

Managing Namibia's fisheries as a vehicle for development: a common pool resource or candidate for tradable pool rights?

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Presentation to conference on "Reinventing the Commons"

May 1995

The pre-independence history of Namibia's marine fisheries offers a classic illustration of the problem, much discussed in the literature, of resource depletion due to open access to a common pool resource. Namibia has attempted to tackle those problems by imposing a system of regulation on the fisheries, but in the context of using the sector as a vehicle for addressing the economic legacy of the Apartheid system in Namibia.

I intend to first outline Namibia's post independence fisheries policy and its implementation. I will place this in the context of the theoretical literature on fisheries management, considering in particular the conflict between the market solution of tradable rights and the development objectives of Government.

Namibia post independence fisheries policy and its fisheries management system:

Two overwhelmingly significant objectives immediately become apparent when Namibia's fisheries policy is examined¹. The first is to effectively address the serious depletion of several species which took place prior to independence, to rebuild the stocks and to exploit them on a sustainable basis. The second significant objective is that the policy aims to use the resource as a means of redistributing wealth and economic power to Namibians² and to a broader sector of the population than those previously privileged by the Apartheid system³.

When existing rights terminated on the 31 December 1993 at the end of the period for which they had been granted, the decision was made to grant rights for periods of ten, seven and four years, depending on a preannounced set of criteria. Only

1. Government of the Republic of Namibia, "Towards the Responsible Development of the Fisheries Sector", December 1991.

2. Prior to independence the fisheries sector was dominated by South African, Spanish, Russian and other foreign interests. Little of the value of the resource accrued to Namibia or Namibians.

3. See also "Policy Statement on the Granting of Rights of Exploitation to Utilize Marine Resources and on the Allocation of Fishing Quotas" was published in July 1993.

companies holding a right of exploitation may be granted a quota.

The new rights of exploitation:

The Sea Fisheries Act (No 29, 1992) and the Sea Fisheries Regulations (January 1993) section 7, set out criteria to be used in determining who was to be granted rights of exploitation. While the need for technical and financial competence are a requirement, the criteria also focus on the degree of Namibian ownership and control and, notably, on the

"the advancement of persons in Namibia who have been socially or educationally disadvantaged by discriminatory laws or practices which have been enacted or practised before the Independence of Namibia"⁴.

The Ministry received 565 applications for rights of exploitation from 316 applicants. Of the 165 rights granted to 124 enterprises, around 90 of these were to companies which had entered the industry since independence in 1990⁵. Around 30 of the existing rights were not renewed⁶. Overwhelmingly the companies were at least 51% Namibian owned.

A TAC and quota system operates for the most important commercial species and a system of licences restricting the fishing effort operates for the rest. The objective of the Ministry is to move towards vessel quotas with the aim of discouraging over-capacity in vessels developing. It introduced vessel quotas into the hake fishery in 1994.

Once a company accepts a quota it becomes responsible for the payment of a quota fee whether or not the fish are caught. Quota fees are set on a sliding scale to encourage Namibianisation of the industry and the development of land based processing facilities.

Implementation of policy has been positive in relation to rebuilding of stocks, despite the negative impact of the current prolonged warm water event similar to the El Niño Southern Oscillation and apparently linked to it⁷. In this context Government has demonstrated that it is ready and able to dramatically cut the TAC, as it has done with the pilchard TAC for 1995, when it is in the best long term interest of the

⁴. Sea Fisheries Regulations Government of the Republic of Namibia, 1993.

⁵. Speech by R Konkondi, Permanent Secretary, MFMR published in FNI April 1994, page 26).

⁶ Ibid, page 26.

⁷. Journal of the American Geophysical Union, Indian Ocean May Have El Niño of Its Own, 1994.?

resource to do so. Scientific research, relatively neglected before independence has been given greater priority, and scientific advice taken seriously rather than made secondary to short term economic gain.

Implementation of the other element of policy, the redistributational aspect, is not yet clear. I must emphasise that this aspect has only been implemented for just over a year and it would be premature to judge Government reaction to current developments in the industry. It is important, however, to look at early trends and to note the trade taking place in company shares and at other devices used by big companies to gain control over quota.

The policy has not yet brought about the degree of change anticipated⁸. With the announcement of the new Fisheries Policy in 1991 there were big changes in the formal ownership of many of the established companies in the fishery, particularly in instances where the companies were foreign owned. In some instances, there was a direct sale of interests to Namibian concerns. In others cases, involving South African companies, a majority of shares were sold to Namibian shareholders but with management contracts which have enabled the South African companies to retain control of the Namibianised company while at the same time being able to claim that it qualify¹⁰ as 51% Namibian owned.

Certain trends are becoming apparent. Companies are competing for control over as large a quota as possible. There has already been some consolidation of power around large companies. Catching and processing capacity have grown very rapidly and in most instances are in excess of what is required.

In particular, the larger established companies have exploited the lack of finance, vessels, processing facilities and marketing outlets to their advantage and to the detriment of the newcomers to the industry. Typically, the new companies in the industry, without adequate collateral, have gone to the financial institutions to raise finance to purchase a vessel or establish a processing plant. Armed only with a quota which is not normally transferable, the financial institutions have declined to extend loans to them. The new companies have subsequently landed in the hands of the larger established companies. In some instances there have been buy-outs of a majority of shares of new companies by the established companies. In others, smaller companies have been forced to sell their year's quotas to the larger operators as the only means of having their quota caught⁹. Others have found themselves locked into five year

⁸. The following are preliminary observations arising from recent fieldwork in Namibia.

