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Transforming ownership and governance – Lessons from capital intensive pelagic fisheries in South Africa and Zimbabwe

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Abstract: This article is on the political economy of transformation and governance reform in industrial fisheries in Southern African states undergoing political and socio-economic transformation. Specifically, it focuses on the experiences of transformation and reform of governance in the pelagic fisheries of South Africa and Zimbabwe. A democratic South Africa and independent Zimbabwe each inherited a dual socio-economic system characterised by racially based inequitable distribution of political and economic powers, and productive assets in favour of the white minority. This study provides a comparative analysis of the driving forces for transformation and governance reform in the two countries. The study demonstrates that reliance on market mechanisms as the main driving force for change in both countries has merely reinforced the existing ownership patterns and power relations, with a limited number of strategically positioned black elites benefiting. Neither the state nor the market place has been able to secure equitable distribution and the creation of an inclusive governance system. Instead disputes are often still settled in courts. This paper concludes that the solution could be found in innovative approaches to transformation and governance that genuinely include the players without undermining the economic viability of the industry rather than the use of conventional top-down state and free market interventions.

Keywords: Pelagic fisheries, political economy of transformation, South Africa, Zimbabwe

1. Introduction

Until 1980 and 1994 respectively, Zimbabwe and South Africa had been ruled by white minority regimes whose policies systematically stripped the black majority of political power and socio-economic rights. Upon finally overcoming white minority rule the black governments faced the difficult task of redressing the extreme imbalances in the distribution of wealth and resources from whites to blacks without killing or jeopardising the goose that laid the golden eggs – the economy. The reform of fisheries policies in both South Africa and Zimbabwe was about making trade-offs among the three incompatible institutional orders of the community, state and market.[1] Any strategy for changing property rights comprises a set of rules, principles and values that structure economic, social and political interactions. Redistribution is therefore a contestable issue as actors reposition and align themselves with institutions that would support or enhance their interests.

Transformation in fisheries underwent through historical periods that shaped their governance. In both countries fisheries management was (and still is) designed to ensure biological sustainability through the use of conventional biological scientific models and assumptions. In recent years and following the collapse of many fisheries around the world, issues of economic and social sustainability are beginning to come centre stage. This has triggered a growing recognition for user participation (the concept of co-management) to improve fisheries management performance as well as introducing more democratic decision-making procedures in fisheries management. This shift in thinking has been heavily influenced by concepts such as *people-centred development and sustainable development* (World Commission on Environment and Development 1987) and *sustainable livelihoods* (Chambers and Conway 1992).

This article aims to evaluate the dynamics and processes of policy evolution in the pelagic fisheries of South Africa and Zimbabwe. It provides a comparative analysis by highlighting the main drivers and governance reforms involved in transforming pelagic fisheries in the two countries. The article discusses how scientific discourses have led to a strong focus on sustainability of the pelagic resources, which to some degree has undermined increased user-participation in the policy process. Moreover, it addresses the delicate balance between transformation and maintaining economic efficiency of the fishing industry. In this article, primary mechanisms for transformation are divided into: re-distribution

[1] Community is characterised by close interpersonal ties, egalitarian and often multiple social networks and shared identities. The state is characterised by hierarchical order, bureaucratic structures, authority relations and professional uni-dimensional relationships. Markets are characterised by competition, economic efficiency and rationality.

of fishing rights/quotas (external transformation); restructuring of ownership and management of fishing companies (internal transformation); and a revamp of governance structures in line with the new political order. Particular emphasis has been given to understanding the policy dynamics around transformation applying market mechanisms in a complex political environment where powerful actors, networks and alliances are operating to protect their often fundamentally different interests.

2. Methods

The material presented in this article is an accumulation of the research on governance and management of pelagic fisheries in South Africa and Zimbabwe conducted by the authors over the last 10 years. The Author have together and individually participated in a number of research projects dealing with pelagic fisheries in the two countries, including a PhD study by Nyikahadzoi (2006).

In conducting the research the authors have all together conducted more than 150 in-depth semi-structured face-to-face interviews in South Africa and Zimbabwe covering all stakeholder groupings. About 10 focus group interviews were conducted with industry representatives of the Kapenta Producers Association (representing the interests of white entrepreneurs) and Indigenous Kapenta Producers Association (representing the interests emerging black entrepreneurs) in Zimbabwe. In addition, the authors have attended meetings of the Pelagic Scientific Working Group in South Africa as observers and one of the authors attended management meetings for the Kapenta fishery in Zimbabwe as a staff member of Zimbabwe National Parks and Wildlife Authority.

The authors have in addition followed the evolution of the policy process through the media, and have attended public meetings on the subject. Official documents and stakeholder discussion papers have been an important source of information also, particularly documents produced by Marine and Coastal Management (MCM) in South Africa and documentation provided by the Zambia Zimbabwe SADC Fisheries Project and the Lake Kariba Fisheries Research Institute in Zimbabwe.

