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Isaacs, M. 2013. Small-scale fisheries governance and understanding the snoek (*Thyrsites atun*), supply chain in the Ocean View fishing community, Western Cape, South Africa. *Ecology and Society* 18(4): 17. <http://dx.doi.org/10.5751/ES-05863-180417>



Research, part of a Special Feature on [The Recent History and Practice of Local Fisheries in a Globalizing World](#)

Small-scale Fisheries Governance and Understanding the Snoek (*Thyrsites atun*) Supply Chain in the Ocean View Fishing Community, Western Cape, South Africa

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ABSTRACT. Postapartheid fisheries reform in South Africa, through the Marine Living Resources Act (MLRA) 18 of 1998, used individual transferable quotas (ITQs) to broaden resource access through allocating quotas to new entrants, even though the system has been created to reduce capacity through a reduction in the number of active fishers. The formal action space created through fisheries reform in South Africa left many artisanal fishers to operate in the informal action spaces, selling *Thyrsites atun* (snoek) to poor communities to sustain their livelihoods. Artisanal fishers were not recognized by MLRA of 1998 and through class action case brought against the ITQ system, and in out of court settlement with the claimants in 2007, 1000 interim relief permits will be allocated to artisanal fishes and the development of a new small-scale fisheries policy for South Africa.

In this case study of a fishing community in Ocean View, Cape Town I examine a snoek fishery that operates differently, through a community supply chain and informal markets, than that of the high value ITQ regulated species, yet plays a significant role in the livelihoods of artisanal fishers and in the food security of poor households. The findings of this case study show the failures of existing policy frameworks and the implications for the implementation of the new small-scale fisheries policy in South Africa.

Key Words: *collective rights allocation; food security; individual transferable quotas (ITQs); small-scale fisheries policy; South Africa; Thyrsites atun (Snoek) supply-chain*

INTRODUCTION

With the establishment of the Cape as a refreshment station in 1652, Table Bay was inhabited by Dutch farmers, slaves from West Africa and Muslim political prisoners who had been brought from Indonesia and the Philippines from 1658 onward. Since that time, the main economic activities in Cape Town have been traditional fishing and farming. Snoek (*Thyrsites atun*), southern mullet (*Liza richardsonii*), Cape bream (*Pachymetopon blochii*), white steenbras (*Lithognathus lithognathus*), galjoen (*Dichitius capensis*), and dusky kob (*Argyrosomus japonicus*) were all important food sources for the slaves.

Under Dutch rule, in place since 1753, the Dutch East Indian Company (DEIC) controlled fishing rights. Slaves and farm workers were entitled to fish, provided it did not interfere with their farming activities. Snoek formed an important part of the slaves' protein and was called *zee snoek* by Dutch settlers because it reminded them of a freshwater pike they knew from Holland. Farming of vegetables in Cape Town was specifically directed at passing boats and, until the 1950s, the land in the town was used primarily for agricultural purposes. British occupation of the Cape in 1795 lifted the previous strict control on fishing rights, and a commercial fishing industry was opened in 1801, at the same time as the slave trade was banned. After 1856, privatization of the southern shores allowed merchants to control and organize the shipment of dried snoek from South Africa to Mauritius (van Sittert 1993).

South African snoek, then, has been part of the commercial fishing sector since the 1800s. The fishing methods that were used then were beach seining and hand lines, and these methods are still in use by fishermen today. Snoek, part of the history and culture of the slaves from Indonesia, was considered a delicacy; more importantly, it was an important protein source for many poor households in the Western Cape Province. Historically, snoek was caught by hand lines but, after 1960, it was also trawled (Crawford 1995). In 1978, total catch peaked at 81,000 kg but then dropped significantly to 22,960 kg in 1995. Approximately 40% of the South African catch (1990-1996) is made by traditional hand line fishermen, and 60% by trawlers (Sauer et al. 1997). Table 1 shows the present day amount of snoek caught by small-scale fishers using line fishing methods, and the considerable amount of snoek bycatch taken by inshore and offshore hake (Merluccius) trawl and longline vessels. Some trawl vessel skippers specifically target snoek, and this has a negative impact on the availability of the resource for small-scale fishers, and hence on the noncorporate supply chain.