⁹. Although not in keeping with Government policy, the Ministry has tended to tolerate the practice as it is for some companies the only route open to them under current conditions to raise finance.

contracts with the big companies to deliver fish exclusively to them for processing and marketing.

Tradable rights or the common pool:

It is now generally accepted that, if a common pool fishery has commercial potential, is not subject to effective regulation and is competitively exploited, then there will be inevitable market failure. Each fishing enterprise, by extracting from limited fish stocks, reduces the harvesting possibilities of other fishing firms, thus imposing production externalities on each other.

In principle there are two accepted ways in the literature of dealing with this problem in large marine fisheries. They are through establishing property rights to fish stocks and through regulation by public authorities.

The usual instruments of private property rights are difficult to apply in ocean fisheries so individual harvesting rights or individual transferable quotas (ITQ), the property rights school argues (Arnason 1991, Hannesson 1991, Pearce 1992), may constitute an adequate substitute for private property rights in fisheries.

They argue that the incentive to over-capitalise would be removed and a fishing enterprise would develop an interest in the sustainable utilization of the fish stocks. Theoretically, by creating secure property rights, long term expectations of access to the resource would be created, thus lowering the future discount rate. As the stocks improve, the catch per unit of fishing effort would rise and the value of the quota share would increase.

It would seem that the reason why ITQ have shown promise is because the number of companies in the fisheries tends to reduce to a point where the few remaining in the industry operate as a monopoly. Pearce (1992) observes that ITQ generate successful self-management organizations where the number of parties involved are small and are similar in size (Page 81).

Under a ITQ system, if the companies holding quotas are not cooperating but competing, then the chances are that externalities will continue to exist.

This would then explain their success. In the case of multiple firms exploiting a common pool resource, each firm acts as if the resource has no user costs. In contrast, the sole owner must contend explicitly with the user cost because the decisions on utilization of the resource becomes endogenous through the choice of extraction rate and input usage¹⁰.

¹⁰. See E.A. Keen (1983) and Squires (1992).

The essential point is that monopoly exploitation can take care of the externalities in fisheries. The monopoly exploiter would, however, need to exercise control over the whole of the ecosystem. In most national fisheries, including that of Namibia, that would be extremely difficult to achieve. If there are transboundary stocks, straddling stocks or highly migratory species involved then a competitive situation will most likely exist with other appropriators of the resource on the other side of a maritime boundary, and the problem is not solved.

If, in addition, the Government has development objectives in the use of the resource as Namibia does, such as spreading the benefit of the resource to a much wider portion of the population, then accommodating a consolidation leading to private monopoly behaviour becomes problematic.

The second method is through public authorities exercising direct control of fish stocks. This approach remains the most common system within EEZs in instances where there is a serious attempt made to control catches.

Problems arise in the exercise of such controls: Costs of policing are often excessively high and fishing companies tend to find ways of negating the effects of restrictions. Quota allocations by public authorities may lead to various types of rent seeking behaviour.

Namibia's system of regulation is at present essentially a restrictive one, as is found in most EEZs. Namibia has succeeded since independence in gaining a control over its fisheries. The turning point was the dramatic arrest of 8 large Spanish freezer trawlers for illegal fishing in late 1990 and early 1991. After years of overfishing, Namibia has begun the process of rebuilding its stocks. If it became possible for the established companies to gain extra quota by purchasing a control in the companies of new entrants into the fisheries, then the system takes on at least some of the characteristics of an individual transferable quota system.

Namibia earns considerable nett revenue from its fisheries. Revenue from quota fees alone for the financial year 1994/5 amounted to N\$109.7 million, while the running costs of the entire Ministry including the inspectorate amounted to N\$35m for the same financial year¹¹. In addition to quota fees, revenues include fuel tax, the research levy, licence fees for vessels and company and income tax generated. Although some resource rent is being dissipated, it is clear that the Namibian Government is managing to recover a significant portion of it for purposes of development.

In certain limited circumstances self management and regulation of common pool resources have worked well over decades and even

¹¹. Budget 1994/5, Government of the Republic of Namibia.

centuries¹². However, it would seem that management by what Elinor Ostrom calls an "appropriators organisation" can work well if the resource system is relatively small and contained. The essential elements that need to be present if a common pool resource is going to be successfully managed by an appropriators organisation which Ostrom identifies, all relate to communication and trust which are more easily achieved in the context of management of a relatively small resource than in large marine fisheries.

However, it could be argued that the Ostrom type cooperative arrangement, whereby a group of resource appropriators are persuaded to act as one co-ordinated entity, is essentially the same as a relatively small number of companies in a large fisheries acting together as a monopoly and in so doing eliminating the externalities that arise in a competitive situation.

Michael Lipton (Lipton 1985) considers the problem of common resources in developing countries. Lipton argues that, through democratic or participatory systems, it becomes easier to move away from the more expensive, coercive systems of control or regulation of common pool resources and towards the more cost effective 'control-with-consensus'. This relates very much to Ostrom approach.

It would seem that the Namibian Ministry of Fisheries and Marine Resources has created preconditions for a transparent system of resource management which could be further built upon and could explore ways of creating within the fisheries sector technical means of emulating the type of essential elements of communications and trust which Ostrom identifies. In principle there is no reason why size should preclude cost effective self management systems of large common pool resources. Namibia could move relatively easily towards a system of "control with consensus", of which Lipton speaks, which could be regarded as an expanded version of the Ostrom type of solution to common pool resource management.

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¹². see Ostrom 1990; Bromley 1992.

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