3. Overview of the pelagic fishing industries

The pelagic fisheries in both countries are capital intensive, operate on high volume/low profit basis and are based on the exploitation of highly productive, short-lived and migratory species. Both fisheries have to cope with high fluctuations[2] in biomass which has implications on annual catch possibilities. Management skills as well as capital are essential for operation of a profitable fishing business in the sector.

[2] The fluctuations in stock sizes are due primarily to the characteristic population dynamics of the species and environmental factors.

Catch trends of the pelagic fisheries

South Africa's pelagic resource is a multi-species fishery based on two primary species, namely anchovy (*Engraulis encrasicolus*) and sardine (*Sardinops sagax*). The two species contribute between 60% and 90% of the total national landings. This fishery is the largest in South Africa in terms of catch volume and the second most important in terms of value. The anchovy is reduced to fish oil and fishmeal while the adult sardines are canned or frozen for human consumption. Juvenile sardines are also reduced to fish oil and fish meal together with the anchovy.

The pelagic fisheries off South Africa are highly variable in terms of changes in relative catch abundance, which is closely linked to changes in environmental conditions (Fairweather et al. 2006). Figure 1 below shows the fluctuation of the target species over time. South Africa's purse-seine fishery for pilchard started in the 1930s and was commercialised in 1943 to meet war-time demand for canned sardines (Crawford 1981). The pilchard fishery landings peaked in the early 1960s reaching around 400,000 tonnes, but collapsed thereafter (Fairweather et al. 2006). As a result, fishermen started employing purse-seines with a smaller-mesh size in order to target anchovy. Since then anchovy has been the primary target species (De Oliveira 2002), peaking in the mid-1980s at around 600,000 tonnes and then collapsing thereafter. From the mid-1990s both anchovy and pilchard stocks recovered substantially, with the anchovy landings reaching close to 300,000 tonnes in 2005 and those of pilchard reaching 400,000 tonnes in 2004 (Fairweather et al. 2006). Since then, both stocks have declined and the 2008 TACs were reduced to 90,000 tonnes for pilchard and 247,500 tonnes for anchovy (Moolla and Kleinschmidt 2008).

The fishery for small pelagics is South Africa's second most economically valuable fishery after hake. In 2006 the value of the fishery amounted to R 1150 million and contributes 23% of the total value of fish landings in South Africa

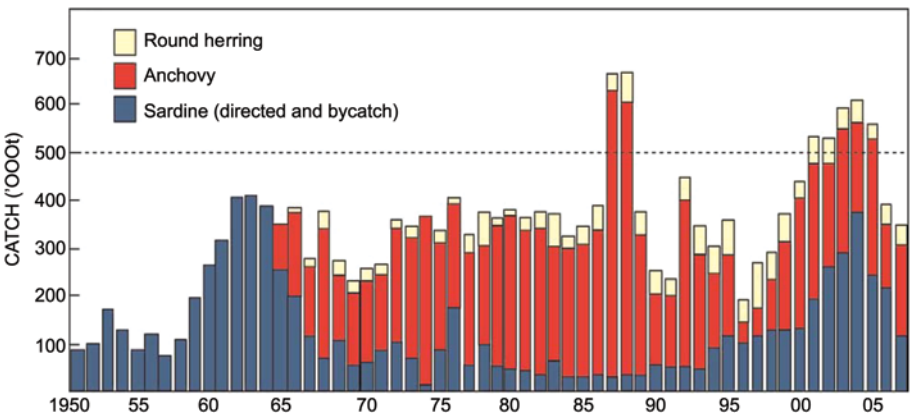

Figure 1: Catches of sardine, anchovy and round herring taken by South Africa's pelagic fishery for the period 1950–2007 (Source: MCM 2007).

(Warman 2007). The adult sardine is canned or frozen for human consumption, while juveniles and anchovy are reduced into fishmeal and fish oil. In 2003, the fishery supported about 100 purse-seine vessels, eight fishmeal plants, six canning factories and 40 bait packing facilities (Sauer et al. 2003). The infrastructure was valued at R 1200 million in 2005 (DEAT: MCM 2005). The sector employs more than 10,000 people: 4500 fulltime workers, 2500 seasonal workers, 700 fishermen and 2400 indirect jobs (Sauer et al. 2003).

The fishery for Kapenta (*Limnothrissa Miodon*) on Lake Kariba (a man-made lake) was initiated in 1974 after the introduction of the freshwater sardine from Lake Tanganyika in the 1960s. Total annual landings of Kapenta in Zimbabwe peaked at about 40,000 tonnes in 1990 as shown in Figure 2 below. Thereafter catches have shown a downward trend due to theft (therefore unrecorded catches), persistent droughts and decrease in fishing effort due to the worsening economic situation in Zimbabwe (Songore et al. 2000). Catch statistics had gone as low as 26,000 tonnes in 2000 (Songore et al. 2000).

