitoring and the Sheikh's supervision. EGAPA's experience with gum arabic production activities helps reduce the risk linked to *salam* credit being a loan denominated in a commodity and facilitates lending. Moreover, the EGAPA assists its members in production diversification and technology with support from the

Agricultural Research Corporation. In most cases the Forest National Corporation negotiates the terms of *salam* credit with creditors, namely the contract price and size of the loan per unit of a specific crop's land, and assists in loan disbursement as well as delivery of crops to collection centres that belong to lenders.

## CONCLUSIONS

EGAPA started with registration fees as seed money. The establishment rule foresees that every member must transfer 33 percent of his annual net profit to the revolving fund to be used for development activities for the benefit of the entire village. However, after ten years of operation the revolving fund failed to mobilize savings from its member producers, and the association is suffering from unstable and insufficient funding sources. Hence, the only source of funding is the credit that it receives from gum tapping and collection and from the Forest National Corporation.

Unfortunately, the EGAPA Secretary keeps no records other than the list of members and the credit they receive, so it is not possible to provide a quantitative evaluation of operating costs, profitability and sustainability of EGAPA's revolving funds.

Nevertheless, based on the experience so far, an overall assessment of EGAPA's microfinance provision is possible, and appears inauspicious. EGAPA funding relies on sources that are not long term and not always regular; operations are not always demand-based; intermediation is focused on provision of microcredit; and staff appears to lack professional financial management skills. The failure to mobilize internal savings, which is the basis for the functioning of a savings and credit association such as EGAPA, is critical. This seems to indicate that the association is regarded more as a mechanism to access targeted credit coming from external sources than as a sustainable source for a whole range of microfinance services – the repayment performance of which is not adequately monitored and cannot be appraised.

To become sustainable, the EGAPA would need to develop stable access to longer-term funding, good products addressing the members' needs, and capacity and professionalism of its staff. It would also need to successfully mobilize savings from its members, as well as establishing and maintaining appropriate records and accounts. Diversification of lending portfolio may also be necessary to diversify risks.

It should be recalled that no successful provision of microcredit, or more appropriately, of microfinance services, is possible without viable customer micro-enterprises. Prior to or at least concurrent with supporting the outreach of microfinance to gum arabic producers, a number of initiatives must be carried out. These include: the improvement of agricultural land policy to address issues of land tenure and land-use systems; more stable sector and microfinance policies; a more reliable legal and judiciary system; the enhancement of production and processing technologies; the promotion of product marketing including exports; and the improvement of the communication infrastructure necessary for the development of the agroforestry sector.

# 7. Peru: the Brazil nut industry in Madre de Diós

The Brazil nut is a non-wood forest product that grows naturally in the Amazonian forests of Brazil, Bolivia and Peru. The Brazil nut fruit comes from one of the tallest trees of the Amazon Basin's tropical rainforest. The fruits fall naturally to the ground and are collected, processed and sold primarily on the international market, which has an established demand for the nut. Bolivia is the largest exporter, followed by Brazil and then Peru. Peru's production is located in the southeastern Department of Madre de Diós.

The Peruvian Government is the official owner of all Brazil nut trees and provides 40-year concessions to individuals with the exclusive rights to harvest the nuts found in a certain area. The Brazil nut production chain has four components: production; collection (cleaning paths between trees, gathering the fruit, opening the fruit and transporting them to the camp); processing (drying and soaking, peeling the nuts, drying the peeled nuts) and commercialization.

Brazil nut extraction in southern Peru was traditionally carried out informally, with harvesters going into the forest without any government intervention or regulation. In the 1990s, the government progressively started to actively regulate the sector. The harvester must present a management plan within the current system of concessions for non-wood forest products in order to obtain a concession for Brazil nut extraction.

Brazil nut businesses are micro-enterprises owned generally by one person who works in the harvesting process and who contracts family and/or non-family labour. The number of employees during any given season ranges from one to seven, with an average of approximately four. The enterprises carry out the complete harvesting process up to drying the peeled nuts, and then sell to intermediaries or directly to processing/export companies. Brazil nut collectors generally do not depend exclusively on nut production for their livelihoods, but also carry out other activities such as cattle-raising, agriculture, timber collection and commerce.

The Brazil nut concession system also requires that any group or person granted a concession must present a tax identification number emitted by the Peruvian Government. Given the low levels of organization among harvesters, this leads to a concentration of concessions given to single micro-entrepreneurs, who then subcontract family and non-family members to harvest in the concession.

