RESOURCE RENT

P.E. Bergh
Adviser, Ministry of Fisheries and Marine Resources
Windhoek, Namibia

INTRODUCTION

Who should pay for managing the fishery and how they should pay is a key question in fisheries policy and management. There is an increasing trend to recover fisheries management costs from those active in the fishery, such as the fishers, the boat owners, the port owners and the fish processors.

How can the fisheries management authority generate enough income to meet the need for a balanced MCS scheme? Lack of money for resource management and misunderstood priorities have in many countries depleted fish stocks. Many economists claim that the collection of resource rent can achieve management goals more economically than other methods.

Funding for fisheries management in many developing countries relies heavily on donor assistance. Such funds are declining, resulting in larger requirements to recover these costs locally. This will become increasingly important and needs to be addressed to maintain and develop good fisheries management systems for both industrial and artisanal fisheries within these countries.

MCS IN RELATION TO COSTS

The cost related to the implementation of fisheries management plans must be subtracted from the total economic income made by the regulated fisheries. This is a very general rule and it has weaknesses among others, related to the cost of the enforcement organisation. There are many types of enforcement related costs and these costs will vary according to which regulatory measures are being applied (Hersoug and Paulsen, 1996[10]). The industry's response to regulative measures will always be a crucial factor in relation to the cost of an MCS operation. Acceptance and compliance from the industry obviously requires less effort from the MCS organisations than from an industry that does not accept the compliance regulations.

If we, in the tradition of economic theory, limit our view to only considering strictly economic factors that affect compliance, the individual fisher's decision to comply with the legislation will be based upon the following three elements (Hersoug and Paulsen, 1996):

- The expected illegal gain of non-compliance
- The expected probability of getting caught and convicted
- Penalty or sanctions, if convicted

[10] Hersoug and Paulsen, 1996. *Monitoring, control and surveillance in fisheries management.* Windhoek, Namibia, University of Namibia. 107p.

Another factor is the biological condition of the resource. Normally good years result in a higher percentage of compliance compared to years with small catches and economical difficulties.
The chances of detecting violations of fisheries regulations are directly related to the amount of resources used for control and surveillance and how efficiently these resources are used by the MCS organisation. Dockside inspections, for example, are less expensive than the use of patrol vessels. The question remaining is if the lack of presence on the fishing grounds will result in a larger loss due to lack of compliance from the fishers.

All these questions may give answers that indicate the requirement of a more advanced and costly MCS scheme. It is for many countries a natural assumption that the fishers have to pay for the management costs of the fisheries. This cost is normally collected through resource rent.

RESOURCE RENT

Some might ask why the fishers should pay resource rent. After all, the fishers pay taxes like any other sector of the economy. Why should this industry have to pay more than other industries do? The short answer is that this does not apply, because without resource rent fishers would be paying less than other industries, since one production input, the fish itself, would then be free of charge.

ECONOMIC RATIONALE

Since fish are a fugitive resource, which do not recognise man-made boundaries, they have traditionally been viewed as common property where, in most cases, anyone could harvest fish freely. This is in stark contrast with most other economic production activities, where individuals and companies must pay for inputs used in their production process, be it labour, raw material, machines or land. While fish were abundant, this was of no consequence, but with increased fishing effort, free access has become a serious problem in world's fisheries leading to overexploitation of many fish stocks, in some cases even to their depletion.

When production inputs are abundant and freely available, nobody is willing to pay for their use. However, if inputs are limited, so that there are not enough inputs for everyone that wants to utilise them, then owners of these inputs can charge a price for them. This is the basic rationale behind resource rent in fisheries. Since fish are limited, those who want to use them should pay a price for that privilege. This is no different from paying for other inputs, such as fishing gear or fuel. These inputs are valuable for the companies that want to generate fish products; therefore they are willing to pay for them. The same goes for the fish, a limited input that creates value added for fishers. Consequently, fishers should pay for the right to exploit fish resources.