The Kapenta fishery is a very important source of protein for Zimbabweans. It is also exported to neighbouring countries thus providing an important source of foreign currency. The importance of Kapenta as a cheap source of protein has become particularly critical in recent years due to the economic crisis in the country. As of 2006, about 100 Zimbabwean fishing companies operate 300 fishing vessels. The fishery directly employs about 5000 people. Another 5000 Kapenta traders and retailers make a living from Kapenta (Nyikahadzoi 2006). Others are employed in related ancillary services such as boat-building and net-making. The fishing industry was valued at approximately USD 7 million in 1990-prices.

3.1 Management approaches

Fisheries management has traditionally focused on biological sustainability aiming to define optimal level of resource exploitation. South Africa's pelagic fishery has

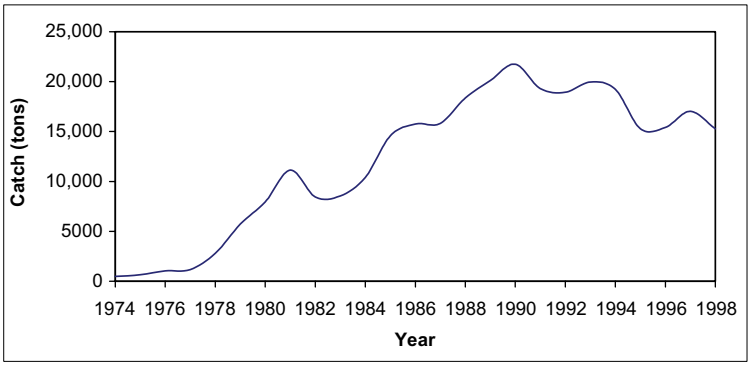

Figure 2: Pelagic Fishery Trends by Basin on the Zimbabwean Side (Source: Songore et al. 2000).

been managed using Operational Management Procedures (OMPs) since 1991. OMPs specify the required data sources for management and translate these into regulatory controls. Essentially, OMPs comprise a set of rules pre-agreed upon by scientists, industry stakeholders and managers. The OMPs for small pelagics set separate TACs for anchovy and sardine, and a total allowable bycatch for juvenile sardine caught with anchovy. Candidate OMPs are developed and tested via computer simulation. Selection of an OMP is based on its ability to (a) maximise catches in the long-term without exposing the resource to undue risk of depletion and (b) avoid excessive inter-annual variation in TACs (Fairweather et al. 2006). The OMPs for the pelagic fishery use research survey-derived estimates of anchovy and sardine biomass as indices of abundance, age structure and mass-at-age of the population and estimates of natural and fishing mortality. Explicit in recent OMPs has been the objective of minimising inter-annual variability in TACs, with the aim of maintaining stability in pelagic landings – a strong socio-economic consideration.

South Africa is striving to meet the 2010 deadline agreed upon at the Johannesburg 2002 World Summit on Sustainable Development for application of the Ecosystem Approach to Fisheries (EAF) management. This followed the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, to which South Africa is signatory, and the Food and Agriculture Organization guidelines for an ecosystem approach to fisheries management (FAO 2003). According to FAO (2005, 3): "EAF's main purpose is to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardising the options for future generations to benefit from the full range of goods and services provided by marine ecosystems." The small pelagic fishery is the first for which South Africa is exploring the feasibility of an EAF. As the fishery moves towards an EAF management approach, it will be important also to focus on the institutional implications of this new approach as well as costs, capacity, and management responsibilities apart from the socio-economic implications (Fairweather et al. 2006).

When Kapenta fishing on Lake Kariba commenced in 1973, fisheries managers had very limited knowledge regarding the size of the biomass (Machena and Mabaye 1987). During this early phase of commercial fishing, an adaptive management approach was adopted (Nyikahadzoi 2006), progressively issuing new licenses. Management decisions where based on incremental and experiential learning supported by active monitoring the developments of the effects new levels of fishing effort on biomass. The scientific research focused on mean length (it was believed that mean length of fish declines with intensive fishing) and catch per unit effort (CPUE). The use of mean length as proxy for abundance was later dropped as it failed to give accurate signals on the status of the Kapenta (Sanyanga 1990). This, therefore, meant that CPUE was the only index used to measure the abundance of the Kapenta fishery during this management epoch (Machena and Mabaye 1987). As more knowledge of the fishery was gained, the level of fishing effort was always revised upwards. In the mid 1990s, CPUE as a standard measure of performance of the Kapenta fishery was abandoned in favour of the

simulation biological and bio-economic prediction model. However, research results on Kapenta clearly indicated that a management approach based on Maximum Sustainable Yield (MSY) is not relevant nor is bio-economic modelling the way forward (Zambia Zimbabwe SADC Fisheries Project 1997, 26). The result of the research undertaken by Jul-Larsen et al. (2003) demonstrated that fisheries in small and medium size lakes in Sub-Saharan Africa are largely driven by natural variation (in water levels), being based on fisheries that are resilient towards changing effort levels. Thus, there is little need for management to focus on biological conservation, but instead management of the Kapenta fishery should focus on the economic viability of the fishery and mediate conflicts within the Kapenta fishery and toward other groups.

