

## **PART 1**

# **Guidelines for meeting credit and microfinance needs in inland capture fisheries development and conservation in Asia**



## 1. INTRODUCTION

Recognition of the importance of microfinance<sup>1</sup> as a crucial development tool for poverty reduction has increased during the last two decades. The United Nations, in its General Assembly Resolution 52/194, passed on 18 December 1997, noted that in many countries, microcredit programmes have succeeded in generating productive self-employment by providing access to small capital to people living in poverty as well as in increasing participation in the mainstream economic and political process.

The Resolution welcomed the launching of different microcredit initiatives and acknowledged their important contribution to poverty eradication, empowerment of women, and social advancement. It called upon the relevant organs, organizations and bodies of the UN system, in particular, its funds and programmes, to explore the inclusion of the microcredit approach in their programmes as a tool for poverty eradication and for further developing other microfinance instruments.

The following guidelines are based on the discussions held in two regional workshops. The first is the *Regional Workshop on Microfinance and Credit Programmes in Support of Responsible Inland Capture Fisheries Practices for Sustainable Use of Inland Fishery Resources*, held in Kuala Lumpur, Malaysia, 26-30 April 2004 (the Kuala Lumpur Workshop), and organized by the Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia Pacific Region (INFOFISH) in cooperation with the Fisheries Development Authority of Malaysia (LKIM), the Department of Fisheries of Malaysia, the Agricultural Development Bank of Malaysia and FAO. The second is the *Regional Workshop on Guidance for Credit and Microfinance Programmes in Support of Sustainable Use of Inland Fishery Resources and Poverty Alleviation*, held in Beijing, China, 14-17 February 2006 (the Beijing Workshop), jointly organized by the China Society of Fisheries, the East China Sea Fisheries Research Institute, the Chinese Academy of Fishery Sciences and FAO. The guidelines are also based on the case studies and success stories from the participating countries presented at the Beijing Workshop. The Asia Pacific Rural and Agricultural Credit Association (APRACA), with the strong personal support of their Secretary-General, was an active partner in conducting both workshops and in preparing the guidelines.

These guidelines are complementary to the FAO *management guidelines on revolving loan funds and credit programmes for fishing communities*, (Dorsey, Ryhanen and Tietze, 1989) and to the *FAO guidelines on microfinance in fisheries and aquaculture* (Tietze and Villareal, 2003).

## 2. PURPOSE AND TARGET GROUP OF GUIDELINES

These guidelines provide orientation, basic considerations and general principles for the institutions and organizations that provide formal credit and microfinance services to the fisheries sector, particularly the small-scale fisheries sector, and for those who wish to include inland fishers and inland capture fisheries as part of their client base and lending operations. The guidelines can be used by public and private financial institutions and other agencies providing financial and related services, including insurance, and by NGOs and donor agencies.

The guidelines also reach out to the users and target groups of credit and microfinance services and to important stakeholders. These stakeholders include inland fisher and fish producer associations and cooperatives; fisheries and other government departments and institutions concerned with the management, conservation and use

<sup>1</sup> There are a number of Web sites devoted to microfinance, such as: the International Year of Micro Credit 2005 at [www.yearofmicrocredit.org](http://www.yearofmicrocredit.org); the Rural Finance Learning Center at [www.ruralfinance.org](http://www.ruralfinance.org); the United Nations Capital Development Fund (UNCDF) Microfinance at [www.uncdf.org](http://www.uncdf.org); and the Microfinance Gateway at [www.microfinancegateway.org](http://www.microfinancegateway.org).

of water bodies; local government authorities; and finally, to individuals and groups of inland fishers and women in inland fishing communities.

Like other guidelines, these should not be followed blindly, but rather be creatively adapted to the various circumstances and situations that prevail in different countries and geographic regions. In this way, they will contribute to the ultimate objectives – access of inland fishers and fisheries to viable credit and microfinance services in support of ecologically balanced and sustainable inland fisheries development and conservation, as well as to poverty alleviation in inland fishing communities.

