RIGHTS-BASED MANAGEMENT OF INDUSTRIAL FISHERIES IN A SMALL COASTAL TERRITORY

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ABSTRACT

The Falkland Islands has successfully met many challenges in the management and development of its fisheries resources over the last 20 years. To meet a new generation of challenges the current licensing system based on the allocation of non-transferable, variable duration licences to individual vessels is to be replaced by a system of long-term individual transferable rights owned by Falkland Islanders. The anticipated gains are enhanced economic performance of the sector because fishing businesses have increased security and flexibility, rapid diversification from harvesting into value-added activities and increased international competitiveness as poorly performing companies sell rights to well performing companies. Implementing a rights-based regime in a small coastal state is challenging. Thin markets for rights, a desire to maintain local control of fishing rights, and a dependence on foreign direct investment in the fisheries sector are key considerations in the design of an effective and efficient management regime. Additional considerations include the trade-off between the economic efficiency gains derived from output-controlled fisheries and the relative administrative simplicity of input controlled fisheries. Under the rights-based system monitoring of economic performance including the value of rights trades and rents generated will be key performance indicators alongside traditional biological measures of management performance. Starting operation in 2005, the new rights-based management system provides a model for small coastal states or small industrial fisheries that previously had considered rights-based systems too complex to implement and administer, despite the inherent advantages of rights-based management.

Keywords: Keywords: Falkland Islands; Rights-based Management; Small Coastal States; Input Controls

INTRODUCTION

The Falkland Islands Government has overcome many challenges in its management of fisheries resources and the development of a domestic fishing industry. Income from fishing provides the Government with half its annual income and contributes up to 40 percent of Gross Domestic Product. The choices made now by Government, the fishing industry and other interested parties will determine whether or not the Falkland Islands continues to grow and prosper from the sustainable use of fisheries resources.

There are many contemporary influences on Falkland Islands fisheries. Fisheries management systems and company operations are under increasing scrutiny by buyers, consumers and the general public. Meanwhile the economics of fishing are increasingly about cost minimisation and revenue maximisation rather than expansion of fishing effort. The local industry is seeing increasing growing demand for white fish and changing consumer preferences for traditional products such as whole *loligo* squid. Falkland Islands companies are now more exposed to the volatility of seafood prices and highly variable and unpredictable catches. Changes in social and environmental values are placing pressure on Government and fishing companies to demonstrate international best practices in stock conservation, mitigation of incidental mortality of seabirds and marine mammals, and minimisation of the adverse effects of fishing on the marine ecosystems. Continued illegal, unreported and unregulated fishing challenges flag states to monitor the operations of vessels in all waters and for licensing states to work with flag states. Non-tariff trade barriers based around food safety, quality and handling require Governments and fishing companies to implement best practice food safety systems and to monitor the handling of product throughout the chain of custody.

A key Government strategy to maintain the stability of the Falkland Islands economy is to develop further the local capacity to take advantage of the globalisation of the international seafood market. Participating more fully in the global seafood market involves expanding the economic base of the seafood sector by diversifying

fishing-related activities undertaken by Falklands-based companies. This is particularly important because the Falklands largest fishery, the *Illex* squid fishery has failed in two out of the last three years. The Government is facilitating a transition from an industry involved in the extraction of fisheries resources for downstream processors based mainly in Europe, to a Falkland's based seafood industry focussed on seafood production marketed into a wide range of international markets. A diversified seafood sector also reduces the Government fiscal risk of being reliant on fishing licence revenues by ensuring that a greater proportion of private and public sector revenue comes from a range of seafood and related economic activity, for example maritime service industries.

It is in this context that the new fisheries policy described in this paper is set. The next section provides a brief overview of the Falkland Islands fisheries sector. This is followed by sections describing why the change in policy came about, expected outcomes from the new management regime and the major components of the proposed rights-based regime. The paper concludes with a discussion of unresolved issues and the current state of play in the implementation of the rights-based policy.

OVERVIEW OF THE FISHERIES SECTOR

The Falklands Islands are an Overseas Territory of the United Kingdom and are located in the South Atlantic some 400 miles off the coast of South America between approximately 51 and 53 degrees south (Figure 1). The resident population is only 2,500. There is full employment and Gross Domestic Product (GDP) is £70 million. The Territory receives no financial or technical development assistance from the United Kingdom. It is an open economy with few tariffs or duties and no restrictions on the transfer of capital in or out of the Islands. Real growth in GDP has stalled because of the slow growth of the fisheries sector. There are substantial leakages in the form of wages to overseas crew and transfer of profits by overseas-based companies.