3.2 Equity considerations

Another management task that the two countries have to deal with is equitable distribution of access rights to the fish resources among its nationals. Soon after attaining political independence the two countries had to deal with the imbalance in resource ownership and access rights caused by the legacy of colonialism (in the case of Zimbabwe) and apartheid (in the case of South Africa). However, it has not been possible to accommodate all the potential new entrants to the industry, given that the upper limits in terms of safe sustainable harvesting levels in the pelagic fisheries off South Africa cannot accommodate all new entrant citizens that would have wanted to participate. In both countries, a variety of strategies had been used for restorative justice to address past political, social and economic injustices post independence. A number of key discourses are also used to legitimise these approaches to restorative justice.

4. Governance reforms

In both countries, transformation of the pelagic sector focused on three aspects; redistribution of rights from the established, mostly white-owned companies to emerging black entrepreneurs, broadening of ownership of the established companies (especially in South Africa) and lastly revamping governance of the sector in line with the new political orders. Although the Zimbabwean government was not explicitly keen on internal re-structuring of fishing companies as an avenue of transformation this has nevertheless *de facto* been the case. The key challenges that the two countries face in transforming the sectors have been for these changes to happen without disrupting the biological integrity of the resource, or threatening the jobs and employment that the sectors offered, and at the same time also ensuring that the industry remained competitive both nationally and internationally.

4.1 Socialist approaches

The governance and economic ideologies of the incoming ZANU-PF and ANC governments had strong socialist imperatives. Thus at independence in

Zimbabwe, 12 of the 20 licenses for redistribution were issued to cooperatives. The remainder were given to persons with high-level political connections. Cooperatives were preferred in order to extend socialist and popular democratic participation in the ownership and management of natural resources. Most of the cooperative members were privileged individuals and groups linked to the ruling party, ZANU-PF, partly as political patronage. These included war veterans, politicians and ex-detainees. When the ecological limit of the resource was perceived to have been reached, the government then resorted to redistribution through the 'willing seller, willing buyer' principle that had been enshrined in the Lancaster House agreement which provided a constitution for the post colonial Zimbabwe in 1980.

For the first two years into democratic rule, the South African government embarked on implementation of a 'people-centred' Reconstruction and Development Programme (RDP) policy framework which envisaged a strong state interventionist approach in management of the economy. In the case of fisheries, the state was to intervene actively in attempts to ensure that the three pillars of transformation (redistribution of rights, broadening of company ownership, governance reforms) were being implemented. As discussed below this was abandoned for a more neo-liberal[3] market-oriented approach referred to as GEAR. Without doubt, the timeframe for the RPD policy approach was too limited to expect any meaningful transformation.

However, the hands of both new governments were tied with regard to intervening in transformation. In the end the process has been largely left to market forces, partly because of the prevailing global influences and forces following the collapse of communism in the former Soviet Union and Eastern Europe. Another important factor that limited the hand of the two governments were the agreements enshrined in the negotiated settlements that led to the independence and end of apartheid. These legal constraints under the terms of the negotiated settlements dovetailed with the practical desire to secure orderly transitions, which had to discourage and prevent the sudden exodus of capital and skills.[4]

4.2 Market-based approaches

The collapse of the Soviet Union (communism) by the end of the 1980s and the neoliberal movement (economic and political) on the international scene forced the abandonment of socialist policies. At about the same time the World Bank and the International Monitory Fund forced the introduction of the Economic Structural Adjustment Programme (ESAP) in Zimbabwe and the South African

[3] Neo-liberalism emphasises concepts such as free trade, privatisation, limited government intervention and undistorted market prices.

[4] Mozambique experienced such a capital flight, which slowed down redistribution of access rights. Factors such as lack of skills, finance and access to credit worked against the emergence of strong black entrepreneurs that could take up fishing business.

government switched to the Growth Employment and Redistribution (GEAR). ESAP and GEAR were designed to reduce government's involvement in national economic and social development and allow markets to determine the pace and direction of development. The programmes required that the governments reduce fiscal deficits, liberalise trade and deregulate domestic markets. It was assumed that GEAR in South Africa and ESAP in Zimbabwe would lead to economic growth and creation of new jobs and that benefits from these would 'trickle down' to the poor and so begin to lift them out of poverty, without direct state intervention (Isaacs et al. 2007).

In both countries, the emphasis was on the market mechanisms to regulate the distribution of access rights. The momentum to restructure the fishing industries declined considerably as a result of implementation of market-oriented Economic Structural Adjustment Programme and Growth Employment and Redistribution approaches in the two countries. However, these market-oriented approaches did not yield the desired results. Rather they benefited the existing, established (white-owned) fishing companies more than the new entrant (mainly black-owned) fishing companies. The economic conditions and market-oriented approaches favoured companies that had previous access to the resource, economies of scale, financial resources and a deeper understanding of market conditions – the well-established white-owned companies. For example, trade liberalisation opened up new foreign markets which increased foreign currency earnings for such companies and also enabled import of specialised skills and expertise.