### **3. BASIC CONSIDERATIONS**

Prior to designing credit or microfinance policies or programmes that cater to inland fishers and fisheries, the ecological and economic importance of the sector needs to be considered together with the socio-economic characteristics of the stakeholders. The impact and sustainability of credit and microfinance operations depend on crucial factors that need to be identified, for which information, both quantitative and qualitative, needs to be compiled at the local level.

When secondary information is not available, primary data need to be collected and inland fisheries profiles need to be prepared that address, verify, and wherever possible, quantify the aspects for a given geographic area, as described below.

#### **3.1 Inland fishery resources development and management**

Inland fisheries in Asia and elsewhere make a very important contribution to food security, employment and generation of income, particularly in rural areas and for low-income sections of the population. In 2003, global inland fisheries production reached 34.2 million tonnes and accounted for 25.8 percent of the global fish production, of which 8.9 million tonnes, or 6.7 percent, were contributed by inland capture fisheries, and about 25 million tonnes, or 19 percent, by aquaculture.

Considering the percentages, inland capture fisheries production seems to be comparatively low. When looking at the local scale, however, it becomes clear that inland capture fisheries is very important for a vast segment of the rural and poor population since they contribute directly to the daily food supply. Also, when looking at the 6.7 percent share of inland capture fisheries production, it must be taken into consideration that figures for landings of inland capture fisheries are sometimes difficult to obtain, and in many cases, likely underestimated. This is also the case for studies on fish consumption based on household surveys, which suggest that the figures for inland fisheries production can be two to three times higher than are reported in official catch statistics.

In the case of inland capture fisheries, almost half of the global production in 2001 came from eight Asian countries and about a quarter from China alone.

There are diverse inland waters of importance for fisheries, including open river systems that are greatly influenced by annual variations in rainfall and host a large number of fish species; lakes that are less influenced by short-term climatic effects and have a smaller variety of fish species; and reservoirs that have the characteristics of both rivers and lakes.

In accordance with the Code of Conduct for Responsible Fisheries (FAO, 1995), states and users of living aquatic resources have the obligation to ensure their effective conservation and management.

Current fisheries management regimes have generally three components: fisheries management through the regulation of fishing and other human activities; fish management through stocking and introduction of species; and environmental management. The latter includes negotiating and arranging for adequate environmental conditions and promoting physical improvements to enhance the support capacity of the environment for fish.

Fisheries management should further promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations to enhance food security, alleviate poverty and contribute to sustainable development. The promotion of economically viable fishery activities and enterprises that generate sustainable employment and income are an important element in this endeavour.

In the case of inland fisheries (FAO, 1997) the primary responsibility for the management of the aquatic environment usually falls outside fisheries authorities, and fisheries' interests and concerns are often peripheral to policy-making. It is important to integrate fisheries with other uses of water bodies such as energy generation, irrigation and navigation.

In most inland waters, principal constraints on the system and its living components come from human activities other than fishing. In the case of rivers and lakes, for example, construction of dams and channels, loss of lateral connectivity through loss of floodplains, and siltation pose threats to fish production and livelihoods of rural populations. Government at all levels, from central to local authorities, should set up mechanisms to conserve living aquatic resources that are compatible with the sustainable use of basins and aquatic ecosystems for the whole range of economic and social purposes. It should be kept in mind that conservation is always less expensive and more economical than rehabilitation or restoration.

### *The situation in Asia*

Inland fishery resources in Asia are noted for their variety, biodiversity, rich ecological heritage and production potential. Rivers and floodplains are the prime source of fish germplasm and thus crucial to the conservation of fish biodiversity. Millions of fishers and their families depend on rivers and floodplains for their livelihoods. The present level of fish production from inland waters is below potential, in many cases due to low priority given to the sector by governments and investors. Little is known about the financial and economic performance of different inland fisheries in Asia and more studies need to be done at the regional level.

Commodities from freshwater inland fisheries play an increasingly important role in the regional trade of fish and fish products. The commercially most important products are made from catfish, freshwater prawn, carp, tilapia and eel. Little information is available, however, on marketing channels of inland fishery products and on consumer demand and preferences. There is a need for marketing research at the international, regional and domestic level with a special focus on inland fishery products.