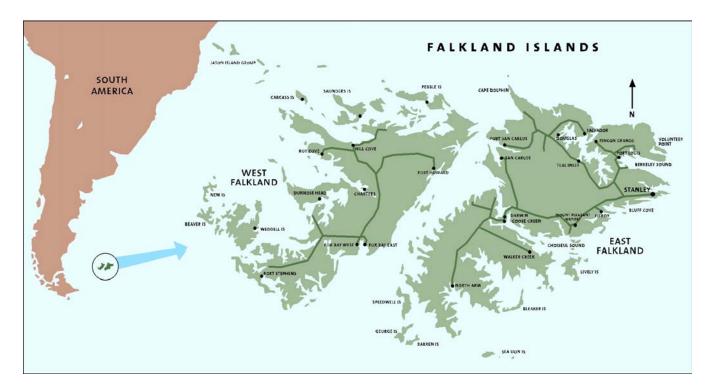


Figure 1. Map of the Falkland Islands

Fisheries are the largest contributors to the Falkland Islands economy generating approximately 42% of GDP. The main catch in tonnage and value is squid (Figure 2). Two species are caught, *Illex (Illex argentinus)* squid by a jigger fleet from East Asian countries and *Loligo* squid (*Loligo gahi*) by Falkland Islands registered vessels owned jointly by Falkland Island and Southern European based companies. Catches of all species of squid and finfish have ranged from a high of 377038 tonnes to a low of 100979 tonnes per annum over the last decade. During this period catches averaged around 220,000 tonnes. The low total catch of 100979 in 2002 was due to the failure of the *Illex* fishery. The fishery has again failed in 2004. These two low years appear to the result of poor squid recruitment and unfavorable oceanographic conditions meaning the few squid recruited in those years did not enter the Falklands Islands waters.

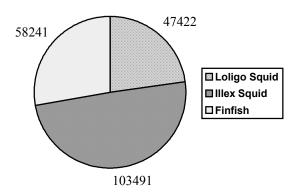


Figure 2. Total catch in Falkland Islands waters 2003 (metric tonnes)

The total ex-vessel value of fishing and related maritime activity in an average fishing year is estimated to be between £200 and £250 million. The biggest source of Government revenue (approximately 50%) is the sale of licences to mainly foreign vessels from the Far East and Spain. The share of fishing income generated by joint venture companies, owned by partners from the Falkland Islands and foreign, mainly Spanish partners has increased over recent years.

There are currently eight local companies owned by Falkland Islanders with a share of more than 25 percent in one or more vessels. Their share amounts to between 15 and 20 percent of fishing revenues. Local companies are vertically integrated into the processing and marketing operations of their joint venture partners. Local investment is predominantly a share in the fishing vessel. Significantly, no onshore processing or cold storage of offshore catches occurs in the Falkland Islands. Transhipment of catch occurs at sea in sheltered coastal waters or in other South American ports.

THE NEED FOR CHANGE

Prior to recent fisheries policy review the approach to economic development of the fishery was set as a result of the 'Falkland Islands Development Strategy' produced in August 1988 [1]. This advocated a cautious approach to investments in the fishery until the viability was proven. Subsequent fisheries policy statements, culminating in the 1997 policy [2], promoted greater involvement by the private sector in fishing activities. This was largely in response to demand from the fishing industry for such policy support.

Although successful for over 15 years it is now apparent that the policy approach to fisheries management requires a fundamental change. Without change it is likely that in the short term Falkland Islands fishing companies will find it increasingly difficult to generate the cash flows and capital required to maintain a viable presence in Falkland Islands fisheries. In the medium to long-term the Falkland Islands economy will be

incapable of capturing a significant share of the total economic activity generated by its fisheries resources. Also Government revenues, in the absence of other sources of income such as oil revenues, will decline in real terms, as revenue from fisheries licence fees remains static or falls (Figure 3).