The economic reforms adopted by the two governments required that participants be more enterprising, innovative, and economically aggressive. However, new entrants lacked skills, finance, networks business acumen and information to ably compete with established companies. New entrants also lacked financial support from local financial institutions due to red-lining[5] and the fact that most new entrants lacked collateral for loans. In both countries new entrants thus continued to look up to government to reverse the fishing rights and company ownership structures by simply taking such rights from established companies and redistributing them to those that had been historically disadvantaged (mostly blacks) as a concrete sign that black government is indeed in power.

On the other hand, the established companies were equally unwilling to relinquish fishing rights, arguing that they had spent decades building up their companies. As Isaacs et al. (2007) put it, the situation between those that had been historically disadvantaged and those that had all the rights before the political change in both countries was that of 'unwilling buyers' (the historically disadvantaged) on the one hand and 'unwilling sellers' (established white-owned companies) on the other. In both countries established companies used the economic and political hegemonic power that they acquired over the years of racially based monopoly ownership of fishing rights to maintain the status quo.

[5] Banks view poor people living in marginal areas as a huge risk when it comes to offering them loans.

Some companies even used loopholes in the new or existing legal framework to derail or frustrate the pace of redistribution e.g. in the case of South Africa by systematically challenging in Court almost every single decision on transformation issues taken by Government.

4.3 Affirmative action approaches

In order to correct for the shortfalls of the market, the governments of the two countries intervened in designing and implementing policies that favoured the historically disadvantaged. Such policies were driven by political imperatives aimed at addressing socio-economic grievances that could not be addressed through the use of markets. The two governments introduced Black Economic Empowerment policies that sought to bring about significant increases in the numbers of black people that manage, own and control the country's economy, as well as significant decreases in income inequalities (Government of Zimbabwe 1981; Republic of South Africa 2003, 12). The affirmative action had to address four critical issues that included the provision of capital to support black empowerment supporting the establishment of shareholding arrangements, promotion of employment equity and forced reallocation[6] of licenses in Zimbabwe.

In both countries one of the most important elements of this affirmative action has been the drive to offer credit lines to the historically disadvantaged. The South African government introduced the Development Bank of South Africa and the Industrial Development Corporation of South Africa. In Zimbabwe these financial intermediaries included the Indigenous Business Development Centre (IBDC) and the Small Enterprise Development Corporation (SEDCO).

Internal transformation

Although capital was available, established fishing companies preferred selling shares as a means to enhance black ownership. The shareholding approach increased black ownership, but not to the extent the two governments would have desired. Employment equity was used to promote blacks and women into senior decision-making management positions. Where the strategy was used the black directors lacked genuine management decision-making powers. Moyo (2000) and Isaacs et al. (2007) characterised most of the attempts by the established industry to introduce employment equity as window dressing.

Forced external transformation

The failure of the market and the negotiated approaches to adequately redistribute access rights led the government of Zimbabwe to take a leading role in redistributing access rights in the Kapenta fishery. In 1995, the government introduced a limit on the number of rigs a company could operate (Author 2006). The move was contested by the established industry in courts because there

[6] The forced reallocation of rights was not used in South Africa.

was no scientific evidence to suggest that Kapenta was overfished. Established companies and scientific evidence supported the contention that there was no need to redistribute access rights, rather new licenses could be allocated to black entrepreneurs without jeopardising the integrity of the fishery. Courts did not endorse this scientific argument and ruled that new licenses should not be issued. This gave the Government of Zimbabwe the justification to redistribute licenses from established companies to new black entrepreneurs.

In 2000, the government revived the call for radical redistribution of access rights to natural resources (including Kapenta fisheries) to fulfil promises made at independence as part of the fast track land reform programme. To overcome constitutional constraints, legal instruments were hurriedly amended, thereby extending the ground on which access to natural resources could be compulsorily acquired. The revised legalisation generally absolved government from providing compensation for confiscated assets. As a result of the fast track land reform programme, all economic fundamentals went in disarray (e.g. shortage of foreign currency giving rise to fuel shortages, high inflation rates and high costs of spare parts).

5. Lessons from the transformation

Despite various attempts to introduce policy instruments and strategies to address the economic inequalities and to redress the legacy of apartheid and colonialism in both countries, little has been achieved for the majority black population as they continue to be systematically excluded from benefitting from the transformation of the national economies. South Africa remains a highly unequal society. According to Human Sciences Research Council (2004) the Gini coefficient[7] for South Africa rose from 0.69 in 1996 to 0.77 in 2001, meaning that the gap between the rich and poor had widened. In rural Zimbabwe, while rural incomes had increased substantially between 1993 and 2003, inequality increased (with a Gini coefficient increasing from 0.51 to 0.568), especially among the poor (UNDP Human Development Report 2005). Commentators attributed this to reform polices which have intensified inequalities, with the poor and less-efficient farmers unable to participate in the growth experienced by wealthier, more efficient farmers (Cavendish and Campbell no date).