Snoek, a low value species, is different than the commercial species (see Table 1) but significant because it has important lessons for the new small-scale fisheries policy. The fishery has a substantial informal market that resides particularly in Cape Town, and it is an important source of protein for poor and working class households in the Western Cape. Indeed, it is the main target species for line fishers, comprising more

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than 50% of the line fish that is landed. It is also one of the main target species for small-scale fishers. Most of the snoek that is caught outside Cape Town City, for example on the West Coast, is transported unprocessed or processed to the Cape Town metropolitan area and other urban and peri-urban markets for sale. Some is sold in the communities where it is caught, thereby contributing greatly to food security, because one fish can feed a family of four for two days and the fish contain important omega 3 and 6 oils. Snoek is mainly a winter species, at its best during the months of May to August, although it is sold throughout the year. It spoils easily and needs to be chilled. Most of the sellers operate from the back of 'bakkies' (pick-up trucks) that do not have adequate ice facilities to maintain a proper cold chain, i.e., the means of keeping the fish chilled during transport and marketing, and so the fish spoil after having been in the sun or without ice all day. The usual practice of the sellers in that case is that, at the end of the day, all remaining fish are sent to smokers. Although snoek is considered a low-value, inferior fish that spoils easily, it is an important source of these fishers' livelihoods, as well as part of the culture of communities in the greater Cape Town area.

Table 1. *Thyrites atun*, Snoek catch, landings, and imports from New Zealand 2010.

Sources of snoek	
Line fish	6,638,139
Deep sea hake trawl	3,650,270
Hake longline	3,491
Inshore trawl	709
New Zealand barracouta (imports)	5,690,968

Source: *Fishing Industry Handbook* (2011)

Snoek products range from fresh whole fish, to fish that has been gutted and headed, filleted, or salted and smoked. Although it is caught locally in South African waters, retailers such as Woolworths and Pick n Pay also sell imported barracouta (*Thyrsites Atun*) from New Zealand, which they incorrectly label as snoek. They argue that unlike snoek barracouta allows them to be sure of the quality of the product, its traceability, and sufficiency of stock. Many of the local fish and chips outlets and specialized shops are also importing barracouta from New Zealand.

Before the first democratic elections were held in South Africa in 1994, the country's fishing was controlled by an established industrialized white-owned sector that systematically deployed its centralized management structure and influence over government scientists to control fishing access, thereby securing their established companies' quotas and licenses. The poor black population, artisanal and subsistence fishers, were allowed to fish only on recreational permits or informally

because inshore resources were 'open access' at the time. Legally, however, these inshore fishers could not sell their catches. Nevertheless the fishers and communities living on the margins operated an informal fish market, especially for snoek, that formed an important part of the community's food protein source, livelihoods, and cultural practices.

The postapartheid South African Government has relied on individual transferable quota-based (ITQ-based) fisheries management as part of a range of reforms designed to broaden access to fisheries, particularly for marginalized groups like artisanal and small-scale fishers (Raakjær-Nielsen and Hara 2006, Isaacs et al. 2007, Isaacs 2011*a,b,c*). ITQs were introduced in the late 1980s in South Africa and the rest of the world as a mechanism for economic rationalization that functioned by adapting fishing capacity to resource availability. In theory, ITQs are de facto property access rights or privileges, and are primarily concerned with promoting economic efficiency rather than conservation, community welfare or equity (Copes and Charles 2004, McCay 2004, Sumaila 2010). The established fishing companies were required to increase their race and gender complement by partnering with Black Economic Empowerment (BEE) companies if they wish to maintain their quotas. The fisheries department argued that BEE would fit into the government's broader macroeconomic policy of reducing poverty, the rationale being that ITQ and BEE in established fishing companies would provide secure, quality jobs based on the government's minimum wage regulatory framework, and these benefits would 'trickle down' to vulnerable fishing communities. The new government was seeking to formulate a fisheries policy that would address popular expectations for a more equitable redistribution of access rights, while at the same time maintaining an internationally competitive fishing industry (Hersoug and Holm 2000, Isaacs and Hersoug 2002, Isaacs 2006, Isaacs et al. 2007, Hara 2009, Isaacs 2011*a,b*). Transformation created a space for many new entrants to access fishing rights to achieve equity, without the necessary infrastructure, financial capital, and business skills to manage the quota: they had no option but to enter into catching, processing, and marketing agreements with large industrial companies, resulting in 'armchair' fishers. The consequence of restructuring was the concentration of rights in the hands of a few rights holders.