Costs

Figure 1 shows in simple terms how total revenue can be divided into cost terms. First is the rent that is paid to labour, i.e. workers' salaries. Second is the rent to capital, e.g. interests paid on loans or normal returns to shareholders. Third is the rent to be paid to the owner of the fish resource. If a fisher were fishing from a private lake, then this payment would be to the owner of the lake. In the case of sea fisheries, the payment is to the guardian of the resource, namely the State. Once, these costs have been paid, any revenue left over represents the profit of the company.

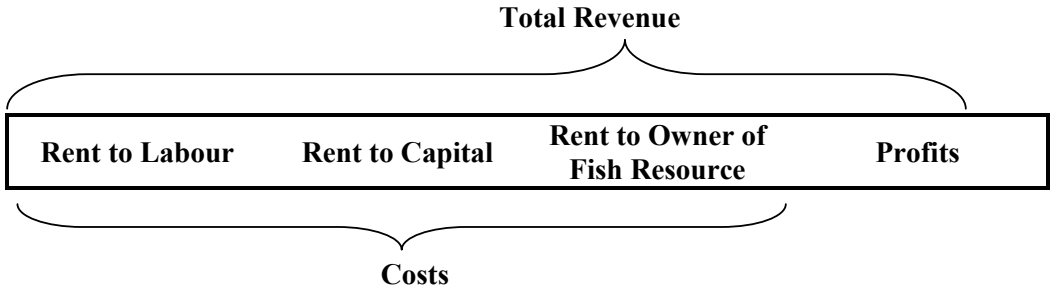

Figure 1: Division of total revenue into the different cost terms

Two notable features of the rent paid to the owner of the fish resource.

12. All fisheries targeting a stock that is scarce should be paying an exploitation fee. The appropriate term is **resource rent.** That term implies that rent is being paid for the exploitation of a resource, without making any reference to the management system.

13. Resource rent is ***not a tax***. This cannot be emphasised enough. Resource rent is simply the payment due to the owner of the resource for allowing fishers to utilise the resource. Just like a farmer would pay a rent to the landowner, the fisher pays for the privilege of harvesting from the fish stock.

FISHERIES ABILITY TO PAY RESOURCE RENT

The different price movements clearly affect the ability of fishing companies to pay resource rent. A fixed resource rent does not affect companies adversely if the price of fish is stable or steadily rising. However, for companies that are operating under a price that fluctuates greatly, a fixed fee can be difficult to meet when prices are low. Most other input costs can be adjusted to a certain degree, but the resource rent is outside the reach of individual fishers.

It is desirable that the payment burden of fishers from resource rent stay reasonably stable from year to year. Therefore, the resource rent should be linked to fish prices in order to stabilise the payment burden of fishers as much as possible.

WHAT CRITERIA FOR DETERMINING THE RESOURCE RENT?

If it is accepted that resource rent be charged, then the question of how to set this rent must be addressed. Following are the main criteria that need to be taken into account when setting the level of resource rent.

- **Rent capture:** The resource rent must capture a considerable portion of the actual resource rent generated. If fish stocks are of value, then the State, as the owner of the resources, should receive a reasonable return on its asset.