The costs incurred by the collectors for their production activity include legal costs (in obtaining and maintaining concession rights), collection costs and harvest costs. The micro-enterprises that harvest Brazil nut do not operate throughout the

whole year, but for three to nine months depending on their form of sale and the zone in which their concession is located. Those working the minimum generally turn their harvest over to a processing firm that peels and classifies the nuts, while those working longer are more directly involved in the entire harvesting and preparation process.

## MICROFINANCE IN PERU

Peru has a relatively developed microfinance sector, with services being provided by many different types of institutions. These include formal financial institutions, including commercial banks, municipal savings and credit banks (Cajas Municipales de Ahorro y Crédito), rural savings and credit banks (Cajas Rurales de Ahorro y Crédito) and institutes for the development of micro and small enterprises (Entidades de Desarrollo para las Pequeñas y Micro Empresas), as well as semi-formal institutions such as savings and loan cooperatives and microfinance NGOs. Non-formal money lenders also continue to play an important role.

When there is significant outreach of microfinance institutions and competition in urban areas, the rural sector faces more difficulties in accessing microfinance services. Following the closure of the state-owned agricultural bank in 1992, the rural savings and credit banks were created in 1994 to fill the gap. Although these institutions allocate 51 percent of their total portfolio (approximately US$35 million) to the agricultural sector, the overall volume of their operations is still not sufficient for the needs of the sector. The municipal savings and credit banks represent an important player in the Peruvian microfinance sector. However, only 7.4 percent of their total portfolio (approximately US$17 million) is dedicated to agricultural activities.

The role of credit unions in the microfinance sector is fairly limited because they do not provide significant microcredit and have limited overall outreach. Institutes for the development of micro and small enterprises are the newest form of financial institution in Peru. Created in 1996, they represent a stepping stone for NGOs looking to upgrade into the formal sector. These institutes are commercial enterprises dedicated to providing credit services, and are initially restricted in their capacity to capture savings, which they can do only after accumulating US$1 million in capital. Institutes for the development of micro and small enterprises currently dedicate approximately 3.4 percent, or US$1.4 million, to the agricultural sector.

In 2001, the government passed a law creating a new state-owned bank, AGROBANCO, to ensure provision of microfinance to the rural sector. The specific purpose of this bank is to provide credit to the agricultural sector, as well as to function as a second-tier bank providing lines of credit to other formal financial institutions.

## DEPARTMENT OF MADRE DE DIÓS

The Department of Madre de Diós is located in southeastern Peru and borders with Bolivia and Brazil. Its population is approximately 100 000 and its land

area of 8.476 million hectares represents 6.6 percent of the national territory. The Department is more isolated than other parts of the Amazon due to poor roads, and thus has limited industrial and commercial development. There are three municipal savings and credit banks active in the department, but no rural savings and credit banks or institutes for the development of micro and small enterprises.

The Brazil nut industry is a driving force for the Department of Madre de Diós. It is estimated that anywhere from 22 to 30 percent of the population of the Department derive their income directly or indirectly from the Brazil nut trade. According to the National Census, over 70 percent of those living in the Department are poor, and the incidence of poverty among those with Brazil nut-based livelihoods is even higher.

Studies on Brazil nut collectors´ incomes have shown that this activity, completed in three months, generates on average 67 percent of their gross annual income. In absolute terms, this is equivalent to US$6 410 annually per harvester, or an average of US$534 per month. Considering that the average family size is 6 people, this signifies a monthly per capita income of US$89. This is less than the minimum living income, which for the country as a whole averages at US$200 per month.

Most of the concessions visited during the case study (67 percent) confirmed that they were unable to save from their earnings. The main causes identified were the low selling prices, the relatively high costs, the large number of family members depending on the activity and the relatively non-diversified income sources.

## MICROFINANCE SERVICES IN MADRE DE DIÓS

To access financial resources, Brazil nut harvesters avail themselves mainly of advance payment systems, and attempts to introduce financing alternatives have not met with much success. The most common financing instruments utilized include:

- ***Habilitos* (prepayments)**. In order to guarantee a sufficient cash flow to complete the harvest and cover other livelihood needs and harvesting costs, concessions accept prepayments (*habilitos*) from intermediaries (*habilitadores*) at the beginning of the harvest season. Prepayments are made in exchange for the guarantee that production will be channelled through the intermediary. Prices are fixed at the time of the advance and can cover both shelled and unshelled nuts. *Habilitadores* may be organized businesses or individuals from the local community, and can be processors, or simply intermediaries who resell the nuts to a processor or exporter.
- **Sale of unshelled nuts.** Unshelled nuts are sometimes marketed in small quantities at the beginning of the harvest in order to obtain working capital to continue the harvest and cover debts. These nuts may be sold to the *habilitadores* or other traders.
- **Loans from targeted programmes.** At times, Brazil nut harvesters have had access to some targeted programmes, such as the Operadora de Crédito

Social para el Desarrollo Sostenible de Madre de Diós from 1998–2002. However, the outreach of these programmes is limited.