The main threats to sustainable inland fisheries in Asia are: the reduction of survival space and the modification of habitat of fish and aquatic organisms; deforestation; pollution of water bodies and the aquatic environment; overfishing and destructive fishing practices; and local conflicts in the management and utilization of migratory fish stocks and water bodies. Other main threats are the lack of capital needed for the development and rehabilitation of inland fisheries, and related to this, the lack of awareness of financial institutions of the investment and credit needs of inland fisheries.

Other constraints to proper and sustainable utilization of inland waters include: short-term leasing policies of open water bodies; inadequate conservation measures; inadequate infrastructure for fish hatchery and nursery activities and post-harvest handling and marketing; inadequate data on current and potential levels of exploitation of water bodies. Further constraints are inadequate financial assistance, investment support and credit supply to inland fishers, and the exploitation of fishers and primary producers by traders.

### *Opportunities for inland fisheries development, conservation and financing*

In general terms, possible measures to overcome the constraints and move towards the sustainable use and rehabilitation of inland fishery resources are:

- improving habitats in rivers, floodplains and other inland waters;
- facilitating fish migration through retrofitting of dams with fish passes and by constructing appropriate fish passage facilities when new dams are built;
- conserving wetlands;
- training and socially mobilizing fishers and their associations;
- creating civil society organizations such as self-help groups (SHGs) and their federations to reduce the negative influence of traders and middlemen, and to promote active participation of inland fishers in the use and management of inland fishery resources;
- upgrading skills of extension workers;
- improving infrastructure with regard to hatchery and nursery units, landing centres, transportation, marketing, cold storages and ice plants;
- promoting effective microfinance programmes and institutions, and improving access to investment credit and working capital credit facilities;
- introducing insurance facilities for fishery assets and life and health insurance facilities for fishers; and
- introducing long-term leasing policies for publicly owned open water bodies to encourage investment and sustainable development inputs and efforts.

### **3.2 Socio-economic characteristics of inland fisheries and inland fishers**

Inland fishers (Welcomme, 2001) are far from a homogeneous group. In Asia, most inland fishers belong to the rural poor and are indebted to middlepersons and moneylenders. While some inland fishers own their fishing gear and craft, most work on a share basis or as labourers. In some areas, there is an open access to inland water resources, but there is an increasing tendency to limit access to these previously open resources and charge fees for access through leases and licences. Often, entrepreneurs and local businessmen acquire the fishing rights and levy a charge on fishers, in cash or kind, or employ them to fish for them.

Inland fishers can be subdivided according to how they use the resource. Full-time fishers are one of the smaller stakeholder groups dependent on inland capture fisheries. They are found in or around larger water bodies where there are sufficiently large quantities of commercially valuable fish year round. Full-time fishers may also seasonally migrate between a number of different habitats or river sections. The livelihoods of full-time fishers depend greatly on the profitability and the yield of the fishery as their only or major source of income. Most of the catch of full-time fishers is sold for cash, while a part might be retained for family consumption.

Many inland fishers are part-time and occasional fishers who have other important sources of income, such as agriculture, urban labour or transport. A part of their catch is usually sold for cash while another part is retained for family consumption. Such fishers may also depend greatly on the profitability of the fishery since this is likely to determine the percentage of the time they allocate to fishing. In the case of fishers who are also farmers, fishing is usually practised during the season when no planting or harvesting needs to be done.

Subsistence fishers mainly fish to supplement the family diet during slack periods in their daily schedules or seasonal calendars. Subsistence fishing in inland waters can be a last-resort occupation for the landless, the widowed, women and children.