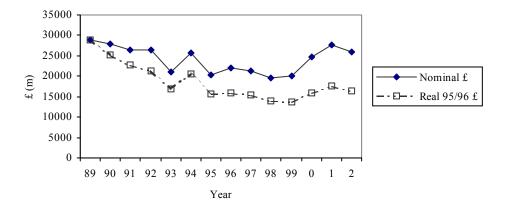


Figure 3. Fisheries Licence Revenue 1988-2002

The key fisheries policy challenges facing Government and industry center on the certainty and security of access to fisheries resources and flexibility in the use of fisheries licences. The licensing regime in the 1997 Fishing Policy is inflexible compared to licensing regimes in other leading fishing nations such as Iceland and New Zealand. Licences are vessel, not enterprise, based meaning that companies are unable to allocate effort to the most efficient vessel. Licences are not transferable between enterprises meaning that inefficient operators tend to remain in the fishery during hard times, dissipating economic rents for everyone. Licences are of relatively short duration meaning that companies could be tempted to focus more on maximising short-term profits by catching as much fish as they can rather than focusing on longer-term value added activities such as product development and marketing. The solution is a fundamental change to the licensing regime.

EXPECTED OUTCOMES FROM A RIGHTS-BASED REGIME

At least eight significant fishing nations, Australia, Canada, Greenland, Holland, Iceland, Namibia, Chile and New Zealand, employ market based rights management as a major component of their fisheries management system [3, 4, 5]. Mosambique, Portugal, Mexico and the United States, use Individually Transferable Quota (ITQ) in some of their fisheries [5]. Other fishing nations such as Peru, Argentina and Morocco are preparing the introduction of ITQ in some or all of their fisheries.

Falkland Islands expectations of the new regime are based on international experience with rights-based systems over the last 30 years. These expectations help establish the basis for benchmarks against which the performance of the system can be judged. First, overall economic performance of the sector is expected to be enhanced because fishing businesses have increased security of access to the resource and flexibility in the way they decide to structure activities to take advantage of the business opportunities. Second, diversification should occur in the industry as companies, no longer required to invest in vessels, look to invest in value-added activities such as processing and marketing. Third, seafood companies should invest more in research and development because long-term rights mean that they will benefit from investments that have longer pay-off periods. Fourth, international competitiveness should also increase as poorly performing companies sell rights to better performing companies. No longer will they be forced to stay in a fishery, unable to exit without

losing everything. Fifth, as the profitability of the domestic seafood sector increases, government income from personal and corporation tax and resource rents should increase.

As well as economic expectations there are also expectations about changes in the behavior of seafood companies. Though less tangible and harder to measure they are also important yard sticks for a maturing seafood industry. First, there should be increased co-operation between industry members on research and development, enforcement, marketing, and environmental issues because companies no longer have to compete with each other for access to fisheries resources. Second, voluntary compliance with rules should increase because companies now have a long-term "ownership" stake in the fishery and non-compliance means stealing from one another rather than from Government. Third, environmental stewardship should be enhanced because fishing companies will hold valuable long-term rights to a proportional share of a fishery, so that concepts such as ecosystem management and protection of vulnerable marine ecosystem have greater relevance. The larger and healthier the resource the larger a company's share of the harvest and the healthier their balance sheets.

COMPONENTS OF THE NEW FALKLAND ISLANDS RIGHTS-BASED MANAGEMENT REGIME

Implementing a rights-based regime in a small coastal state is challenging. A desire to maintain local control of fishing rights, a dependence on foreign direct investment in the fisheries sector and as a consequence potentially thin markets for rights are key considerations and/or constraints in the design of an effective and efficient management regime. Additional considerations include the trade-off between the economic efficiency gains derived from output-controlled fisheries and the relative administrative simplicity of input controlled fisheries.

Effort or catch-based rights?

The new fisheries policy allows for Individually Transferable Quota (ITQ) to be expressed either as a proportional share of a total allowable catch (TAC) or as a proportional share of total allowable effort (TAE). ITQ will be effort-based in the first instance because the current management system is effort-based, making implementation easier. An effort-based system will have lower administration and enforcement costs than a catch-based system. This feature is especially relevant to the Falkland Islands where the major fisheries are offshore and dominated by foreign registered vessels and there is limited local capacity to implement catch-based compliance systems. Moreover, TACs cannot be set with any certainty for the highly variable and highly migratory squid stocks that dominate Falkland Islands fisheries. Finally, since there are relatively few vessels and/or the fishing fleets are homogeneous in their gear types in Falklands fisheries, issues of effort creep are less of a concern and quickly discernable from mandatory catch reports. Although effort-based systems are less efficient than catch-based systems because fishing innovations are penalised by awarding greater catch power to a vessel, an explicit tradeoff was made to implement the administratively simpler effort-based approach in the first instance. In the medium to long-term it is expected that the fishing industry will seek a change from input controls to output controls in some higher value finfish fisheries. Since the new policy provides for both TAC and TAE managed fisheries there are no major legislative barriers to this change.