- **Loans from exporters.** To a very limited extent, collectors may be able to access loans from exporters. For example, the Asociación de Castañeros de Madre de Diós received a loan from the Exportaciones La Selva for US$8 570, which was then distributed to members for their use in the harvest.

Apart from the municipal savings and credit banks, other providers of microcredit are either informal financial sources embedded in the production and supply chain, such as sellers, exporters or intermediaries, or government and international cooperation initiatives.

### Municipal savings and credit banks

The three municipal savings and credit banks in the Department of Madre de Diós are the Caja Municipal de Tacna, the Caja Municipal de Arequipa and the Caja Municipal de Cuzco. The Caja Municipal de Tacna is one of the most important in the Department, with 8 000 outstanding loans and an outstanding portfolio of approximately US$6.8 million. It is considered a leading microfinance institution in Peru, showing a high level of profitability, high portfolio quality and strong management. Special credit lines are offered for micro and small enterprises, mortgages, and pawning. Agricultural credit is not currently offered in Madre de Diós, nor is there a special line of credit for Brazil nut harvesters.

Loans for micro and small enterprises have the following characteristics:

- Interest: 2.3 percent monthly average
- Term: 6, 12, 18, 24, 36 months
- Payment schedule: monthly or daily
- Guarantees: collateral
- Maximum: 35 000 nuevos soles (S/.) (US$10 000)

Municipal savings and credit banks do not keep records regarding the number of Brazil nut harvesters who have taken loans. They put special emphasis on analysing the overall repayment capacity of the client, taking into account overall cash flow. Brazil nut harvesters with relatively diversified livelihood strategies and educational levels have more access to the services they provide. Those who are more exclusively dependent on Brazil nut collecting and on subsistence agriculture in general do not have access to loans from such institutions.

### Operadora de Crédito Social para el Desarrollo Sostenible de Madre de Diós

The Operadora de Crédito Social para el Desarrollo Sostenible de Madre de Diós is an association created to satisfy the financial needs of farmers, Brazil nut collectors, people working with small livestock and those in marginal urban areas working in small-scale commerce. The institution was founded in 1998 and capitalized through a Peruvian-Canadian cooperation agreement. Initiating with a fund of US$314 000, the programme lent approximately US$2.4 million in four years, reaching approximately 1 850 clients, 200 of whom were Brazil nut

collectors. Approximately 100 collectors had loans at any given time, and the total loan amount to this group was US$90 000.

The characteristics of the loans provided through the programme were:

- Interest: 2.5 percent monthly
- Term: 6 to 9 months, grace period of three months
- Payment schedule: monthly following grace period
- Guarantees: no guarantee necessary if the borrower does not have an outstanding loan; guarantees required for refinancing
- Maximum: S/.7 000 (US$2 000)

Community assemblies were held to approve loans at the community level. However, loans were then individual. The institution is no longer providing credit and is in the process of recuperating US$250 000 in outstanding overdue loans. Failure of the programme can be attributed to a number of factors, some of which are related to management. Lack of supervision for monitoring and follow-up on loans with clients at the field level was key to high loan loss rates (20 percent annual).

### Sales outlets/exporters (*habilitadores*)

These businesses are dedicated to the processing, marketing and export of Brazil nuts. They establish direct relationships with the Brazil nut collectors. In order to guarantee their sources of supply and therefore to meet their orders, they work with a prepayment system, or *habilito.* As of November 2004, there were nine processor/export companies offering *habilitos* in the Department.

