

# Fisheries and Poverty Reduction

FMSP Policy Brief 1



## Key messages

- Achieving the Millennium Development Goals to eliminate extreme poverty by 2015 requires a concerted and unified effort by governments and the international community.
- When fisheries are well managed, they can contribute to reducing poverty. Fisheries provide benefits at national and local levels, providing revenue to the state, employment to millions of fishers and people in associated trades, and food security to poor people.
- Many fishers are poor, and targeting development interventions at fishing communities can help reduce poverty, for example by improving fisheries management. However, many poverty problems of fishing communities have non-fisheries causes, and are often related to institutional issues, requiring broader cross-sectoral support.
- To increase the contribution that fisheries make to poverty reduction, management is needed that ensures sustainability of fish stocks and equitable distribution of the benefits. To achieve this, policy-makers must recognise the important contributions that fisheries make at both national and local levels.

This brief examines how fisheries can contribute to poverty reduction, with examples from the Fisheries Management Science Programme (FMSP), and considers the implications for future work priorities. This brief is one of a series of five concerning fisheries and development issues produced by the FMSP.

## Poverty and fisheries

Combating poverty is high on the agenda of governments and the international community. In September 2000, 189 nations committed themselves to work towards the Millennium Development Goals (MDGs), a set of 8 goals aimed at halving the number of people living in poverty by 2015. Fisheries can play a role in achieving these goals (see Box 1).

Fisheries are a source of income for over 100 million people. The majority are employed in small-scale fisheries in the developing world; 90% are from Africa and Asia, where poverty among coastal and rural communities is often particularly high. In many developing countries, fisheries and poverty are synonymous. but although many fishers are poor, fisheries are also capable of generating great wealth. For fisheries to contribute to poverty reduction, the distribution of that wealth must be addressed.

However, too much fishing pressure is causing overexploitation of fish stocks and threatening the contributions they can make to poverty reduction. One quarter of all fish stocks are exploited beyond sustainable levels, and half of all stocks are fully exploited, with no potential increases in production. International awareness and concern about fisheries is growing. In the World Summit on Sustainable Development in 2002, there was an international call to reverse the impacts of overfishing.

Overfishing can reduce the amount of fish available to fishers, lead to a loss of jobs, increase the cost of fish, and reduce an important revenue stream to developing

countries. When fisheries collapse due to overfishing, it is the poor who are least able to cope with the loss of livelihoods and source of protein, as they may have few other options available to them. For fisheries to continue providing benefits to poor people and to developing countries, they must be managed so that exploitation is kept to within sustainable limits.

Poverty reduction in fisheries encompasses two aspects:

1. Enhancing the contribution that the fisheries sector can make to poverty reduction;
2. Reducing poverty in fishing communities.



Small-scale fishers, such as these fishers in India, provide half the world's fisheries production for direct consumption. One billion people rely on fisheries as their main source of animal protein. Photo by: S.F.Walmsley

## Box 1: The Millennium Development Goals and the potential contributions of fisheries

### 1. Eradicate extreme poverty and hunger

Fish production provides important food security benefits for poor people and a source of income for some 38 million people worldwide. Government revenue from industrial fisheries supports economic growth and can be specifically directed towards pro-poor investments.

### 2. Achieve universal primary education

Money earned from fisheries provides an important contribution to household income, which can increase the likelihood of child education. The nutritional benefits from fish also help children's development and learning abilities.

### 3. Promote gender equality and empower women

Women often play an important role in the processing and marketing of fish, which can provide them with an important income-earning activity and some control over household spending.

### 4. Reduce child mortality

Fish is a vital component of the diet in many parts of the world, complementing the carbohydrate-based diet of the poor, and providing an important part of children's nutrition which helps their development.

### 5. Improve maternal health

Nutritional benefits from fish, and income from fisheries, can improve maternal health and reduce the chances of maternal mortality.

### 6. Combat HIV/AIDS, malaria and other diseases

Likewise, the nutritional benefits of fish can help strengthen the immune system and reduce susceptibility to disease.

### 7. Ensure environmental sustainability

Effective management of fisheries to ensure their sustainability and minimise negative impacts on fish stocks and associated ecosystems contributes to ensuring environmental sustainability.

### 8. Develop a global partnership for development

Fish stocks cross national borders so international cooperation and partnerships are essential for their successful management. Fish are among the most widely traded goods worldwide and are important to millions of poor people's livelihoods. Governance must encourage trade that promotes development whilst recognising and protecting the rights of those dependent on fishery resources.