Local ownership

In many small territories the issue of foreign ownership and control of natural resources is politically sensitive. Part of this sensitivity is a legacy of the colonial system where resources were managed for the benefit of absentee land owners with little benefit accruing to the local population. At the same time, limited experience with industrial fisheries and limited capital mean that foreign investment plays a major role in the development of fisheries in small territories. In the case of the Falkland Islands, not only do joint ventures with foreign companies form the backbone of the domestic fishing sector, sales of fishing licences to foreign flagged

vessels, often only loosely connected to local companies through agency agreements, make up half of annual government revenue.

Another dimension that has political significance in small, fishery dependent states is how much faith officials and politicians are willing to put in the operation of the market to ensure fisheries resources are used in a way that maximises the welfare of the community. Any apprehension is often warranted given thin markets arising from a limited number of eligible owners of rights and the significant amount of capital required to obtain rights, and the stickiness in markets caused by long-term joint venture arrangements. Addressing these concerns presents a major policy challenge.

Such concerns were at the heart of protracted debates during the development of the new policy. The agreed solutions had to be both politically acceptable, conform with international agreements and be workable for both for administrators and fishing companies. Consensus was finally reached when it was agreed that only companies that are 100% owned by shareholders with Falkland Islands Status could own ITQ. This addresses local concerns that non-Falkland Islanders could come to live in the Islands in order two obtain fishing rights. Falkland Island Status is normally awarded after a period seven years as a full time resident in the Islands. Significant political and public concern about granting perpetual rights resulted in rights being granted for 25 years. This time period was a compromise between those who called for the certainty of permanent rights and those who did not wish to see "public" rights given away permanently.

Limiting the ownership of ITQ rights to status holders will see Falkland Islands partners in any joint venture in a much stronger bargaining position. Under existing arrangements vessels are effectively foreign owned and crewed and catches are integrated into the marketing operations of the foreign partners. Although Falkland Island companies may have up to a 50 percent ownership in a vessel, their bargaining power is severely reduced because of the need to renew one year or five-year licences. Renewal depends on owning a part share of a vessel that has a track record in local fisheries and hence on the continued presence and cooperation of the foreign partner. Under the new arrangement it is the foreign partner who will need the continued support of the local partner to guarantee access to the fishery.

Providing for foreign involvement in fisheries and strengthening the market for rights trading

To provide for joint venture arrangements and to create more robust markets for rights trading, the new policy provides for annual or seasonal catch entitlements (CE). Catch entitlements are generated by ITQ at the start of each fishing year or season. They must be held to cover catch or effort in Falkland Islands waters. They are tradable but expire at the end of the fishing season or fishing year. CE, rather than ITQ, or as now the fishing licence, becomes the day to day currency of the rights-based regime. Fishing vessels will still be required to have a fishing licence that will be granted if the vessels operators have sufficient CE to cover their fishing campaign in Falkland Islands waters. The fishing licence is retained in the new management system to regulate fishing activity with respect to gear type and sizes and mitigation measures to limit the impact of fishing on dependent and associated fish stocks, marine mammals, seabirds and the marine environment.

Unlike ITQ, joint venture companies can own catch entitlements even if Falkland Island status holders have a minority shareholding. The threshold for local ownership may be set at different level in different fisheries. This allows existing joint ventures to continue with minimal disruption and gives the security of short-term access to fisheries to foreign investors. It is also expected that local companies will be more willing to trade short duration CEs rather than ITQ because this trade does not affect a company's long-term access to the fishery. In time the CE mechanism should see a faster rationalisation of the fishing fleet and effort than would have been the case if ITQs alone where implemented.

Determining if and how government should intervene in a fishery

The extent of possible government intervention in the operation of fishing companies has been subject to considerable debate. It was agreed unanimously that Government should intervene at the level of the fishery to set catch levels and for other sustainability related reasons. Less agreement was to be found about whether or not Government should be able to intervene if it had concerns about an individual company's economic performance. On the one hand pro-market interests argued for little or no intervention because the market would see stronger performing companies buy out the rights of poorly performing companies. On the other hand pro-intervention factions felt that holding rights was a privilege and companies under-performing in economic terms should lose their eligibility to hold rights.