The general conditions of the *habilito* are:

- Interest: 0 percent
- Term: 1 to 6 months, sometimes longer if a trust relationship has been developed between the company and the collector
- Payment schedule: payment is made in kind – either Brazil nut in its shell or shelled, depending on the agreement reached between the two actors. Payment is made immediately upon harvest or shelling
- Guarantees: some companies sign loan agreements in front of a notary public and ask for collateral guarantees. Other companies use verbal agreements without guarantees, limiting the formalization to the signature of a receipt by the collector
- Maximum amount given to intermediaries: S/.40 000 (US$11 500)
- Maximum amount given to collectors: S/.5 000 (US$1 500)

The *habilito* is based primarily on a trust relationship and the *habilitador* uses local knowledge when deciding to whom to provide an advance. Future advances are dependent on meeting current obligations. However, some enterprises also require some kind of collateral guarantee. In the case of non-payment, companies require that the collectors sign documents recognizing the debt and attempt collection in the next harvest. Some companies collect on collateral that has been put in guarantee. If no guarantee has been offered, repayment is encouraged through pressure tactics.

Some companies require that 100 percent of the collector's production is committed exclusively in order to give the *habilito*. The Brazil nut trade that is used to cancel the debt may be valued at the pre-agreed price or at the current market price. Other companies require only that the collector pay the value of the debt and the remainder of the production may be sold freely. In the case of non-payment, companies require that the collectors sign documents recognizing the debt and attempt collection in the next harvest. Some companies collect on collateral that has been put in guarantee. If no guarantee has been offered, repayment is encouraged through pressure tactics.

### Intermediaries

Intermediaries are individuals who work placing *habilitos* and buying Brazil nut to sell to the processing/export companies. Their profit is earned through sales margins. Intermediaries can handle an average of 60 *habilitos* per harvest, for a total of approximately S/.30 000 (US$8 955).

In some cases these intermediaries work with money from processing/export companies, while in others they work with their own capital. Conditions of the *habilitos* are similar to those with the export companies. However, the intermediaries tend to work within shorter time frames and implement more intense monitoring practices than do export companies. The *habilito* is not formalized, and at most, a receipt for the disbursement is signed.

### FONDEBOSQUE

Although it is not currently providing credit to Brazil nut collectors, FONDEBOSQUE, a private foundation created to channel funds from the Peruvian government and international cooperation to strengthen the forest sector, has begun to support mapping of the Brazil nut concessions. In addition, the institution has developed a fund to provide credit to forest concessions. This fund is capitalized by AGROBANCO and channelled through the Caja Municipal of Tacna. To date, credits provided have been for timber extraction. However, a Brazil nut collectors association has submitted an application for a loan under this programme.

FONDEBOSQUE is currently working on developing a supply chain project with the Asociación de Castañeros de Alerta, a Brazil nut harvester association. The project, which would represent an interesting alternative to the traditional system, is backed by the export company, El Bosque, which would guarantee the full amount turned over to the harvesters. The company would also guarantee the purchase of 100 percent of the production of the Association.

### AGROBANCO

Unlike the former Banco Agrario, AGROBANCO has the mandate to operate according to market conditions and with sound financial management. This means that it should charge interest rates sufficient to generate profits and should appropriately manage its risk. The bank focuses on supporting the development of

specific supply chains or value chains intervening in links from basic production to marketing. To date, AGROBANCO has worked primarily through local operators, who in turn relate directly to the credit clients conforming to a given chain.

AGROBANCO loans for micro and small enterprises have the following characteristics:

- Interest: 27 percent annual
- Term: depends on activity, maximum of 1 year
- Payment schedule: monthly following grace period
- Guarantees: real guarantee for two times credit amount
- Maximum loan amount: S/.46 000 per client (US$13 731)

There have been a number of procedural problems with the relationship between AGROBANCO and its local operators, leading to delays in loan disbursement and frustration among potential clients. Toward the end of 2003, FONDEBOSQUE worked on developing value chain projects in the Madre de Diós timber concessions. However, the project did not result in a loan through AGROBANCO, principally due to a lack of guarantees among the concession members.

## CONCLUSIONS

Brazil nut harvesters are not an attractive market for microfinance institutions given the limited time in which they are active in their business and the isolated manner in which they work. Further development of the micro-enterprises and their associations will be necessary to attract more focused financing outside of the informal sector.

An alternative option for financing the harvesters would be to focus on their entire livelihoods system as opposed to taking into account only the Brazil nut activities. For the harvesters based in the urban settlements surrounding Puerto Maldonado, this option is more immediately accessible, given the diversified livelihoods activities that show more stability and profitability. For those depending more on agricultural activities to complement Brazil nut extraction there are greater limitations.

The *habilito* system fulfils an important need for both Brazil nut harvesters and processing and export companies. Processing and export companies have a vested interest in ensuring that the harvesters are able to carry out their role within the supply chain. For this reason, they are willing to risk their own funds to finance these activities. They use an intimate knowledge of the individual harvesters in order to minimize their risks, lending only to those with a good reputation and high potential for repayment. Without these funds, most harvesters simply would not be able to carry out harvesting activities.