## The contribution of fisheries to poverty reduction

### *Fisheries are economically important*

Fisheries provide an important source of revenue for many developing countries (see also Brief 2). Net fisheries exports amounted to US\$17.4 billion in 2002 in foreign exchange earnings for developing countries, more than the net exports of coffee, cocoa, sugar and tea combined. The total export value of the world trade of fisheries and aquaculture products was US\$58.2 billion in 2002 [1], half of which accrued to developing countries. Developing country governments also receive revenue from licensing foreign fleets to access the fisheries in their Exclusive Economic Zones (EEZs).

Government revenues from industrial-scale fisheries can contribute to overall economic growth in a country. In Mozambique, for example, fisheries account for 28% of total merchandise exports (FAO, 2000). It is recognised that economic growth is crucial for making sustained progress towards the MDGs [2]. Growth can be beneficial to the poor, but not everyone always benefits equally from growth and there is disagreement over the extent to which such benefits 'trickle-down' to the poorest groups [3]. 'Pro-poor growth' can be more effective at decreasing poverty, by promoting the redistribution of benefits so that low-income growth is greater than overall growth. Additionally, revenue generated from fisheries can be reinvested in public goods and infrastructure, including services such as health and education for the poor.

### *Fisheries are important to food security*

Fisheries provide a key source of protein, micronutrients, essential fatty acids and minerals. They contribute to food security by providing an accessible and cheap protein source for the poor that complements other locally available food sources (see also Brief 3). Over one billion people worldwide rely on fish as their main source of animal protein. Fish are a particularly important source



Industrial fisheries, such as tuna, provide revenue to the state which contributes to economic growth. Photo by: R.Gater

of protein in developing countries, where protein intake may be low. For 2.6 billion people in developing countries, fish provides over 20% of total animal protein intake, compared with 8% in developed countries.

### *Fisheries form a key part of livelihoods*

Fisheries are an important part of the livelihoods of millions of people around the world (see also Brief 4). They provide a source of food, employment and income. For many poor families, fishing is a way of reducing their vulnerability to risks by supplementing and diversifying their incomes. They also provide a 'safety net' for the poor when other economic opportunities or food sources are limited.

Fishery-related livelihoods are complex and dynamic, and fishing may be engaged in full-time, as part of a mixed livelihood strategy, or as a seasonal fall-back. There are often differences according to ethnic, cultural or socio-economic group, and men and women often have different roles in fisheries.

## Enhancing the contribution of fisheries to poverty reduction

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Fisheries contribute to poverty reduction in a number of ways, but are there any ways that this contribution can be increased?

### **Effective management for sustainability**

Overexploitation and other threats to fisheries such as habitat destruction have negative impacts on their productivity and sustainability. When a fishery is overexploited, its productivity is reduced and there is a greater likelihood of it collapsing. Reducing fishing effort to rebuild fish stocks involves a short-term cost, but is essential to be able to maximise the potential wealth that can be generated from fisheries in the longer term. Whilst social and economic benefits from fisheries may take priority for decision-makers, without biological sustainability of the fish stock, those benefits cannot be realised. Fisheries management therefore needs to address the issue of sustainability of fish stocks to continue providing these benefits.

### **Coherent policy objectives**

Fisheries often require multiple management objectives to meet economic, social and biological goals. Where these conflict with each other (e.g. maximising export revenue and increasing a fishery's contribution to domestic protein supply) there is a risk of neither being achieved. The trade-offs must be recognised, and coherent policies must be developed that first recognise the ways in which fisheries can contribute to poverty reduction, and then maximise that contribution.

### **Governance and capacity building**

Strong institutions are a prerequisite for good governance in fisheries. Appropriate governance structures for fisheries vary depending on the type of fishery, the scale at which it operates and the stakeholders involved. For example, a small-scale localised fishery differs from a highly migratory fish stock straddling various territorial waters (see also Brief 5). There are increasing moves towards greater participation of resource users in management, and decentralisation of decision-making. This implies a change of roles for fisheries management authorities, and capacity building is necessary to enable them to fulfil these new roles.

## Reducing poverty in fishing communities

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Many fishing communities are poor and lack access to basic services and infrastructure. This is often exacerbated by their remote locations. However, this also provides an opportunity for tackling poverty through targeted interventions for fishing communities.

The Code of Conduct for Responsible Fisheries (CCRF) recognises the important contributions of the small-scale sector to employment, income and food security.

### **Distribution of benefits**

Who receives the benefits from fisheries is fundamental to the role they can play in poverty reduction. Where industrial fisheries provide revenue to the state, they can contribute to poverty reduction if the distribution of that revenue promotes pro-poor growth, is reinvested in the economy to promote general economic growth, or is invested in services and infrastructure for the poor. In the case of small-scale fisheries, the allocation of use-rights or access rights is fundamental in controlling effort and in determining who benefits from fisheries. Rights can be allocated specifically to the poor, and to those dependent on fisheries, to avoid 'capture' of use-rights by influential individuals [4].