The agreed solution is to establish eligibility registers. There would be an ITQ eligibility register and a catch entitlement eligibility register for each fishery. Only companies listed on an eligibility register would be able to trade ITQ or CE for that fishery. To be entered onto an ITQ eligibility register, a company will have to demonstrate active involvement in a fishery, effective control of rights and the efficient use of those rights. To be on a CE eligibility register companies will need to meet minimum thresholds for Falkland Island participation in a joint venture company. Companies listed on the ITQ eligibility register will automatically be placed on the corresponding CE register.

Active involvement means a company must be actively involved in either the harvesting and/or processing and/or selling (wholesale or retailing of fish) and its holding of rights should be commensurate with its active involvement in the seafood industry. This is to prevent brokering of licences where a Falkland Islands company makes its income from trading in rights rather than from direct business involvement in the catching, processing and/or selling of seafood.

A Falkland Islands company must also be able to demonstrate that it is in control of how it uses its rights and who uses its rights. This prevents Falkland Islands companies becoming fronts for foreign fishing concerns who are really controlling the activities of the local company. Finally, to remain eligible to hold and trade rights a company must be making efficient use of its rights holdings. This means that the return to the holder is proportional to the value of the rights held, and not inconsistent with the returns received by holders of similar rights over a reasonable period of ownership.

To remain eligible on a register, a fishing company must make a statutory declaration each year that it is eligible to remain on the register and provide documentation to the Director of Fisheries to support the declaration. Companies that are found to be ineligible to be placed on or remain on the relevant register can appeal the Director's decision to an independent review board. The decision of the review board is binding. If still not satisfied with the outcome either the Director of Fisheries and/or the company can judicially review the board's decision.

Initial allocation of ITQ rights

In the first instance fishing rights will be allocated to companies on the basis of their effort history in a fishery. The Falkland Islands various fisheries can be differentiated by the level of exploitation and the level of involvement by local companies. It is intended to allow fisheries such as *Loligo* squid with higher levels of Falkland Islands involvement to move quickly to a fully transferable rights-based system, while taking a more diversified approach to fisheries such as *Illex* squid with low levels of Falkland Islands involvement. The intention with fisheries dominated by foreign fishing companies is to boost local involvement in the fishery, but to maintain stability where foreign vessels operate, sometimes with relatively weak links to local companies. This will allow local companies to proceed at a pace they can sustain without jeopardising the significant revenue that Government receives from the sale of licences to overseas fishing interests.

To cater for the differing levels of economic development and local involvement in the various fisheries allocation formulae for four categories of fisheries development have been developed (Table 1). Although it is proposed to have a specific allocation method for each fishery there can be some mixing of systems for a particular fishery. The finfish fishery is an example where joint venture and other business arrangements range from a relatively high level of Falkland Islands involvement to very little active involvement. Hence, a different approach can be adopted in a particular fishery depending on the quality of the business arrangements. Aggregation limits setting the total proportion of available ITQ rights any single company can control may also be set for each fishery but only if the Government believes there is good reason to restrict the amount of control a company can have over a fishery.

Biological	Relative local investment in the fishery			
Exploitation	Undeveloped	Developing	Relatively Developed	Developed
Exploratory	Exploratory Allocation Policy			
Under Exploited	Developmental	Full effort history plus developmental allocation policy		Full effort history + auction of unallocated rights
Fully Exploited	Allocation Policy			Full effort history
Over exploited				Full effort history

Table 1: Rights Allocation Matrix

In a new or exploratory fishery rights will be allocated in the first instance to the Falkland Islands fishing company that undertakes the exploratory fishing. The local fishing company first applies for an exploratory licence for a period of between one and three years. The Director of Fisheries places whatever catch or effort restrictions he or she believes necessary to conserve the stock or mitigate impacts on seabirds, marine mammals, associated and dependent species and benthic communities. On expiry of the exploratory licence the company applies for the exploratory catch to be allocated as ITQ. The Director of Fishery must then determine a total allowable effort or catch for the fishery. The company, subject to aggregation limits, is awarded its share of the catch or effort as ITQ. The Government owns any unallocated effort and has the right to sell those rights to other Falkland Islands fishing companies after first offering the company with the exploratory licence first right of refusal on the purchase of unallocated rights. The first right of refusal is subject to aggregation limits.