At the same time, many of the companies expressed a preference for the introduction of specialized financial services into the system. This would allow them to minimize their risks and focus on the commercialization process. The drawback for processing and exporting companies is that they would have to compete for obtaining supply based on offering better prices or purchase

conditions to the harvesters. The harvesters would be able to sell to the highest bidder and would not be constrained by pre-set purchase prices. However, alternative sources would require paying an interest rate and adhering to specific payment dates and amounts, in cash. The *habilito* system, on the other hand, permits maximum flexibility in terms of the payment plan.

The Peruvian forest concession system has recently been significantly revised and concessions for non-wood forest products were granted starting in 2003. Many of the rules of the game continue not to be clear, and this lack of clarity also contributes to a sense of risk on the part of the financing institutions. Clearer rules, in addition to stronger overall microfinance institutions, might contribute to more effective financial services for the sector.

Recently, new alliances have begun to form among supply chain actors, financial institutions and semi-governmental agencies. These alliances may offer future alternatives for making financial services more agile and accessible to the harvesters. If credit is seen as a package to the alliance members, limitations caused by the short term of the loans can be minimized since the processing and marketing activities require longer terms.

A number of key improvements in the overall Peruvian Brazil nut industry environment could contribute to improved finance options, including:

- ***Continued clarification and formalization of the concession process to provide increased security to harvesters.*** This should contribute to higher investment levels in the concessions and therefore improved profitability. In addition, more secure access to the concessions should provide greater security to financial institutions regarding the probable cash flow of the Brazil nut harvesters.
- ***Further organization of the harvesters.*** This is key to developing a more level negotiating field between harvesters and processing and export firms. Efforts to increase the transparency of processing costs and market prices would also contribute to the same goal.

# 8. Conclusions

The financing of forest-based activities reflects specific needs and constraints: small-scale enterprises need to plant, purchase and process inputs, innovate, improve their productivity and modernize constantly. Their financial needs involve various microfinance services: short-term loans to finance inputs such as fertilizers and labour, storage, processing of products; medium- and long-term loans for equipment and seedlings, etc; savings to smoothen consumption and uneven cash flows and to build assets to cover investment needs; insurance to protect their crops and insure loan repayment; and payment services.

The demand of small-scale enterprises for microfinance services has extremely diverse characteristics, varying according to the rural ecological zone, the type of activity, the degree of diversity and intensity of production systems, the type of micro-client, and the degree of market integration. This implies that standardized microfinance products do not always fit their financial needs, and more targeted microfinance services may be needed.

Financing forest-based small-scale enterprises carries a high level of risks, climatic and economic, which are often covariant and therefore harder to manage through the usual mechanisms used in microfinance, such as solidarity group lending.

Household income deriving from a small-scale enterprise is often integrated with other household budgets, often less risky and better for generating short-term revenue than forest activities. Financing for forest-based and non-forest-based activities, consumption and household investments are fungible in the household practice; it is sometimes difficult to tie funds to a single specific activity.

Table 3 outlines in general terms the importance of different microfinance services for timber and non-wood forest product activities, based on the previous sections of this publication. Capital and financial needs for small-scale enterprises providing ecotourism will be mostly linked to activities not directly related to forestry, such as the building of amenities, and working capital to run the facilities and expenditures for utilities. For small-scale fuelwood enterprises, access to finance has not been identified as a main constraint for carrying out the activity; the needs for microfinance services of households dealing with fuelwood would be those typical of rural households.

Limited access to microfinance services is a constraint to the development of small-scale enterprises in the forest sector. The nature of their activity and the fact that they are generally located in areas of remote access make it particularly challenging and costly for microfinance institutions to reach out to them. However, worldwide experience indicates that it is possible to provide microfinance services successfully, i.e. in a sustainable manner, even in difficult rural environments.