Recreational fishers do not normally depend on inland fisheries for employment, income or food, but enjoy fishing as a temporary pastime. Recreational fisheries are defined here as “fisheries conducted by individuals primarily for sport but with a possible secondary objective of capturing fish for domestic consumption but not for onward sale” (FAO, 1997). Recreational fishers are often external to the rural milieu where they practise their sport. They can provide important contributions to fish and habitat conservation. Concern of recreational fishers with the fishing habitat is driven

by a desire to protect the characteristics that they value. However, recreational fisheries can also damage commercial fish stocks through the loss of gear and catching breeding fish. In inland waters they provide employment and income to hundreds of thousands of people throughout Asia. Recreational fishers in Asia spend considerable amounts of money for their fishing activities on fishing tackle, fishing permits, harvest charges, boats, travel and accommodation. Economically viable activities that support the sustainable development of recreational fisheries and aim at reducing conflicts between recreational and commercial fishers should be eligible for microfinance and credit support.

Other stakeholders involved in inland fisheries derive their livelihoods from either side of the fishery: upstream, by supporting or providing inputs to catching activities; or downstream, by being part of the supply chain between fisher and ultimate consumer. In Asia, the same individual can be involved both upstream and downstream as supplier and manufacturer of inputs and infrastructure, formal or informal financier of fishing, fish processor, transporter, wholesaler, trader and/or retailer, as well as in other functions.

#### **4. LENDING POLICIES AND PROCEDURES**

Credit and microfinance should be supported by effective measures of government authorities and other stakeholders that aim to reduce poverty through improved inland capture fisheries management, conservation and fishery resources enhancement. This requires a better integration of fisheries development within an overall ecosystem and a rural development approach, as well as the adoption of a precautionary approach. Financing institutions and funding agencies should support development projects only on the basis of sound environmental impact assessments that take into due consideration fisheries management, and conservation needs and interests.

Cooperation and coordination between the fisheries and other sectors concerned with rural development and water resources management need to be enhanced, and stakeholders from the fisheries sector need to be involved at the earliest possible stage to ensure the long-term benefits of credit and microfinance interventions. Further, there is a need to consider the social and economic benefits of fisheries on a local scale and for improved fisheries data collection and dissemination for better planning of fisheries development in order to better target and tailor credit and microfinance programmes to local needs and requirements.

While the selection of target groups for microfinance programmes in inland fishing communities should be based on poverty and income levels of households, the consideration of poverty and income levels to be used as eligibility criteria should be dependent on country and local contexts.

##### **4.1 Target groups and their microfinance and credit needs**

Microfinance is needed in inland capture fisheries, particularly by poor households in fishing communities. Experiences of microfinance institutions have shown that there is a demand for savings and credit services among the poor that is rarely met because they do not have access. Experiences show that when the poor do get access to credit and microfinance services, they are able to save and repay their loans. Microfinance should help these households increase their income from fisheries activities and their general income-earning capacity through the promotion of other income-generating activities and micro-enterprises, both inside and outside the fishery sector, to be undertaken by household members. Microfinance support to inland fishing households should further support urgent consumer and other social needs related to their quality of life and smoothen consumption patterns, particularly during lean and off-seasons when little or no income or food is generated. Microfinance should help in managing risks better and reducing economic and social vulnerability by promoting mutual insurance, assistance mechanisms and other means.



Microfinance should assist and empower women, in particular, in inland fisheries. Women play an important role in inland fishing communities, which includes social and economic responsibilities and duties, both within and outside their households. They are directly involved in fish capture and culture, fish processing and marketing, as well as in livelihood activities other than fisheries that are important for augmenting household income during periods of scarcity and seasonality often experienced in inland fishing communities. Their involvement in microfinance often not only benefits them personally, but also their households and communities.

Since demand for financial services in inland fisheries is diverse, microfinance is only one of the means to meet this demand. Characterized by small loans and short lending periods, microfinance has inherent limitations when it comes to financing capital investments that need to be undertaken in the inland fisheries sector. These investments are necessary for growth and development, and most importantly, for the promotion of sustainable and environmentally sustainable fishing, fish processing, management and conservation practices and regimes, which are essential for the overall health of inland fisheries.

Target groups for credit in inland fisheries should include: individuals and groups of inland fishers in inland fishing communities, particularly women; inland fisher and fish producer associations; fish seed and feed producers; fish traders; fisheries and other government departments and institutions concerned with the management, conservation and use of water bodies; local government authorities; and NGOs.

