

The purpose of these *Key Sheets* is to provide decision-makers with an easy and up-to-date point of reference on issues relating to the provision of support for sustainable livelihoods.

The sheets are designed for those who are managing change and who are concerned to make well-informed implementation decisions. They aim to distil theoretical debate and field experience so that it becomes easily accessible and useful across a range of situations. Their purpose is to assist in the process of decision-making rather than to provide definitive answers.

The sheets address three broad sets of issues:

- Service Delivery
- Resource Management
- Policy Planning and Implementation

A list of contact details for organisations is provided for each sub-series.

This Key Sheet is one of a series on fiscal reform in fisheries⁽¹⁾.

Overview of the debate

Implementing fishery fiscal reform may be a difficult exercise. One of the reasons why economists have often rejected tax (or, more accurately, royalty) based approaches to fisheries management is because of the apparent political difficulties that they would entail despite their undoubted attraction from a purely economic viewpoint (Munro, 1993). There are increasing signs however that countries, particularly developing ones, are managing to overcome these difficulties (e.g. Vetemaa et al, 2002).

This Key Sheet considers some of the political economy aspects to fiscal reform in fisheries. Issues that will need to be considered include identifying potential winners and losers, building coalitions and managing the reform process, transparency and corruption, and the role of the State.

Key issues in decision making

Defining the issue - Due to poor management in the past, many fisheries find themselves in a difficult position, characterised by overcapitalisation and overfishing, with the potential wealth in terms of resource rents dissipated. In such circumstances, attempting to improve the situation through a fiscal reform process raises many questions of a political economy nature. The process will produce change in the nature of the exploitation system, producing winners and losers. These must be identified, and decisions taken about whether to compensate losers. Achieving change may only be possible if coalitions can be developed to provide support to the change process. Once wealth begins to be generated on a substantial scale, action will have to be taken to deal with rent seeking behaviour (including corruption). Underpinning all of this will be a clear recognition of the role of the State in rational fishery management.

Winners and losers - Where fisheries are starting from a position of overexploitation with resource rents dissipated, the potential for a net social welfare gain is likely to be large. From a financial point of view, there are, in principle, no reasons why there have to be any losers in the process. The gains from generating resource rents will be more than adequate to compensate losers and ensure that there remains a positive balance.

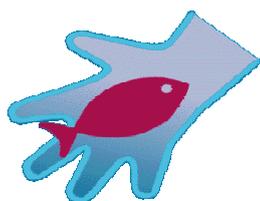
In practice however this view of the outcome of reform may be too optimistic for variety of reasons. First, the required transfers to compensate the losers may not take place. Second, even if they do they are not costless, so a proper definition of economic and social equity would have to include the transaction costs of moving the economy to the desired income distribution from that implied by the most efficient production configuration. Third, once compensation has taken place, the welfare gain *per capita* may be so small as to make little difference. (This latter argument raises again the issue of resource rent devolution⁽²⁾).

In economic analysis, fiscal reform (and reform in general of the fishery management system) aims at achieving fisheries production in the most economically efficient manner. From a political economy perspective it is important also to consider the issue of the socially equitable distribution of the benefits of fisheries production. Because of the cost and difficulty of compensating losers in practice, there may be a trade-off between efficiency and equity. At the very least, some consideration must be given to the nature of the benefits function in fishing. If, for example, benefits change only slightly with major changes in the distribution of fishing effort, then the search for economic efficiency may have major equity implications for minor efficiency effects.

Before undertaking reform, it will be necessary therefore to build bio-economic models of the fishery in order to investigate the implications of different policy scenarios. This kind of research can reveal the value of resources and the implications of different policy choices. It can also provide guidance as to the broad groups of gainers and losers and policy decisions can then be made concerning appropriate remedial action.

Economic efficiency is not an end in itself. Fiscal reform to generate resource rents through a more efficient use of resources is intended to improve the quality of life for society in general. It is important therefore to consider the extent to which some (perhaps many) people are made worse off (perhaps significantly so) as a result.

Building coalitions - Institutional reform is never easy. Fiscal reform in fishing raises many challenges. Those who depend on the exploitation of the resource are unlikely to be easily convinced that it is in their best interest to tax their activities more heavily. In fact if the fishery is currently exploited under free and open



DFID experience

- The DFID Workshop and Exchange of Views on Fiscal Reform in Fisheries took place in the context of a wider OECD-DAC ENVIRONET initiative examining issues related to environmental fiscal reform (EFR) for sustainable development and poverty reduction. Outcomes of this initiative will include a joint-agency paper on EFR - Environmental Fiscal Reform.
- DFID has also supported work on EFR in China, India and South Africa.