In response to these reforms, in 2004, the Artisanal Fishers Association, Masifundise Development Trust, and the Legal Resources Center, with support from academics, launched a class action suit against the Minister of the Department of Environmental Affairs and Tourism (DEAT). This case, "Kenneth George and Others vs. the Minister," used the Constitution (RSA 1996) and the Equality Act (RSA 2000) to litigate against the reform process, i.e., the ITQ allocation of fishing rights, in light of its social and economic impacts. The allocation system opened the door to elites within

communities, who captured the benefits (fishing rights) of participation in the industry at the expense of communities and the marginalized bona fide small fishers who were supposed to benefit from transformation (Isaacs 2011c). Many small-scale fishers were left without fishing rights and hence no longer had access to the sea. Others were able to exist by working for rights holders in certain sectors at various times of the season, but often had no income during other times of the year (Sunde 2006). The case was to be heard in the Equality Court but, in April 2007, the claimants of “Kenneth George and Others” agreed to put it on hold, on the condition that the small-scale fishers were allocated interim rights and a new small-scale fisheries policy was developed (Isaacs 2006, 2011a,b,c, Sowman 2006, Sunde 2006, Hauck 2008). The new small-scale fisheries policy gazetted on 20 June 2012 and approved by cabinet, has a strong developmental focus on poverty alleviation and food security. Toward these goals the policy promotes community ITQs through the creation of legal entities representing fishing communities (RSA 2012). The new small-scale Fisheries Policy defines small-scale fishers as “persons that fish to meet food and basic livelihood needs, or are directly involved in harvesting/processing or marketing of fish, traditionally operate on or near shore fishing grounds, predominantly employ traditional low technology or passive fishing gear, usually undertake single day fishing trips, and are engaged in the sale or barter or are involved in commercial activity” (RSA 2012:iv-v).

The challenge therefore has now become how to implement the policy and develop strong community-based organizations whose task it will be to co-manage inshore marine resources, support fisher household livelihoods, achieve food security, reduce poverty, create local economic development, and benefit from the value chains of fish production ‘from ocean to plate.’ Access rights are clearly only the first step toward the solution of this problem. Understanding and supporting the chain of events that transfer the value from the ocean (fish) to the consumer (product) is a second step. Because fish products are perishable, sales depend on an expensive infrastructure that can deliver fish to market rapidly. In practice, this means that the larger companies have a virtual monopoly of the marketplace, and fishers are obliged to sell most of their catch to them.

In this case study I examine the importance of the availability, access, and use of the snoek supply chain in the livelihoods of households in the community of Ocean View, on the outskirts of the Cape Peninsula. The impacts of existing ITQ allocations on snoek fishers’ livelihoods, the nature of the rights, the lack of fisher representation in local organizations and the capturing of benefits and positions by community elites are discussed. Also, I highlight local tensions over community/collective allocation of rights under the new small-scale fisheries policy and the existing individual rights holders. Because food security is a key aspect of the new policy, I report

on the role snoek plays in food security by analyzing the purchasing and consumption practices of a particular community.

CASE STUDY METHODOLOGY

In this study, qualitative methods were used to identify and assess the purchasing and consumption practices of fisher households and consumers in Ocean View. I conducted a short survey of 300 households in the community, using 10 local fieldworkers. A one-day introductory workshop was held before the actual survey and, during the week of the survey, briefing meetings were held daily to discuss the fieldworkers’ experiences. The questionnaire was divided into four sections – personal information, purchasing practices, consumptive practices and governance of the fishery. It specifically targeted consumers who purchase fish from the local ‘langanas’ (fish buyers/sellers) to understand how they cook, preserve, and consume snoek. In addition, I held focus groups interviews with line fishers, and in-depth interviews with boat owners, permit holders, and langanas. I used individual interviews and focus group interviews to understand the historical and cultural importance of snoek to the local community. Through participation in the development of the new small-scale fisheries policies, and attending community meetings on these policies, I have been able to examine the significant role of the snoek fishery in the food security, culture, and livelihoods of fishing communities and poor working class households in the Western Cape Province of South Africa. This fishery has important lessons for the implementation of the new small-scale fisheries policy in the country.

RESULTS AND DISCUSSION

Demographics

Ocean View is a colored township established by the Apartheid state in 1968 as a result of the Group Areas Act, when all colored people were forcibly removed from Simonstown, Noordhoek, and Redhill. The estimated population is around 40,000. At the time of this research, over 40% of the population were unemployed. Of the 300 involved in the survey, 32% were males and 68% females. Of the respondents 76% had high school education, and 69% were aged between 30-60 years. Twenty-nine percent were on child, pension, and disability grants. Poor families stayed in government housing, or lived in a shanty in someone’s back yard, whereas the well-off lived in owned or bonded properties with large grounds, drove a car, and sent children to quality schools that were formerly for white children only. Figure 1 shows where Ocean View is located in the Western Cape.