The medium- and long-term credit needs of inland fisheries are generally for the purposes of:

- modernization and replacement of fishing craft and gear through acquiring ecologically sustainable and economically viable production inputs;
- navigational and safety equipment;
- equipment for on-board preservation and handling of catch;
- small- and medium-scale fish processing equipment and facilities;
- fish transportation and marketing facilities;
- fish product development and value addition;
- establishment and modernization of hatcheries and nurseries;
- small infrastructure works such as landing places or wharfs.

In addition to providing microfinance and credit for traditional and innovative production-oriented investments in the inland capture fishery sector, financial institutions, including governments and international funding agencies, may consider providing funds for project components designated for habitat conservation or improvement and for related research activities. Medium- and long-term credit should also be provided to: producer associations, and fisheries and other government departments and institutions concerned with the management, conservation and use of water bodies; local government authorities, NGOs and other bodies for investments into inland capture fishery enhancements through:

- introducing appropriate new fish and other aquatic species;
- stocking indigenous species in open aquatic environments;
- engineering the environment through shelter and habitat creation;
- constituting an artificial fauna of selected species;
- eliminating invasive species;
- fertilizing waters to raise productivity;
- modifying water bodies;
- conducting macro- and micro-economic and financial feasibility and valuation studies of inland fishery enterprises and of habitat and fisheries-related activities;
- conducting marketing research for inland fishery products in both domestic and export markets;
- establishing monitoring control and surveillance schemes;



- setting up initial implementation phases of inland fisheries management schemes based on cost-recovery.

#### 4.2 Loan size and purpose

Loan amounts should be solely based on the purpose of the loan, the borrowers' debt and absorptive capacity, and on the regulations followed by a given financial intermediary. Underfunding of credit and investment needs should be absolutely avoided since it can very negatively affect investment profitability. Loans should not be limited to fisheries-related activities only, but include other livelihood opportunities available to members of the inland fishing community. The guiding criteria for both fishery and non-fishery projects should be their viability, sustainability and profitability, as well as their contribution to the long-term conservation and enhancement of inland fishery resources.

As can be seen from the credit and microfinance needs listed above, a very wide variety of loan sizes can be expected, ranging from very small loans related to small-scale fish trading, to medium-sized loans related to the purchase of fishing craft and gear, to very large loans related to shelter and habitat creation and the modification of water bodies.

In the case of microfinance, lending usually starts with small loans, including those for social and consumption needs, which gradually increase based on the repayment performance of the borrower.

#### 4.3 Interest rates, lending procedures and repayment periods

As with other rural credit and microfinance operations, interest rates should be market-oriented in order to promote the development of economically and financially viable enterprises that would be sustainable in the medium and long term. The use of market-oriented interest rates also supports the emergence of healthy and viable financial institutions and intermediaries, which can service inland fisheries clients in the long term.

As for other rural sectors, lending procedures for inland capture fisheries should be flexible, timely and demand-oriented. Time taken for processing of a loan application should be kept to the minimum and loans should be disbursed when the funds are actually needed, for example, at the beginning of a particular fishing season to maximize investment profitability.

Loan repayment periods and frequency of loan repayments should be based on the borrower's cash flow. In the case of capture fisheries and capture fisheries-based marketing and processing activities, no or only small amounts of repayment should be scheduled during lean and off-seasons, while repayment should be scheduled at regular intervals during fishing seasons.

In the case of all production-related loans, loan repayment periods should be related to the amortization period and cash flow of the investments, and should be kept as short as possible to keep the amount of interest to the minimum. Early repayment of loans should be encouraged and incentives devised.