TABLE 3
**The importance of various microfinance services for different forest-based small-scale enterprises**

| Service | Timber | Non-wood forest products |
|---|---|---|
| Savings | High – to generate assets to finance capital-intensive investments | High – to smoothen seasonalities and idle periods due to shortages of raw materials |
| Individual lending | High – flexibility is important for more developed enterprises, and those with specific financing needs | Low – the lack of collateral is a common problem |
| Group lending | Moderate – when access costs make individual lending prohibitive | High – more standardized loans usually with lower interest rates and social collateral |
| Short-term microcredit | Moderate – to finance recurrent investments and working capital after tree planting | High – to finance working capital requirements |
| Long-term, larger microcredit | High – to finance tree planting investments (as an alternative to equity finance)<br>High – to finance equipment purchases (as an alternative to leasing) | Low to moderate – possibly to finance processing equipment purchases (as an alternative to leasing) |
| Leasing | High – for equipment purchases | Moderate – for equipment purchases |
| Equity finance | High – to finance tree planting investments | Low – mainly for possible capital-intensive, high-risk processing activities |
| Micro-insurance | High – crop and property insurance<br>High – for loan repayment for high-risk businesses | Moderate<br>High – for loan repayment for high-risk businesses |
| Remittances | Moderate – to help support household income | High – to finance working capital and smoothen seasonalities |

Several key factors and government interventions that can facilitate the outreach of microfinance institutions to small-scale enterprises are: establishing a policy framework conducive to microfinance, securing appropriate land tenure and property rights, providing business development services and market infrastructure in support of production and marketing, and enhancing the capacity of microfinance institutions to effectively service such enterprises.

## CONDUCIVE POLICY FRAMEWORK

Firstly, governments should ensure that adequate financial policies, land tenure and infrastructure are in place to help forest-based small-scale enterprises to

access sound and reliable microfinance services. Ceilings on interest rates limit the ability of microfinance institutions to attain viability and give more households permanent access to their services. Subsidized targeted credit programmes, most often beset by poor loan collection rates, undermine the development of sustainable microfinance and distort the market. Rural microfinance institutions should not be forced to provide substandard financing products for small-scale enterprises or to risk a worsening of their portfolio quality, for example by imposing mandatory forest-lending quotas. Sound financial procedures and management autonomy of microfinance institutions should be respected. As noted in the case of the Sudan, an inadequate legal framework in terms of both land tenure and microfinance policies may hinder the development of strong self-sustainable microfinance institutions, and the presence of subsidized credit programmes encourage flawed borrowing patterns among clients.

To create greater and longer-term benefits, governments should establish a supportive policy environment that:

- ensures a stable macroeconomic environment, an appropriate microfinance regulatory framework and adequate land tenure and property rights;
- stimulates the development of microfinance services targeted to poor people;
- promotes competition and market penetration of microfinance institutions while ensuring customer protection.

The case of community forest enterprises in Petén, Guatemala, shows how clear forest tenure rights and the legal establishment of forest concessions successfully drew two banks, BANRURAL and Bancafé, into servicing small-scale timber enterprises. Allowing for cost recovering prices and promoting competition and institutional efficiency while focusing on transparency in pricing will facilitate interest rates to come down over time. According to CGAP, in four competitive markets not affected by interest rate caps, the microfinance portfolio yield decreased from 57 percent in 1997 to 31 percent in 2002. For the same period, total operating expenses decreased from 38 to 24 percent. This downward trend was driven primarily by efficiency improvements stimulated by competition (CGAP, 2004).

## BUSINESS DEVELOPMENT SERVICES, SOCIAL FACILITATION AND RURAL INFRASTRUCTURE

To avail themselves profitably of microfinance services, small-scale enterprises must be economically viable and sound. Forest extension and business development services, selecting potential forest entrepreneurs, training on cost-effective innovations (products, business processes, technology) and providing marketing support are all ways to prepare such enterprises for microfinance initiatives. This is shown in the case of MEDEP in Nepal, where the provision of business development services and follow-up after enterprise establishment are key to its success. In Petén, extensive support from technical and business development service providers together with successful organization and solidarity among the community enterprises facilitated access of small-scale enterprises to commercial banks. In order to support the sustainability and the benefits of small-scale enterprise access

to microfinance services in Petén, the commercialization and marketing company Forescom has been established to ensure better market conditions for the producers. As small-scale enterprises grow, business development services should also develop and cater to their evolving needs.

When targeting disadvantaged areas and communities, social mobilization support may also be necessary, and must be kept distinct from the financial intermediation. Social intermediation should support awareness-building for small-scale enterprises on microfinance services; the dissemination of information on microfinance institutions; the development of basic literacy, numeracy and skills training for women, indigenous people and other disadvantaged groups; and the mobilization and establishment of self-help groups to participate in microfinance markets. When supporting the expansion of microfinance services to small-scale enterprises, governments and donors should never overlook the importance of accompanying microfinance facilitation with the necessary business and social backing.