The Crown will retain all ITQ in an undeveloped fishery and a developmental allocation policy will apply. This means existing licences (one and five years) held by non-Falkland Island interests will revert to the Government on expiry. A new type of provisional quota (PQ) right will be created. These will be non-transferable and exist for up to 5 years. PQ will generate CE that cannot be traded. Previous licence holder shall have a one off first option on an equal amount of PQ if they put forward proposals to develop those rights by establishing a seafood operation that meets the ownership criteria for fully transferable ITQ. Other local qualifying companies can bid for PQ at any time. Locally owned companies that meet the criteria for full rights at any time within the 5 year period can convert their provisional right to ITQ. Companies that do not meet the criteria for converting PQ to ITQ within the 5-year period may apply for a further period but this will be in competition with other eligible applicants. Companies eligible to hold ITQ will take priority in the allocation of any unassigned rights

The developmental allocation policy will apply to mixed finfish and *Illex* squid fisheries. Effort will be allocated as either ITQ or PQ depending on the extent to which the companies involved satisfy the criteria for owning ITQ. Local fishing interests will fish alongside foreign vessels in mixed fishery. Local interests will always have priority in the allocation of PQ.

Local companies involved in fisheries such as *loligo* squid and Patagonian toothfish (*Dissitichus eleginoides*) that are regarded as developed or relatively developed are expected to be eligible to receive full ITQ rights granted on the basis of their effort history. This award is not automatic and each company believing it is eligible to be awarded rights will have to demonstrate eligibility and catch history. Any ITQ rights in not owned by qualifying companies are owned by the Government. The CE generated by ITQ owned by Government will be made available to foreign fishing and local interests each year in return for a licence fee.

Resource rents and cost recovery

The Falkland Islands Government has a well-developed system of setting licence fees and collects up to £25 million in licence fees annually. These royalties represent between 10 and 20% of the ex-vessel value of the catch depending on the fishery. The annual cost of managing the fisheries is approximately £6 million, including the cost of fisheries patrol vessels and aircraft.

Under the new policy, Government will continue to charge resource rents with some modifications. For foreign vessels fishing in the Falkland waters using catch entitlements sold by the Government the present, or broadly similar, system of payments levied on each vessel and based on projected catches and catch values will continue to apply. Where there is competition for catch entitlements from overseas companies the Government may consider a closed tender where bidders are asked to bid additional amounts above a price floor established by the Government. This will allow the Government to extract the maximum amount of rent from the fishery in years where there is high demand for catch entitlements. For fisheries where ITQ or provisional quotas have been granted, the owner of the ITQ or PQ will pay a resource rent to the Government based on their proportional share of the catch or effort in a fishery. This will help ensure that ITQ holders make the most efficient use of their rights since they are responsible for paying substantial rents to Government.

The new policy provides for the collection of resource rents and provides for the method of assessment to be set by regulation. This allows the methodology for assessing resource rental payments to be altered without the need to amend the legislation. Failure to pay resource rents would result in suspension of that company's fisheries licences for any stock fished in Falkland waters and forfeiture of quota to the Government. In case of bankruptcy or receivership the fisheries legislation will contain a clause ensuring the Government is a secured creditor.

The issue of whether or not the Government should seek to recover some of the value of ITQ if they are traded was discussed intensively during the development of the policy. The argument for this recovery is two-fold. First, Government created the permanent right and the ability of owners to sell the right and is therefore entitled to some proportion of any increase in value. Second, the first time an entity that was allocated rights sells the rights they get a windfall profit.

Arguments against recovery of some of the "additional" value of the rights were also strong. In most instances companies built up the fishing histories that gave rise to the initial rights allocations through significant investments in the fishery. In building up histories, entities paid significant amounts of resource rents and, in many cases, company tax to the Government. Subsequent purchases of rights are made at the market price and therefore there are no windfall gains to rights owners on subsequent sale of rights. Increased efficiencies in the exploitation of fisheries resources due to the rights-based system should see higher profits and therefore increased company tax revenue from the seafood industry. Finally, entities selling rights will often reinvest the revenue in other parts of their fishing business or invest in other sectors of the economy.