In both countries it can be observed that while some redistribution had occurred, the stakeholders from the previous eras have largely retained their dominant economic positions. Various strategies had been used to maintain this dominance, such as networking and forming alliances with other stakeholders. For government, when push came to shove, it used its political muscle to impose policy or revise it in such a way that would fall in line with its political and

[7] Gini coefficient measures how far the distribution of income or consumption expenditure deviates from a perfectly equal distribution, where a Gini of zero means absolute equality among all citizens while one (the highest score) means massive inequality.

socio-economic imperatives. For example, in South Africa the ANC dominated Parliamentary Portfolio Committee on Environmental Affairs and Tourism took issue with structure of access rights that had been proposed by the Fisheries Policy Development Committee especially the idea of 50 year long-term, real and transferable rights. The committee reduced the maximum term of fishing rights from 50 to 15 years inserted the principle of 'state ownership' of the resource by replacing 'selling' with 'leasing' in the Bill (RSA 1998a). In Zimbabwe, seeing that the policy of 'willing seller, willing buyer' under the Lancaster House agreement had proved insufficient for addressing the historical imbalances in access rights, the Government withdrew and terminated all commercial fishing licenses using powers under section 82 of the Parks and Wildlife Act of 1975 (Government of Zimbabwe 1995). This allowed the Minister, "if necessary or in the interests of the preservation, and conservation …, to prohibit any person from fishing absolutely or subject to certain conditions or from possessing fishing gear" (Parks and Wild life Act of 1975). The Act further stated that the Minister may or may not give any reason for the withdrawal of a license. However, fear of alienating international donors, investors and powerful private capital, largely in the hands of whites, forced the state to proceed with caution in its efforts to redress racial imbalances.

Due to the negotiated settlements that were part of the crucial condition for the white minority relinquishing power, pressure from national capital (which was, and still is, largely white-owned) and pressure from the World Bank and the International Monetary Fund constrained both governments the extent to which socialist macro-economic policy could guide re-distribution. As Ben Turok (This Day, 11 December 2003) pointed out, experience elsewhere in Africa had made liberation movements (cum governments) such as ZANU-PF and ANC painfully aware that achieving political office did not automatically provide the leverage needed to introduce change as intentioned. This shows that economic transformation is more difficult and complex than political change.

5.1 Change in collaborative structures

Transformation disrupted the historical, high level of cooperative governance between existing rights-holders and management authorities that were a result of shared culture, language and value systems. According to Hutton et al. (1999) this had enabled a high level of co-management between government and resource users with respect to stock assessment resulting in a high degree of acceptability and compliance with the regulatory measures by users.

However, the relationship and co-operation that had existed between companies and management authorities under the apartheid (in South Africa) and colonial era (in Zimbabwe) could not be maintained due to the diversity of the cultural backgrounds now involved and the increased number of participants, which called for different types of representation. For example, the South African Pelagic Fishing Industry Association (SAPFIA) was created by the large companies from the previous era. Most new rights-holders have organised their own groupings such

as the Small and Medium Enterprises (SMME) Association, the Small Fishing Companies Coalition and regionally based groupings such as the West Coast Fishermen's Association and the East Coast Fishermen's Association (Fairweather et al. 2006) rather than joining SAPFIA. Transformation has resulted in two Kapenta producers associations along racial lines in Zimbabwe. The two associations have antagonistic objectives. The white dominated Kapenta Producers Association (KPA) sought to protect the whites from losing licenses while the Indigenous Kapenta Producers Association (IKPA) was formed to lobby the government to redistribute licenses. The lack of a homogenous group gave rise to inability of the fishing industry to form a collective resource management goal.

The shift from a single stakeholder group to multi-stakeholder groups based on racial and company sizes increased conflicts of interests, competing discourses and interest-based networks and alliances aimed at influencing policy processes. The formation of organisations/associations with different views, aims, and objectives has hampered coordinated management strategies that find acceptance across all interest groups both in South Africa and Zimbabwe.

5.2 The use of science to strengthen discourses

An important biological characteristic of the Kapenta is that it is a resilient species capable of sustaining a high level of fishing effort. Marshall (1988, 1991) argued that increase in fishing effort induces the Kapenta to reproduce faster because its reproduction rate increases when its population density is reduced. From a commercial-fishing viewpoint, increased fishing effort can actually result in faster regeneration of the species and therefore increased productivity. This is contrary to the conventional bio-economic models which assume that at a certain level of fishing effort profitability of fishing will start to decline. According to this prevailing scientific view, the only limit to increasing fishing effort could be diminishing marginal economic returns from fishing and probably crowding on the fishing grounds, rather than recruitment over-fishing. The limited correlation between traditional state management interventions and sustainable utilisation of the resource creates a dilemma on whether to simply broaden access rights (increase fishing effort) or re-distribute the existing access rights in dealing with the past imbalances in access rights.

