Redistribution and Transformation in the South African Fishing Industry: The Case of the Squid Fishery

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Abstract. This is a summary paper on the redistribution and restructuring of the South African squid industry. Political normalisation in South Africa during 1994, and the drafting of the new Marine Living Resources Act 1998, led to the imperative to transform the fishing sector to more equitably reflect the racial demographics of the country. The current approach to redistribution in the squid industry is a command and control instrument. It takes access rights, in the form of fisher permits, away from existing boat owners and redistributes them to new entrants from historically disadvantaged communities. The lack of human skills and capital - which is a persistent legacy of apartheid - of the new entrants, coupled with one year tenure of permits, has resulted in a market for paper permits. This system also results in income, rather than wealth, redistribution. An incentive market based process of transformation is proposed. It is argued that long term access rights on vessels can be used as a behavioral incentive for boat owners to internally transform their own ownership structures to reflect the demographic distribution of the country.

1. INTRODUCTION

The South African squid fishery is concentrated on the south east coast. It was first regulated in 1986 due to a large increase in effort and an influx of foreign vessels into the fishing grounds (Augustyn et al, 1992). Effort is controlled by limiting the number of fishers, gear restrictions allowing the use of hand lines (jigs) only and a closed season during spawning time. Initially the squid were caught using small ski-boats that could remain at sea for no more than a day. However, the fishery was rapidly capitalised resulting in a current predominance of relatively large (a fisher capacity of between 8 and 24 people) freezer boats that can remain at sea for a few weeks at a time. Some small ski-boats still remain, but their viability is questionable as finance companies will not provide capital (Wesson, 1999). It is a relatively small fishery with approximately 2000 fishers and about 200 fishing boats. On the whole it may be considered a mature fishery that is not excessively overcapitalised.

Due to the apartheid system of government the fishing boats, access rights, business and trading skills and processing plants were concentrated almost exclusively in the hands of individuals of European origin. People of African, Asian and mixed origin were effectively locked out, although some exceptional individuals from these groups managed to continue fishing commercially. Political normalisation during 1994 led to a redrafting of many of the laws of the country including the Marine Living Resources Act. In fisheries, where the State effectively manages the resources on behalf of the public, a need to rapidly restructure the fishing sector became important. The new Marine Living Resources Act of 1998 provided policy guidelines for this. Essentially it rests on three pillars, namely, equity, sustainable resource use and industrial stability. As the study shows, it is difficult to effectively achieve these three criteria simultaneously.

Implementation of the new law, however, proved problematic. The key to transformation was incorrectly identified as a redistribution of access rights, usually in sub-economic bundles. This led to a redistribution of income, via an effective revenue tax, to individuals from previously disadvantaged groups identified by government. Industrial instability emerged arising out of the additional uncertainty of rights' tenure and the extra expenses (revenue tax) and potential conflict situations. Naturally the sustainable use of resources came under strain, exacerbated by structural and financial constraints to effective compliance control. It is briefly argued below, that if wealth or ownership of capital is transferred using government instituted incentives, and is allowed to operate through the market, the fishing industry, in particular the squid fishery, will effectively and efficiently transform itself.

2. EQUITY, INDUSTRIAL STABILITY, RESOURCE MANAGEMENT AND ADMINISTRATION

In terms of racial origins and previously neglected people, an equitable participation in the fishery implies that ownership of capital, or wealth, rather than the income from resource rents, should be transferred from one group to another.
The organisation of the fishery - in terms of getting the right mix of government control of the resource and allowing correct market solutions - is important for the success of a lasting restitution and for industrial stability. In this respect, equitable ownership could be achieved through market interactions. Also, the system of resource management and administration as well as the mode of redistribution must be acceptable to the existing fishing companies, existing new entrants and potential new entrants. Care should also be taken to prevent overcapitalization in the fishery. Because South Africa has a labour surplus economy, labour intensive biases should be part of the control structure.

Economic efficiency is gained by allowing available capital, labour and biological resources to allocate themselves in the most efficient way. The most common method of achieving this is through transferable long term access rights. Due to the concentration of economic power in the hands of one group, the goal of economic efficiency is in direct opposition to that of equity as it is likely that the resource will re-concentrate in the hands of the already powerful and previously privileged South Africans of European origin. Economic efficiency thus must be sacrificed until equity is fully and completely achieved.

It is vitally important that a set of simple rules be used to govern and control the use of the resource (allocation of access rights). Compliance control must be easily and cheaply instituted and administered. A good knowledge of the biology is the most important criterion to ensure the long term survival of a stable fishery. However, equity and industrial stability must be achieved first before it is possible to optimally manage the resource.

3. COMMAND AND CONTROL REDISTRIBUTION: THE CURRENT SYSTEM IN SOUTH AFRICA

As effort is controlled by limiting fisher permits, socio-economic disruption results as the government forces unemployment as well as under crewed boats. Gear limitations ensure labour intensive fishing, but limiting crew size works in favour of capital using technologies. No economic efficiency structures are built into the system of control, which is good as this practise would tend to subvert the successful implementation of the equity criteria. Compliance control is difficult and is very expensive to run and administer correctly. In fact the many of the existing fishing vessels currently ignore fisher limitations.