### **Box 1: FMSP contributions to poverty reduction through fisheries research**

Because of the scale of fish stocks, and the difficulties of managing them, fisheries cannot be managed at a household or community level. As a result, much FMSP work has occurred at the **enabling level** to strengthen and support the development of capacity of institutions responsible for management. Impacts on poverty reduction are therefore sometimes indirect.

Examples of impacts from FMSP on poverty reduction in fisheries are:

- Increased incomes of poor communities from inland fisheries through enhancement techniques including stocking (Projects R7335 and R8292);
- Stock assessment tools for fisheries which enable appropriate management targets to be set, reducing vulnerability to overexploitation (Project R8468);
- Increased food security through increasing production of fisheries species (Project R7917), and managing water flow regimes in inland fisheries to maintain fisheries production (Project R8486).
- Participation of fishers in management and stock assessment, enabling them to have a voice in the decision-making process (Projects R8397 and R8464).
- Increased government revenue from industrial fisheries that contributes to economic growth, through Control of Foreign Fishing (Project R8463).

However, it also recognises their potential vulnerability, arguing that they should receive special assistance and protection in order to achieve 'a secure and just livelihood'.

Such interventions may or may not be directly linked with fisheries resources. Actions that tackle the sustainability of fish resources and their effective management are essential for maintaining the benefits

derived from fisheries and reducing poverty. However, poverty in fishing communities often has non-fisheries causes. Béné [5] concluded that poverty is usually more linked to institutional factors than to the fish resource itself. Interventions therefore need to take an holistic approach to the identification of the causes of poverty and possible routes out of it. The Sustainable Fisheries Livelihoods Programme (SFLP) in West Africa, concluded that the factors that contribute to poverty in fisheries stakeholders included: lack of information, skills and education; poor status of fisheries resources; lack of credit, poor organisation and political representation; unexpected losses of human or other capital assets; lack of alternative employment; and lack of infrastructure and access to markets.

Cross-sectoral initiatives that tackle the root causes of poverty, whilst maintaining and increasing the benefits that fisheries can contribute, provide the most promising means of effectively reducing poverty in fishing communities.



Fisheries provide important contributions to livelihoods and food security for millions of small-scale fishers worldwide, such as these fishers in West Bengal, India. Photo by: R.Arthur

## Priorities for future work

Whilst much progress has been made towards understanding the contributions that fisheries can make to poverty reduction, and to achieving the Millennium Development Goals, further support is needed in the following areas:

- Research into the links and underlying causal factors between fisheries and poverty, and development of strategies to maximise the benefits derived from fisheries and reduce the poverty and vulnerability of fishers.
- Establishing appropriate governance structures and strengthening fisheries institutions dealing with management, especially in their ability to manage fisheries sustainably.
- Raising awareness of the importance and contribution of fisheries to poverty reduction, and promoting their inclusion in national development plans and poverty alleviation strategies, particularly through better communication of research messages to policy makers.
- Supporting the delivery of better services to poor and marginalised fishing communities.

## References

- [1] FAO 2004. The State of World Fisheries and Aquaculture.
- [2] DFID & HM Treasury 2005. From commitment to action: human development and growth. September 2005.
- [3] Thorpe, A. 2005. Mainstreaming fisheries into national development and poverty reduction strategies: current situation and opportunities. FAO Fisheries Circular No. 997. Rome: FAO.
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- [5] Béné, C. 2002. Poverty in Small-scale Fisheries: A Review and Some Further Thoughts, Small-Scale Fisheries, Poverty and the Code of Conduct for Responsible Fisheries, Proceedings of the DFID/FAO/CEMARE SFLP International Workshop, Cotonou (Benin), November 2001.

## For more information:

Further information about fisheries and development issues can be obtained from the Fisheries Management Science Programme (FMSP) and Marine Resources Assessment Group (MRAG) Ltd.

### Fisheries Management Science Programme:

The FMSP website has a searchable database where full-text project documents and reports can be downloaded:

[www.fmsp.org.uk](http://www.fmsp.org.uk)

### Marine Resources Assessment Group Ltd:

18 Queen Street  
London  
W1J 5PN  
United Kingdom

Tel: +44 (0) 20 7255 7755  
Fax: +44 (0) 20 7499 5388  
Email: [enquiry@mrage.co.uk](mailto:enquiry@mrage.co.uk)  
Web: [www.mrage.co.uk](http://www.mrage.co.uk)

This FMSP Policy Brief is one of a series of five. Other briefs in this series are:

2. Fisheries and Economic Growth
3. Fisheries and Food Security
4. Fisheries and Livelihoods
5. Fisheries and Governance

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