It was concluded that there would be no additional payment for rights when they are first allocated or subsequently traded. Instead, tax legislation will provide for the sale and purchase of rights to be included in the normal profit and loss accounts of the company in the year that they occur for tax purposes. In other words companies cannot, for tax purposes, claim rights as a capital item. Testing of different scenarios during policy development showed that the net effect is revenue neutral because ITQ sales will be offset by purchases and all other things being equal the tax liability will reflect the difference in purchase price and sale price.

A rights-based system will entail additional administrative, enforcement and monitoring costs. Where possible these costs will be identified and recovered directly from the rights-owners. This payment is additional to the resource rental payment. This policy only applies to the cost of administering the property rights component of the management system and not to the management or enforcement of the fishery. Where possible, the Government will look to delegate responsibility for administering the property rights system to the fishing industry. This negates the need for cost recovery. Within the standards and specifications set by the Director of Fisheries the industry would be responsible to its own members for the cost and efficiency of the system. This includes the rights register, recording of rights trades, and recovery of the costs of administering the system.

A dependence on resource rentals to fund public sector expenditure may not be sustainable even if catches remain healthy. The resource rents charged by the Falkland Islands Government are among, if not, the highest in the world. These resource rents have been collected from foreign companies, either indirectly through their involvement in joint venture arrangements or directly from the owners of foreign fishing vessels. There is a suspicion that these high rents have in fact captured part of the subsidies paid by foreign governments to their offshore fleets. Recent changes in European Community fisheries policy and in the way Far Eastern governments support their offshore fishing fleets brings into question the sustainability of high resource rentals.

On the surface, domestication of fishing effort and transferring the locus of control to Falkland Islands interests is an attractive proposition providing protection from changes in the fishing support policies of nations or bodies such as the European Commission. When licence fees were paid by foreign interest they were a net benefit to the Falkland Islands. Once these charges are increasingly imposed on local companies as owners of ITQ, the payments become transfers and add nothing to gross national income. The debate then switches to which policy generates the most benefit: Rental payments to Government that then uses the revenue to provide social and other services to the Falkland Islands community or reinvestment of rents by fishing companies to expand their operations. There is little doubt that the local fishing industry will lobby hard to keep resource rentals to a minimum, arguing that the tax system will capture rents in the form of corporation tax.

CONCLUSION

Adoption of a comprehensive system of tradable rights is a bold and complex undertaking for any small coastal territory. This is especially so when the economic wealth of the territory is almost wholly dependant on the health and management of its fisheries. Without change, however, a trend towards local exploitation of fisheries resources will slow and likely reverse itself. With long term rights in place the Falkland Islands fishing industry will be well positioned to take advantage of the globalisation of the international seafood market. Companies need no longer depend on the goodwill of joint venture partners for all aspects of their business. This will mean a diversification of markets and diversification into new fisheries, or fisheries with little Falkland Islands presence. Diversification will means the spreading of exchange rate and market risks across different markets and products, and real growth in the seafood sector from operational efficiencies and value adding marketing activities. A successful rights-based management system should see the enhanced transfer of fishing skills, technology and market knowledge while providing for continued foreign investment and joint ventures, but with effective control of the partnerships firmly in Falkland Islander's hands.

Although this paper has focussed on the property rights elements of proposed fisheries reforms in the Falkland Islands, the policy review also addresses institutional issues. The institutional aspects of Falkland Islands fisheries management will become more and more important as the full potential of the rights-based management regime is realised. Matters of consultation, the role of peak industry bodies, and importantly the appropriate role of Government, industry and other groups with an interest in fisheries, such as conservation groups are discussed with increasing regularity. Devolution and delegation of powers, duties and functions are embryo concepts in a territory only recently emerged from a colonial, hierarchical style of Government.

At the time of writing legislation implementing the policies has been drafted by the Falkland Islands Attorney General. The United Kingdom's Foreign and Commonwealth Office (FCO) is reviewing the legislation and policy with respect to its implications for foreign affairs. Once the legislation is approved by the FCO and then passed by the Falkland Islands legislature much work on regulations and policies as well as the creation of a market for rights trading remains to be completed before implantation during 2005. This pioneering work, at least in the context of a small coastal territory, the lessons learned from it, and the management system's eventual performance, will set a precedent and example for many other small coastal states. This experience should demonstrate that rights-based management systems are feasible in countries with minimal fishery management infrastructures and are not only the preserve of coastal nations with large economies and large fishery management institutions.

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