- **Fairness**: The resource rent must be seen as fair, both among the fishers and also from the point of view of the public. The industry normally consists of a number of fisheries and the rent must be structured in such a way that each fishery is seen to be paying its fair share. Since not everyone can enter the fishing industry, those who are outside it must not feel that significant wealth is being given to a group of select few. By charging a reasonable resource rent the issue should not arise.
- **Stability**: It is important that the resource rent be somewhat stable from year to year. Firstly, it would be very difficult on the industry if the rent were fluctuating significantly from year to year. For companies to be able to plan long-term investments, they must know, within reasonable parameters, what expenditures to expect in the near future. Secondly, stability is important from the government's point of view. If revenues from resource rents are varying much from one year to the next, budget planning becomes very difficult and it might lead to unnecessary borrowing in order for the government to meet its obligations.
- **Simplicity**: The calculation of resource rent should be simple. It should be possible for all participants in the fishery to calculate their rent themselves without the help of consultants. This allows fishers to accurately include expenditures on resource rent into their yearly planning and it serves as a monitoring device. If fishers are overcharged they can see that immediately and complain; if they were undercharged their competitors would undoubtedly notice and cry foul.
- **Common sense**: Care must be taken in determining the resource rent. If it is too high, the consequences to the industry could be dire. It would lead to under-investment and too much exit from the industry, while resource rent that is too low is likely to lead to the dissipation of real economic resources through over-investment. It may be difficult to find the right level of resource rent, but utilisation of the TAC and individual quotas is one possible yardstick. If the TAC is not all taken, it is likely that the resource rent is set too high. If, however, there is high demand for fishing licences and quotas, that indicates a resource rent that is set too low.

COST STRUCTURE AND PROFITABILITY

It is not at all clear, that the level of resource rent should depend on other costs or on the profit of the fishers. As argued above, resource rent is simply a production cost that fishers must pay and not a tax. As such, there is no apparent reason why it should change when other costs change, just like the cost of a barrel of fuel does not change when the cost of fishing gear changes.

There are other reasons why resource rent determination should not be tied to costs and profits. There are enormous practical problems for the fisheries administration to calculate costs and profits accurately. One important question would be which costs to include. Should consideration only be taken of the costs of running a fishing vessel, or should office overheads be included? What about companies that also process fish, should their processing operation be included or not? Being drawn into discussions of this kind could well lead to a monstrous and complex system of calculating resource rent, losing the virtue of simplicity. This means that resource rent would be calculated on the basis of old information. The effects could be disastrous. Imagine a situation where the industry was doing very well two years

ago, but is currently making losses. On the basis of the old information, high resource rent would be set, exacerbating the current losses.

Finally, setting rent using parameters – such as costs and profits – that are under the direct control of the companies that have to pay the rent, is always a futile exercise. Careful consideration must be given to the incentives created by such a policy. As an example, consider a policy that lowers resource rent when costs are high (or profits are low). This will naturally lead fishers to search for ways to report the highest possible costs in order to reduce rent payments. A serious possibility is that fishers actually begin to incur higher costs. For instance, fishers may decide to invest in the latest fish finding technology, even if their current equipment is more than adequate. This is most undesirable, since this leads to increased capacity and is wasting real economic resources.

Therefore, it is recommended that the calculation of resource rent should not to be based on cost structures or profitability in the fishing sector.

OTHER OBJECTIVES

Apart from rent collection, resource rents can be constructed to promote local employment and create employment through on-shore processing of catches. Setting higher fees than for local vessels for foreign vessels and those of mixed ownership can meet the target of local employment.

Increased resource rent could also reduce the number of participants in a fishery to enhance stock recovery, if required.

CONCLUSION

By determining the interest groups who benefit from fisheries, costs can be attributed and then recovered. The Code of Conduct for Responsible Fisheries emphasises repeatedly the importance of building sustainable fisheries management systems. One way to ensure a reasonable income for the authorities and to cover running costs of a sustainable fisheries management administration is to let those active in the fisheries pay for this service.

The state owns the fish in its territorial and EEZs. It is both fair and sensible that people pay for access to fisheries if the access is limited to only a few licensed participants.

It is accepted that there is usually some public benefit to fishing because exploited stocks are a common property resource, supplying food, export earnings, etc. and that proper management of those stocks is in the public interest. It is also often the case that fishers who have access to an exclusive fishery gain substantial economic benefits from the fishery and should therefore as a minimum contribute to the management of the stock.

Resource rent is one way to ensure a regular income to the State and to ensure a sustainable fisheries management organisation. It is thus commonly accepted that the costs related to such an administration should not exceed the income from resource rent unless extraordinary conditions exists.