Based on the foregoing, the KPA challenged the premise upon which re-distribution was based by government, arguing that scientific evidence showed that additional fishing effort (that is, new entrants) could be accommodated without jeopardising sustainability of the resource. Therefore, the decision to reduce the number of licenses owned by large companies was unreasonable and indicative of an improper exercise of discretion (Court Case Number 356–96). They advocated for broadening of access rights rather than redistribution of existing licenses. However, government won the case on two grounds. Firstly, the court noted that the fishery was jointly owned by Zambia and Zimbabwe and, as such, Zimbabwe could not unilaterally issue more licenses. Thus although, it was scientifically

concluded that effort (more licenses) could be recruited without threatening the regenerative capacity of the resource, the government (in collaboration with the Zambian government) chose to adopt a precautionary approach.

South Africa's small pelagic industry is currently managed through Operational Management Procedures (OMP) (Shannon et al. 2004; Fairweather et al. 2006; DEAT: MCM 2008). OMPs are developed by the Pelagic Scientific Working Group (PSWG). The PSWG is a scientific forum of scientists from MCM and universities. The PSWG is tasked with determining the scientific basis for appropriate management measures and providing informed scientific advice as a basis for decision-making in the management of the pelagic fishery, making recommendations regarding pelagic TAC levels to the Minister and directing and setting pelagic fishery research priorities. Industry representatives and conservationists are only invited to PSWG meetings as observers.

Most stakeholders concede that they have difficulties in understanding how the OMP works (Fairweather et al. 2006). This points to a problem of legitimacy of the OMP, thereby making the management approach alien to the majority of stakeholders. Industry stakeholders would have preferred a more strategic approach to management than the present OMP approach (Fairweather et al. 2006), and advocate using the OMP only as a tool to formulate 'what-if' scenarios and using such knowledge in the decision-making process.

There are plans to incorporate indicators into South African pelagic fisheries management and to use an ecosystems approach by 2010. It is envisaged that the use of indicators will make it possible to add robust and less costly tools for the management of the small pelagic fishery and will further strengthen the current traditional stock assessment approach. As most industry stakeholders pointed out the inclusion of socio-economic indicators in OMPs would be indispensible for legitimisation of the approach among industry stakeholders, ensuring successful ecosystem management for small pelagic fisheries and reconciliation of multiple objectives.

In both countries, we observe the use of scientific discourses by the various actors in order to try and strengthen their positions. In the case of Zimbabwe, the existing rights-holders attempted to use scientific evidence in order to resist the reduction in the number of licences they held. The government also used the precautionary principle to justify redistribution of existing licenses rather than increasing the number of licenses in order to accommodate new entrants. In the case of South Africa, the use of a complex mathematical model and exclusionary institutional arrangements for management decision-making have resulted in an approach that most stakeholders see as a black box, alienating them from the management process.

5.3 The use of market mechanisms

The shift to neo-liberal economic policies in both countries in the 1990s has had a large bearing on the ability of emerging black entrepreneurs to enter, survive and integrate into the industry. Neo-liberalism emphasises discourses and concepts such

as free trade, privatisation, limited government intervention and undistorted market prices. As an ideological framework it aims to empower the markets and private interests over government and civil society. Proponents of neo-liberalism view it as a means towards economic growth, human development and freedom and liberty.

In reality though, emphasis on markets as the key mechanism for redistribution of rights and survival of new entrants has so far failed to bring about genuine transformation. Although the two governments initially forced the transfer of rights through political power, the (financial) markets limited the ability of most new entrants to access and secure the investment and operating capital necessary for running and consolidating economically viable fishing businesses. In both countries, new entrants have expressed dismay at the lack of financial and technical support by government agencies. The line agencies in both countries do not see their mandate as extending beyond management and regulation of the industry.

The issue of direct intervention for business capacity building of new entrants is seen as falling under the Department of Trade and Industry in South Africa and Ministry of Cooperative and Employment Creation in Zimbabwe. In Zimbabwe's case, emerging black entrepreneurs have continued to look up to the state for support and assistance – a legacy of the bureaucratised economy based on socialist ideology since independence which gave institutions like cooperatives the false idea and impression that government would always be there to hold their hand especially whenever the going got tough. The lack of government assistance forces most emerging black entrepreneurs into joint ventures with established companies on unfavourable terms out of desperation. In the case of South Africa where long-term rights have been introduced since 2006 and legislation to allow consolidation is being developed, the fear is that most small companies will end up being gobbled up by the big established companies, setting back transformation for years to come (Raakjær Nielsen and Hara 2006).

The lack of clear institutional mandates and responsibilities for capacity building for new rights-holders and emphasis on markets as key regulatory mechanism for entrance and survival in the industry made it very difficult for most new entrants to thrive. The market as a resource allocating mechanism has largely rewarded companies that already had good knowledge of the industry, had access to capital and could achieve economies of scale. In most cases these were the existing established companies. These were also the entities that were well positioned to take advantage of the incentives provided by the Economic Structural Adjustment Programme and the Growth Employment and Redistribution policies. The use of markets has therefore inadvertently strengthened the economic position of the existing established rights-holders, forcing most black entrepreneurs to become slipper skippers.