A wide variation of loan repayment periods is recommended in accordance with the various purposes for which loans are required and used in inland fisheries. In the case of microfinance and small-scale fish processing and vending activities, short-term loans to be repaid in less than one year might be appropriate, while most capital investment loans for acquiring fishing boats or fish processing facilities and equipment may be considered medium-term loans with repayment periods from three to five years. Loans for the establishment of hatcheries, the modification of water bodies and construction of fish passes depend on the amount of funds involved, and the amortization period may be considered long-term loans with repayment periods of more than five years. With a view to ensure the proper use of a loan for the intended purpose as well as

timely repayment, it is recommended to follow a loan supervision schedule. The loan supervision schedule should be mentioned in the loan agreement. Depending on the type of loan and the borrower, different time intervals and methods of monitoring may be followed and different institutions may be involved. In the case of loans to local or federal governments, and loans for habitat improvement of rivers, floodplains and other inland waters, for example, the occasional monitoring of loan recovery records might be sufficient. In the case of microfinance programmes for inland fishers, however, regular field visits for the supervision of loan use may be necessary, which offer an opportunity to establish close contact with borrowers and to jointly identify and solve any problems that might arise.

As in other loans, in case of non-repayment of inland fisheries loans, it needs to be determined whether the borrower is genuinely unable to repay the loan or whether it is a case of willful default. In the latter case, if the borrower cannot be convinced to resume repayment of the loan, the financial institution will have to send reminders and then take legal steps according to their normal procedures. In case of genuine default, for example, due to an accident, failure of a fishing season, or a natural calamity, it needs to be examined whether it is possible for the borrower to resume a profitable fishery enterprise. Additional credit can be provided for this purpose and the outstanding repayment of the present loan can be rescheduled. Technical advice from the fisheries department and other fishery entrepreneurs should be obtained before decisions are made.

#### **4.4 Documentation and collateral requirements**

Generally, documentation and collateral requirements in microfinance and rural credit operations involving inland fishing communities should be kept simple. The documents to be completed and maintained should be sufficient to properly appraise requests for loans and financial assistance, both technically and financially, assess the repayment capacity and willingness of the borrower, and monitor and supervise loan use and recovery. (Examples of forms may be found in Tietze and Villareal, 2003 and Dorsey, Ryhanen and Tietze, 1989.) Documents include:

- a loan application document with all essential biographical and residential information of the borrower; the requested amount and purpose of the loan; the size and characteristics of the household and its assets, including non-fisheries assets, and all sources of monthly household income and expenditure; information on any outstanding debts of the household and its members; and on the sources from which the loan is intended to be repaid;
- in the case of loans for productive fisheries and non-fisheries activities, a simple business/production plan with physical and financial details of the planned investment and the anticipated project costs and earnings, including cash flows to be attached to the loan application;
- a loan agreement that clearly specifies the loan amount, the conditions under which the loan is to be disbursed, used and repaid, and all responsibilities and privileges of lender and borrower;
- a simple technical and financial appraisal form of the loan request, which justifies the acceptance or rejection of a loan request;
- other documents and records to be maintained by financial institutions, such as account ledgers, books of receipts, credit and savings registers, passbooks/vouchers, and borrowers' files.

The technical and financial viability of the proposed activity and the repayment capacity of the borrower should be the main consideration when approving or rejecting a loan request.

As far as the use of collaterals is concerned, a flexible mix of collaterals is suggested, which could include a hypothecation of the production assets supplied on credit, lease deeds of water bodies, fishing licences, insurance cover and other collaterals. In the

case of microfinance for inland fishing communities for both groups and individuals, group guarantees and third party guarantees of other microfinance beneficiaries should be accepted as collateral.

#### 4.5 Savings and insurance services

Many inland fishing households save to reduce their vulnerability from natural calamities and other emergencies in lean or off-seasons, and for investment. These households have a demand for secure and convenient institutional savings and deposit services. Savings facilities should be offered to households that do not yet save in order to encourage the development of savings habits. Savings facilities and programmes should meet the following criteria:

- have flexible collection arrangements set up in terms of savings amounts, place and time;
- support savings education and motivation programmes and focus on strategies and benefits of savings and features of savings products;
- include savings products such as savings for health and life insurance, housing and education of children;
- have accountability, control and trust built into the savings mechanisms.

Voluntary savings programmes can also be included in the context of microcredit programmes, where they act as collateral and a pre-condition for receiving a loan, an element of risk management within groups of borrowers, and a tool for learning financial discipline and planning.