Transformation and equity requirements are implemented through a system of redistributing fisher permits. This entails removing rights from established firms and awarding them to individuals from previously disadvantaged groups. Small sub-economic allocations of these short term permits to new entrants creates strong incentives for them to sell their rights back to the established firms. This results in a redistribution of income rather than wealth and the formation of a ‘paper permit’ market. Participation by new entrants is limited and a revenue tax is effectively imposed on established firms which is preferentially and completely transferred to the ‘paper permit’ holder.

In addition, this type of redistribution gives rise to adverse selection problems as there has been no control to determine whether or not the new entrants have been involved in, or are historically connected to, the fishery. In fact, and as can be expected, there has been a steady mushrooming of applications since the first set of permits were redistributed. The sub-economic allocations and one year tenure of the permits effectively make access to capital impossible. This forces a moral hazard problem where it makes sense for the new entrants to sell their access rights back to the established interests even if they have contracted not to do so in their applications.

In terms of sustainable use of the resource, although the current scientific knowledge of the resource is good and an acceptable operational management protocol are in place, the above factors lead to misbehavior and major compliance problems. The stock is thus under threat due to political and economic factors and not a lack of scientific knowledge.

4. INCENTIVE BASED TRANSFORMATION

As a long term right is a strong incentive, wealth is redistributed as boat ownership (capital) is transferred, at market prices through market interactions, from one group to the other. In other words, a system licensing vessels rather than fishers, keeping the gear restrictions, using closed seasons to control effort and providing equity incentives based on boat ownership is examined below. The criteria for being awarded a long term boat licence are that the boat can prove a full crew complement arising from the existing pool of fisher permits (no additional effort is added) and ownership is equitably distributed. Essentially, the only measure that government needs to take to achieve equity, is to provide the incentive, namely, long term boat

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1 New entrants are those individuals who have newly acquired access rights.
licences for good behavior and a suitable disincentive for bad behavior, for example, loss of access rights over a stipulated period of time for noncompliance with the equity criteria. The sale of vessels implies a transfer of access rights, thus for equitable transformation to establish itself the transfer of vessels from one group of shareholders to another must be monitored.

Participation in the fishery is assured due to ownership of capital equipment. From the existing new entrant’s point of view, owing to sub-economic allocation of permits and one year tenure, this system should be favourable. Small permit holders gain bargaining power as they hold a portion of the pool of permits. Value is added to these predominantly ‘paper permits’ and partnership arrangements become feasible. Also, total employment is not controlled by government and the adverse socio-economic effects of reductions in effort (closed seasons) are spread across those involved in the industry. In other words, incomes fall but jobs are not shed. From the established interest point of view, this has proved a favourable solution simply because it reduces the great uncertainty imposed by the other method. In fact, this is the boat owners’ solution to the issue of equity, but is currently viewed with suspicion from government because it comes from the wrong group. Over-capitalization does not, and should not, become a problem as the number of vessels is strictly controlled and limited. Gear restrictions work in conjunction with closed seasons (capital lies idle for longer periods and is therefore more expensive) to encourage labour intensive technologies. Economic efficiency is achievable with the sale of vessels, but should be controlled because of the efficiency/equity trade-off.

The distribution of access rights is simplified and the number of permit allocations is reduced as there are far fewer vessels than fishers. This also means that new individual permit applications are capped, freeing government employees to concentrate on the more important tasks necessary to control and manage the fishery. As it is easier to monitor and log vessels leaving and entering a harbour during closed seasons than to monitor the number of fishers on each boat at all times, the system lends itself to easy and cheap compliance control.

5. CONCLUSION

The system of restructuring the South African fishing sector is not working and does not achieve any of the goals of the Living Marine Resource Act of 1998. Quite simply, it results in a risk free transfer of income, through an effective revenue tax, to individuals fortunate enough to have captured access rights. These individuals, or new entrants, often were not previously involved in the fishing sector - most were astute, well informed and sufficiently well educated to take advantage of the changing political situation. Although these individual characteristics might be desirable to ensure a meaningful transformation, sub-economic bundles of rights and risk free access to income transfers work against the desired goal. An alternative approach, that advocates changing the point of resource control from fishers to vessels and that sets up incentive based systems to ensure ownership transfer, is proposed as a solution to the redistribution problem. In addition it results in a favourable resolution to the requirements of the Act, it is acceptable to current boat owners, new entrants and fishers and it allows cheap and effective compliance measures.

6. REFERENCES


There are political factors that play a role because the command and control system results in a risk free transfer of income to the non-participative permit holder who might also be a powerful political influence. In addition, no organised labour body exists.

A large portion of the Chief Directorate Marine and Coastal Management’s scientific staff time is taken up with the assessment of new permit, and rights, applications. These people are not suitably qualified to do this work and given the number of new applicants every year the ability to verify the applications is non existent.