Investments in basic telecommunications, roads and education can also contribute significantly to the success of microfinance in rural areas, both by increasing the prospective economic return of small-scale enterprises and by reducing transaction costs for microfinance institutions.

## ENHANCING THE CAPACITY OF MICROFINANCE INSTITUTIONS

Experience has shown that microfinance institutions often need several years to cover their costs and establish a sufficient scale of operations and sound institutional organization. Especially in areas with low levels of economic activity and scarce penetration of microfinance institutions and services, where small-scale enterprises are likely to operate, some longer-term donor support (subsidies) may be required to help establish microfinance institutions. Kick-starting mechanisms such as the provision of matching grants, temporary interest rate subsidies for long-term loans, and equity finance at concessionary terms may be envisaged, but should be accompanied by procedures guaranteeing fairness of access and good targeting. Because these should be considered temporary initial arrangements, their design should ensure that they complement and accelerate the development of sustainable microfinance institutions instead of substituting them. Strong microfinance institutions will have the capacity to mobilize resources in the market, provide the microfinance services demanded by poor people, minimize transaction costs and offer competitive prices.

The decision to support a rural microfinance intervention should be based on the prospect of the microfinance institution reaching the twin objectives of outreach and sustainability within a reasonable and agreed time frame. For this purpose, high-quality, targeted technical assistance should assist the microfinance institution in adopting appropriate microfinance technology and services for small-scale enterprises, and improving their management and financial performance. Areas where governments and donors can best focus their assistance include: institutional and human capacity building of microfinance institutions, including training on small-scale enterprises and their activities;

the improvement of financial infrastructure; exposure to and promotion of best practices; transparent information; support for reducing transaction costs, product innovation, and commercial mobilization of resources. Inadequate financial skills, difficulties in mobilizing savings and accessing long-term funding, and lack of attractive microfinance products are hampering the success of the credit and savings association EGAPA in the Sudan.

Important support interventions that can significantly increase the performance of the microfinance sector in a country or region include: upgrading and mainstreaming informal financial institutions (registration, reporting, legal status, prudential practices, supervision); supporting linkages and networks among microfinance institutions and establishing apex services; linking banks with local informal financial microfinance institutions; and transforming agricultural development banks into sustainable providers of agricultural finance and other microfinance services.

In order to become fully sustainable and expand services to poor people in areas of low population density and remote access where most small-scale enterprises operate, microfinance institutions will have to develop innovative products, delivery mechanisms and financial technologies to break these barriers and lower costs. Furthermore, they will need to establish sustainable linkages between more formal financial institutions and informal service providers. Delivery of microfinance services to small-scale enterprises should involve higher degrees of client involvement and division of labour between borrowers' representatives and microfinance institution loan officers. For example, by using group banking methodologies the number and the duration of individual transactions can be reduced.

Despite its rigidities, group lending with its reduced transaction costs and lending risks is a powerful mechanism to reach smaller enterprises and poorer households, some of which would have no access to microfinance services in its absence. Collateral substitutes such as group solidarity help lenders and borrowers overcome some of the problems regarding the availability and effectiveness of conventional collateral in rural and forest areas. Strategies of client graduation applied to groups, based on the principle of increasing the loan size and maturity upon successful repayment, help customers build up a track record with the microfinance institution. This reduces the importance of conventional tangible collateral while allowing for increasing loan amounts. Group lending is also a valuable tool for microfinance institutions to reduce the costs involved in reaching small-scale enterprises. In addition to reducing transportation and transaction costs, it requires less knowledge of forest production due to peer member screening and repayment pressure, and helps microfinance institutions achieve financial sustainability with lower interest rates. Group lending modalities (based on group formation, training, preparation of business plans, and repayment guarantee) coupled with business development services were effectively adopted under the MEDEP approach to achieve outreach expansion.

For small-scale enterprises that have attained a greater economic development and have more diversified demand for microfinance services, and for those that are

likely to have more heterogeneous financial needs in terms of amounts, duration and repayment terms, group lending may not be the best option. Micro-entrepreneurs who take out individual loans from microfinance institutions are able to start their loan on a date of their choice, and loan terms and repayment frequency are more likely to suit their needs. Under individual loan technology, clients also avoid bearing the risks of guaranteeing the loans of everyone in a solidarity group.

By providing both group and individual financial services microfinance institutions can maximize their outreach, building on the same delivery infrastructure and acquired knowledge of the sector. To maintain sustainability, higher rates can be charged for individual flexible products, which are likely to cost more but will be directed to more economically active enterprises. Maintaining low-cost group products can provide microfinance institutions with a profitable source of income, thereby contributing to their overall financial performance. Diversifying microfinance services by expanding the range of credit and savings products available, broadening clientele, and establishing operations in more favourable regions so as to compensate for the risks of remoter areas, help them reach sustainability.