Insurance can be regarded as an effective risk management tool for financial institutions and organizations providing microfinance and credit services. Unfortunately, insurance services are not available to most inland fisheries in Asia. In countries where insurance services are available, they can help reduce the risks for financial institutions that provide credit for investment and productive purposes to the inland fishery sector. In such cases, one of the conditions or requirements for accessing credit may be having an insurance policy, which may then act as loan collateral.

### 5. INSTITUTIONAL ARRANGEMENTS

Close cooperation between all stakeholders, local management authorities, NGOs, government bodies and financial institutions responsible for financing agriculture and fisheries is crucial to counter the threats to inland waters and fisheries and take advantage of opportunities for sustainable inland fisheries development, conservation and financing.

#### 5.1 The role of governments

Governments – fisheries departments, local government authorities, natural resources departments, government agencies responsible for ecology, environmental protection and other concerned government agencies – should cooperate to create an enabling legal and regulatory framework for the development and conservation of inland fisheries. Among other things, this framework should include: suitable fishing and fish farming regulations; the establishment of fish sanctuaries for the conservation of biodiversity; conducive land use planning, zoning and waste disposal regulations; environmental protection regulations; and appropriate leasing policies for public water bodies that facilitate access of inland fishers and their associations to fishery resources. The framework should also include regulations for a community-based management or co-management scheme for inland fisheries and water resources that allow for the participation of inland fishers and other stakeholders.

The creation of a fishery finance policy framework, which could be part of a larger rural and agriculture finance policy framework, is important to enable the sector to efficiently and effectively access financial resources. Inland fishers are affected by

different policy domains, including macroeconomic, financial sector, and fisheries sector policies. A successful fisheries financial policy framework could help integrate the various policy domains at the national level to provide the best possible support to the sector. Governments have a leading role to play in this area, while the views of all relevant stakeholders should be taken into proper consideration. A regulatory mechanism should be formulated whereby NGOs can transform themselves into microfinance institutions.

Government is also called upon to provide adequate infrastructure for inland fisheries development and conservation, particularly in rural areas. Among other things, this includes the construction of rural roads, supply of electricity, water and providing solid waste disposal facilities as well as public works and investments regarding shelter and habitat creation, modification of water bodies, and the construction and operation of hatcheries, nurseries and fish landing sites.

Governments, particularly their fisheries departments and inland fisheries research and extension units, should actively demonstrate and promote improved and responsible inland fisheries practices. Together with government agencies that promote the development of vocational skills, small- and medium-scale enterprises, and with financial institutions, they should assist inland fishing communities in the formation of SHGs and associations in order to improve the economic performance of their fishery enterprises and to alleviate poverty.

With regard to credit and microfinance, government agencies such as fisheries extension services should assist fishers and financial institutions in the identification of credit needs and of sustainable and viable inland fishery enterprises. They should further assist in the technical appraisal of loan applications and in the supervision of loan use as far as technical aspects of inland fishery enterprises are concerned.

## **5.2 The role of NGOs**

NGOs can play a crucial role in all capacity-building and training aspects related to: community-based management of inland fishery resources; the formation and operation of SHGs and producer associations; the management of microfinance programmes, as well as in technical training related to the development of small and medium-scale fishery enterprises. This role should include preparing training of trainers' programmes and materials, implementing training programmes, and providing marketing assistance to SHGs and associations, such as organizing buyers and sellers meetings.

NGOs can also play a role as financial intermediaries and outreach organizations between fisher associations, SHGs and microfinance institutions. Considering the dominant role of women in marketing and post-harvest activities, NGOs should promote their cause in inland fishing communities.

In the absence of adequate government extension services, NGOs can play a crucial role as disseminators of technical knowledge at the village level. Technical personnel of fisheries departments and fisheries research and training institutes may train members and personnel of NGOs on fish breeding and rearing technologies, fish farm management, and various aspects of project formulation and implementation.

Specialized NGOs that have established themselves or that have been transformed into microfinance institutions (MFIs) are at the forefront in the development of microfinance schemes. They play crucial roles in designing, testing and disseminating innovative microcredit services, products and technologies. Some NGOs are officially registered as regulated financial institutions and perform the same services as banks.