Centres of expertise

- Australian Bureau of Agricultural and Resource Economics - ABARE
- Department for Environment, Fisheries and Rural Affairs - DEFRA
- Department for International Development - DFID
- European Union - EU:
 - DG VIII Development
 - DG XI Environment
 - DG XIV Fisheries
- Food and Agriculture Organization of the United Nations - FAO UN, Fisheries Department
- German Technical Cooperation Agency - GTZ
- GOPA Consultants
- IDDRA
- Institut de Recherche pour le Développement - IRD
- Integrated Marine Management - IMM
- Marine Resources Assessment Group - MRAG
- National Oceanic and Atmospheric Administration - NOAA Fisheries
- Natural Resources Institute - NRI

access, the economic condition of most fishing enterprises is unlikely to be good, and the idea of paying more tax is likely to appear impossible.

In order to advance, therefore, there will be a need to build coalitions through convincing different groups of the social value of fiscal reform in fisheries. Partly there is a need for technical education to show stakeholder leaders the expected impacts of such reform.

Fishers are clearly a key stakeholder group. They are also those who stand to lose the most, at least in the short run. If a government is very determined, it will be possible to implement change regardless of what the fishers may think. Generally however it appears that change can only effectively be implemented if the fishers are convinced of the benefits to be gained. Although education may be part of the answer, the development of a partnership between the Government and fishers appears the best way to make progress. The nature of such a partnership will depend on political choices and also on the management instruments that are available.

One possibility is to move towards a co-management approach. The partnership may be sealed by adopting resource rent sharing between the public and private sectors⁽³⁾.

Transparency - The move towards reform is likely to be facilitated by a transparent approach. There is a particular need for transparency concerning the objectives of the policy, and the way in which resource rents are to be used.

At the same time however the management authorities will have to develop an opportunistic approach. The highly variable nature of fish prices, fishing costs and fish production make it impossible to calculate some optimal level of taxation. Instead, the management authorities will have to be given leeway to vary taxation according to the circumstances. The variability of the system is both a potential opportunity and a threat. It is obviously important to develop a system that takes advantage of the opportunity and minimises the threat.

The opportunity is that the variability gives the tax authorities the possibility to introduce and to vary tax rates fairly easily. Suppose, to take a somewhat simplistic example, that the fish prices were suddenly to double. If the tax authorities are able to intervene swiftly, they could simply neutralise the effect of the price rise. This would raise substantial tax revenue whilst leaving the economic position of the fishers unchanged. In practice of course the situation will be more complicated than this. There will be a need, for instance, to consider the way in which fishers build expected price changes into their investment and operating decisions. Nonetheless, the example gives an idea of what might be achieved, provided that a flexible and opportunistic tax system can be designed.

The challenge is to develop a set of institutional arrangements that allow such a system to emerge.

Rent seeking - Any system which generates large rents will find itself subject to rent-seeking behaviour. Such behaviour drives the economy so it is not inherently bad. The problem arises when the system encourages unproductive activities whose sole rationale is an attempt to obtain a rent share. Such activities leave society as a whole worse off.

Fiscal reform in fisheries that leads to the generation of resource rents may have a number of effects depending, for instance, on the nature of the management system. For instance, under an ITQ system, an increase in rents will increase the attractiveness of fishing. Rent-seeking will therefore occur, but in order to fish legally a fisher must possess an ITQ. The attempt to obtain rents will therefore push up the price of rights, thereby capitalising the rents, until it is no longer attractive to attempt to increase fishing.

Rent seeking may however occur in other ways under an ITQ system and these may not be so easy to deal with. One problem is high-grading of the catch. Depending on the fish species involved, fishers may be able to achieve a higher share of rents if they sort their catch, discarding the less valuable fish (the smaller ones for instance) and keeping only the larger ones. Such discarding may and does occur under any system but if the ITQ system worsens it, then such behaviour will undermine the system in the longer run because of the impact on fish mortality.

The clear danger with any rent collection agency is of what is called X-inefficiency. Personnel in the agency may seek rents by artificially inflating operating costs in various ways. For example, working conditions may become luxurious compared to similar activities elsewhere in the economy. Problems could include over-staffing, excessive pay and conditions for staff, and elaborately furnished offices. In order to avoid this kind of problem, the agency could be given clear objectives in terms of resource rent production. It may not be a simple problem to resolve however, because the agency will always have the best information as to what its true operating costs are.