Other possible measures to reduce transaction costs include: using collateral substitutes such as pledging of forest assets; automating banking operations and improvements in management information systems and banking software; introducing staff incentive systems linked to the performance of branches and individual loan officers; reducing excessive paperwork, bureaucratic delays and controls.

Local institutions and authorities such as agriculture extension workers and foresters can play an important role in helping microfinance institutions. They can screen clients and help microfinance institutions understand the economic activities for which they intend to borrow and the risks involved. They can supervise loans and enforce repayment, thereby also contributing to the reduction of transaction costs. The case of Brazil nut harvesting in Peru shows that in the absence of adequate awareness support, economic activities requiring sectoral knowledge can discourage microfinance institutions from entering the market, even when other supply chain actors have succeed in providing microcredit gainfully. Village arabic gum traders in the Sudan are able to operate with high profit margins, lending on the basis of personal guarantees, thanks to their knowledge of the sector and the limited number of competing microfinance institutions.

Since small-scale enterprises active in timber production are likely to require longer-term loans than microcredit typically provides, government and donors should also help microfinance institutions to access long-term funds at affordable costs, thus enabling them to engage in longer-term forest financing. It is important that microfinance institutions access longer-term sources for an appropriate matching of assets with liabilities, for example, by issuing bonds or attracting equity investments by new shareholders.

It is important to note that microcredit should not always be provided, nor act as substitute for institutional development. If conditions are too hostile for its provision, as may be the case in marginal areas with weak infrastructure and

unstable policy and macroeconomic framework, efforts should be focused first on developing appropriate savings and creating an environment conducive to the progressive development of sound financial systems.

Focus should be placed on providing microfinance services for rural households rather than credit for tree crops. When possible, financing should respond to the overall funding needs of rural household activities and their repayment capacity, and not fund specific small-scale enterprise investments only. While the repayment schedule for loans for productive purposes should be based on the estimated cash flow generated by the investment, household cash flow from other activities can serve as an additional source of funds to repay the loan. Some microfinance institutions have responded to this problem by basing the lending decision on the existing repayment capacity of the rural household without making any appraisal of newly proposed investments or activities. Loan appraisal methods that take into consideration the entire family business and household cash flow, rather than focusing only on the cash flow of the specific small-scale enterprise investment activities, can help expand credit opportunities. In the case of Brazil nut harvesting in Peru and similar cases, this may be the best approach to reduce customers' credit risk and overcome seasonalities and production-related problems.

Microfinance services should offer small-scale enterprises a choice of various financing options adapted to heterogeneous investment and production strategies. In marginal areas with a predominance of low-return activities, self-help groups or credit cooperatives, which are savings-oriented and operate at nominal costs, or NGO microfinance institutions with a strong social emphasis and poverty outreach focus, may be more suitable. In areas with high potential for good economic return and profitable small-scale enterprises, large credit cooperatives and rural and commercial banks with individual and group methodologies may be more appropriate.

Box 20 provides a list of government initiatives that can positively support the development of microfinance for small-scale enterprises, showing which institutions are more suitable for providing microfinance services to small-scale enterprises.

BOX 20

**Proposed government support and suitable microfinance institutions for small-scale enterprises**

**Government support**

Conducive microfinance regulatory framework

Land tenure and property rights

Development of microfinance services addressing longer-term, higher-risk financing needs

Supporting reduction of transaction costs and conventional collateral requirements

Encouraging provision of microleasing

Social mobilization through field extension workers and foresters facilitating access to microfinance institutions

Increasing microfinance institutions' appreciation of and ability to appraise small-scale enterprises
Processing and marketing support
Business development services and microfinance facilitation
Facilitating upgrading of microfinance institutions, and strengthening of linkages among microfinance institutions
Linking small-scale enterprises to potential investors to provide longer-term equity of lending capital for higher-risk investments
Equity financing
Matching grants

**Microfinance institutions**
Banks for mobilization of savings where safe deposits are lacking
Credit cooperatives and NGOs with strong social facilitation skills where transaction costs are very high or social objectives pre-eminent
NGOs when there are strong specific environmental concerns and objectives
NGOs or credit cooperatives for equity financing
Banks for bigger and more financially sophisticated loans and for the provision of leasing and micro-insurance services

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