In the promotion of inland fisheries development, conservation and poverty alleviation in inland fishing communities, NGOs should work in close cooperation with local and central government units and all stakeholders. They can also provide an important link to bi- or multilateral donors, which could support the development of inland fisheries through funding or otherwise.

### 5.3 The role of fisher associations, cooperatives and self-help groups (SHGs)

Fisher associations and fishery cooperatives can act as independent financial intermediaries by providing loans and microfinance to members and non-members, including SHGs. They might use their own funds for lending as well as those borrowed from financial institutions. Fisher associations and fishery cooperatives can be crucial in efforts to alleviate poverty, empower and motivate rural communities to actively participate in efforts to conserve, rehabilitate, manage and use inland fishery resources in a sustainable manner, and to provide much needed financial support to this endeavour.

SHGs in inland fishing communities, whether functioning as part of fisher associations, fishery cooperatives or independently, can play a catalytic role as financial intermediaries, loan guarantors and as promoters of sustainable inland fisheries development and conservation. SHGs should be small, socially and economically homogeneous groups of 15 to 20 members who voluntarily come together for mutual benefit and support. The groups should be self-managed and practise collective leadership in credit and savings management. Members of SHGs usually lend among themselves, using their own savings before external funds are utilized. Because of the homogeneity of members, loan default risks such as potential loan diversions and defaults are minimized since members know each other well.

SHGs, fisher associations and fishery cooperatives can assist credit and microfinance programmes operated by financial institutions, NGOs, government and donor agencies in the supervision of loan use and loan repayment so that any problems occurring can be identified as early as possible and remedied.

### 5.4 The role of financial institutions

Financial institutions should put more emphasis on financing inland fisheries. Joint efforts should be undertaken by financial institutions, fisher associations and fishery cooperatives, NGOs and concerned government agencies to promote the setting up of SHGs in inland fishing communities that are capable of managing microfinance and mutual support programmes for the benefit of their members.

Financial institutions should undertake a review of the economic performance of existing inland fishery cooperatives and fisher associations. This review should identify weak and strong points, and make recommendations on how to strengthen the economic performance and credit-worthiness of cooperatives and individual fishers. Ultimately, a credit rating of inland fishery cooperatives and fisher associations should be introduced and regularly updated, which should eventually improve the access of these organizations to institutional and other sources of credit.

Financial institutions should train some of their staff on inland fisheries and on financing inland fishery small and medium-scale enterprises. Training should also be provided on microfinance and poverty alleviation in fishing communities. Training materials for this purpose are available with APRACA.

Financial institutions might wish to employ fisheries experts to check over the appraisal of fisheries loan applications, supervise inland and other fishery loans, and carry out follow-up activities. Such activities may include rescheduling loan repayment, providing additional lending and other financial services. Loan supervision and follow-up to loan disbursements are important steps in the lending process since they support the timely and full repayment of loans, help strengthen the relationship between financial institutions and their clients, and enhance financial institution's knowledge on a new economic sector, client and target group such as inland fisheries.

### 5.5 The role of donors

Donors can play an important role in all training and capacity-building matters related to inland fisheries development, conservation and financing in the context of rural

credit and microfinance programmes. Technical assistance can be provided through the fielding of experts and trainers, partial or full funding of training and capacity-building programmes, and preparation, production and field-testing of training materials.

Donors can also play a role in disseminating information on lessons learned, success stories, and training and other materials at the subregional, regional or global level. They can organize seminars and workshops as well as carry out comparative studies and technical exchange visits for mutual support and assistance between countries in the same region with similar constraints to and opportunities for the development, conservation and financing of inland fisheries – important tools in the process of information dissemination and mutual support.

In providing support to inland fisheries and its financing, and to poverty alleviation in inland fishing communities, donors should work with APRACA, which has been promoting access of the small-scale fisheries sector to rural credit and microfinance services for many years. In cases where funds for providing microfinance for inland fisheries and inland fishing communities are not available locally, donors can assist in providing these funds on a start-up basis. Providing funds to microfinance institutions should be done in cooperation with APRACA, which is in the process of establishing its own fund for this purpose.

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