6. Conclusion

The experiences from South Africa and Zimbabwe of transforming the national economies after the end of minority white-rule clearly demonstrate that it is an

extremely difficult process to introduce property-rights reforms to secure a more equal distribution and ownership of economic resources, in this case the pelagic fish resources. As shown in this article it is a balancing act on the one hand of introducing property-rights reforms and on the other maintaining an economically viable industry that can deliver employment, contribute to food security and generally contribute to the national economy.

In this section we would like to emphasise some of the lessons from our case studies that might have broader application than the specific case studies. Unfortunately, we are not able to present the way forward, but rather, we will highlight several of the pitfalls in the pelagic fisheries transformation processes in South Africa and Zimbabwe.

We are sympathetic to the need for transformation of the economy in the two countries in order to rectify the historical injustices that continue to visit the formerly disadvantaged in form of extreme poverty amid great economic endowment for a small section of the populations of the two countries. As Mbeki (2003) argued, eradicating poverty is fundamental to transformation. Other commentators have gone further to warn that poverty and inequality pose the greatest threats to young democracies in southern Africa (Everatt 2003; UN-IRIN 2004), especially given that expectations and aspirations of the black majority had been raised phenomenally as a result of the new 'friendly' political order and the promise for redress following political change.

The Lancaster agreement in Zimbabwe and the protection-of-property clause in South Africa had earlier in the transformation processes hindered major redistribution reforms in the two countries respectively. In Zimbabwe, when the 10-year moratorium lapsed this built major political pressure for reforms. In South Africa, the state was continually taken to court by established industry, which greatly drained government resources and for many years prevented the government from implementing a fisheries policy with a long-term perspective. When the South African state introduced long-term rights in 2006, questions had been raised whether redistribution had taken place at all (Raakjær Nielsen and Hara 2006). The lessons from this is that one cannot expect the market to pave the way for the transformation process, that affirmative action is required sooner rather than later and that lack of change will only lead to frustration among the majority population that remains deprived.

The two cases presented in this article show that new players generally have been unable to establish economically viable enterprises, because they have been lacking management skills and access to capital. Our findings support the view presented by Isaacs et al. (2007) that the state will have to play a more interventionist role by supporting small emerging enterprises in order to ensure transformation. The state needs to establish institutional structures both for providing credit facilities and actively supporting skills development if governments' aims to redistribute property rights and transform the ownership of the industries are to take lasting effect.

Another lesson is that perhaps it was a dead-end already from the beginning to embark on transformation of ownership rights for capital-intensive fisheries, because this goes against the market dynamics. Such highly competitive and capital intensive industries (another example could be up-market tourism) are probably not a proper sector for transformation. An alternative solution could instead be to impose a resource tax on such enterprises. In lieu of rights, the revenue from the resource tax could then be used to fund the general improvements of the living conditions of the population at large (for example, supporting construction of affordable housing, improving the public education, health systems, etc), but particularly for coastal communities that were denied benefits while bearing the brunt of the environmental effects of the operations of these companies.

User participation for resource governance proved difficult to set up in situations where access to the resource is contested. Different stakeholder groups emerge and invoke institutions and strategies to influence the pace and direction of redistribution. Thus, in terms of participation in public debates and decision-making processes, it is evident that the established companies stakeholder groups have the upper hand as a result of the greater financial and human resources they are able to deploy compared to the new players. This better strategic positioning has enabled them to steer the transformation process. It has also enabled them to pursue a scientific discourse associated with sustainability that is supportive of their interests and difficult to challenge in terms of content by the new players, while at the same time keeping the state in a dilemma over what should take precedence – transformation, biological sustainability or economic competitiveness of the industry?

It is our impression based on the policy process undertaken in both countries for more than a decade that the state had underestimated both the need for capacity-building and the time it takes to build capacity among the new players for them to participate on equal basis. Danida (2008) also supported the argument that 5 years is actually a short time for building capacity for managing fishing business.

One also has to bear in mind that the overwhelming issue related to reallocation of property rights in Southern Africa is related to reallocation of land. It is obvious that state intervention in fisheries in the case of Zimbabwe had been largely dictated by the fast track land reform initiative. In South Africa's case, it is clear that the state has been careful not to introduce unmanageable policies on land reform that would create a precedent for other sectors such as fisheries, as was the case in Zimbabwe.

Governments in both countries had a broad political direction for their fishing industries that is redistribution of rights, transformation of the sectors and reforms in the way the sector was governed. What followed were networks, strategic alliances and discourses by the various stakeholders in order to influence policy in line with their interests using their agency and any other resources at hand. The overwhelming observation from the two case studies is that where different interests compete, the more adept and better resourced usually win unless

the government uses its political muscle to intervene on behalf of the weaker constituency. It can also be concluded that the market alone cannot bring about equitable distribution of access rights to natural resources without governmental support to access capital and building managerial skills of new entrants.

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