A more pernicious form of rent seeking is corruption in its various forms. There will be a need to design arrangements to limit corruption. The fishing sector is unlikely to be different to any other sector of the

Centres of expertise *cont.*

- Netherlands Institute for Fisheries Research - RIVO
- Organisation for Economic Cooperation and Development, OECD-DAC
- Overseas Development Institute - ODI
- Support unit for International Fisheries and Aquatic Research - SIFAR
- University of British Columbia - UBC, Fisheries Centre
- University of Portsmouth, Centre for the Economics and Management of Aquatic Resources - CEMARE
- World Bank
- WorldFish Center - WFC

economy. It is simply that as fiscal reform leads to the implicit wealth of the sector being generated, it is likely to become a more attractive target. There will be a need therefore to include the sector in general anti-corruption programmes and legislation.

The role of the State - A final important political economy issue concerns the role of the State. In fact, it could be argued that in many fishery management issues, it is the State that is the problem.

A key issue is to establish who is the owner of the resource and who is the user. With the advent of 200-mile Exclusive Economic Zones (EEZ) many States have declared themselves the owners of the fish resources contained therein, but relatively few have acted as if they were the owners. As the representative of all citizens, the State has a responsibility to ensure that resources are used in an economically rational manner to achieve social objectives, whilst respecting the sustainability constraint. It is the failure to deal with this issue that has generally resulted in management systems creating perverse economic incentives leading to overexploitation of most of the world's fish resources.

The situation is made worse because it leads to the wrong success indicators being used. Despite some progress in recent years, fisheries management continues to be dominated by a production-orientated view of the world. In many countries around the world, fishery policy success is still judged in terms of the quantity of fish produced. Maximum sustainable yield (MSY) remains the pre-eminent policy goal, especially in international instruments, and, despite the efforts of some States, it remains much easier to obtain data on the weight of fish caught than their value.

Failure to clarify the role of the State has also led until very recently to economic overexploitation not being considered a problem worth tackling. In many cases, policy-makers have only been prepared to act once the symptoms of the problem in terms of overfishing, and increasingly environmental impacts as identified by environmental pressure groups (e.g. drift nets), have become overwhelming. Even here the tendency has been to deal with the symptoms of the problem rather than the cause.

The failure to act upon the resource ownership role of the State also explains the widespread mercantilism in fisheries policy. Because the exploitation of the resource is not perceived in an economic context, in particular in terms of rents accruing to the resource owner, the State is forced to look for alternative criteria on which to base public policy. The standard ones are to favour domestic producers over foreign ones and to focus on employment. This gives rise to all kinds of policy problems.

It has been suggested above that one approach to the resource rent sharing issue may be to move towards co-management systems. At first sight it might appear that devolving fishery management responsibilities in the form of co-management may be a way of reducing the importance of the State, but on closer inspection the State has a key role to play. Under co-management, user groups tend to be considered the primary element for resource management. But the State clearly continues to have a critical role in view of the limitations of local-level collective action.

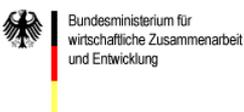
By far the most important role of government is to ensure that appropriate local systems of resource management operate in a legal framework which provides legally enforceable recognition of their identity and rights. The State must also provide the framework within which these rights can be enforced. The systems face three broad threats against which they must be able to protect themselves: from within, from encroachment by neighbouring groups or external intruders, and from other economic sectors (e.g. pollution, tourism).

At the same time the State will have to protect individual members of the system, providing a conflict-resolution mechanism whenever conflicts cannot be settled at the community level. It may also have to intervene in conflicts between groups.

Finally, given the scale of fisheries resources (in particular their widespread dispersion), governments will have to monitor overall resource usage within which the local system operates. Otherwise open access style problems will arise wherein conservation efforts by one resource user (say, the local system) simply benefit other users.

The state has then a central role to play in fisheries management whatever the system adopted. In order to play this role fully, it is essential for States to recognise and act upon the economic dimensions of the management problem.

Recognition of this central role is one factor driving attempts to improve "governance" since this is a fundamental building block for sustainable development. Within this context, the policy-making process will be judged against key criteria: transparency, accountability and participation.



As the policy process is increasingly studied, it is becoming clear that this process is complex, non-linear and dynamic. In many developing countries, the nature of the policy process in a weak state context may constrain the design and implementation of fisheries management plans. Innovative ways must then be found to progress, with improved understanding of policy process and appropriate governance as core areas.

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(1) This special series of Key Sheets on Fiscal Reform in Fisheries disseminate the outputs of a 'Workshop and Exchange of Views on Fiscal Reform in Fisheries - To Promote Growth, Poverty Eradication and Sustainable Management' organised by SIFAR/FAO, Rome in October 2003 and sponsored by DFID. See Fiscal Reform in Fisheries Key Sheet 1: [Workshop overview](#).

(2) See: Fiscal reform in fisheries, Key Sheet 4: [Management instruments and rent collection](#).

(3) See: Fiscal reform in fisheries, Key Sheet 5: [The allocation of revenues derived from fish resource rent](#).

Key Sheets for Sustainable Livelihoods



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