Fishing rights allocation

The snoek fishery is part of the line fishery, which the Department of Agriculture, Forestry and Fisheries (DAFF) manages in terms of total allowable effort, allocating

Fig. 1. Ocean View located in the Western Cape Province of South Africa.



traditional line fish permits in 2006 on a long-term basis. The permits are based on catch per unit effort, which permits fishers to catch as much as the carrying capacity of their vessel per day. Nationally 450 line fish permits were allocated in 2006 for a period of 8 years, until December 2013. In addition 1000 interim relief permits were allocated as part of the out of court settlement with the claimants against the ITQ system. In Ocean View, 6 line fishing permits have been allocated, one of them to a woman. Most of the women rights holders are in the west coast rock lobster sector. There, women act like armchair fishers and subcontract men to harvest their quota for a daily wage, which has created gender tensions. The majority of the snoek fishers (92) operate on interim relief permits, which are valid until the implementation of the new small-scale fisheries policy. The permits allow them to catch 60 snoek, yellowtail (*Seriola lalandi*), or cape bream per day, or 420 per week; this can be in one catch. In 2012, interim relief permits were given out for 6 consecutive years, but these rights are considered insecure because they require yearly reapplication. Some fishers are also fishing on recreational permits, which permit

only 10 snoek per day. The type of allocation, i.e., interim permits, traditional line fish permits, or recreational permits, depends on who, permit holder or skipper, owns the infrastructure, the boats, gear, or transport. Fishers with interim rights but with no infrastructure are contracted by boat owners and skippers to fish. They share 50% of the catch with the skipper and, if there is little or no catch, they are advanced money by the boat owner. This creates a dependency relationship between the fisher and boat owner and results in indebtedness, increasing fishers' levels of vulnerability. Fishers owe large amounts of money to boat owners and have to work without payment until their debt is repaid. The snoek sellers (langanas) employ people to sell fish who are paid a daily rate at the discretion of the seller. Thus lack of fishers' rights in this fishery, along with the insecure working conditions of contract workers increases vulnerability and levels of exploitation.

The fishers and contract workers have few assets and are capital poor, with low numeracy and literacy skills. They also fit into Hogan and Marandola's (2005) conceptualization of vulnerability, as being socially disadvantaged and thus products of poverty. Vulnerability, then, can be expressed as a restriction of rights, whether economic, political, or social. It is here that poverty and social exclusion come together, with the restriction of the right to dignity, health, decent housing, respect, political participation, representation, speech, and to be heard.

Social-ecological interactions of snoek fishing

Catches of snoek fluctuate widely between years and localities, and the seasonal movements of snoek (the 'snoek run') can be highly variable: fishers say they have only 10 to 15 optimal fishing days per month, which are entirely dependent on weather patterns and sea conditions. Sea temperature changes impact on snoek availability and catches; if the sea gets warmer, the snoek move offshore. Climate change, with estimated sea surface temperature rising, is likely to exacerbate this variability. Many respondents stated that snoek has become scarcer, and fishers think this is due to climate change.

Another factor that, according to fishers, impacts on the fishing activity is the increasing number of species, including seals, that feed on sardines (*Sardinops sagax*), the main food source for snoek. The year 2011 was a bad one for snoek fishers: there were no catches from July to the end of September, and only small amounts of snoek were available off Simonstown and Kommetjie from September to December. The fishing grounds off Kommetjie are in Hout Bay and Scarborough, Cape Point, Rocky Bank, Gifkommetjie, and Platboom on the west coast. The fishing grounds off Simonstown (Millers Point) are Smitswinkelbay, Buffelbay, Rooikranz, Bortjie's Drift, and Rocky Bank. These fishing locations are indicated in the map in Figure 2.

Fig. 2. Primary *Thyrites atun* (Snoek) fishing spots around the Cape Peninsula.



In addition to snoek, which is caught as a targeted line fish species by small-scale fishers and as bycatch by company owned trawlers, wholesalers import barracouta from New Zealand, which is marketed under the label “snoek.” A local snoek wholesaler estimates South Africa imports around 100 tonnes of frozen barracouta from New Zealand per annum. Another respondent, a former fisher, who now works for an established fish processing company, reported that he gave up snoek fishing “because the economic returns were insignificant.” The unpredictable seasonal migration of snoek along the west coast of South Africa makes it more difficult for fishers to track the fish at sea. This then leads to increased expenditure, e.g., fuel, and smaller snoek catches. He expects that “the imports of barracouta will lead to decreased traditional snoek harvesting along the West Coast of South Africa, which ultimately means that snoek stocks along the West Coast will grow.”

Fishing operations

The relationship between boat owner and fisher is often unequal and many fishers complain that they are being exploited because they do not have the fishing rights, but are subcontracted by the skipper. The costs involved in running a boat include the cost of bait (popular cheap bait fish are Japanese pike [*Cololabis saira*], sardines, and hake heads), as

well as fuel and maintenance of the outboard motors; one trip requires 76 liters of fuel. Other maintenance costs include boat bearings and oil. This amounts to about \$658 per year (all dollar figures in US\$), consisting of licensing of the trailer and vehicle at \$79 and the boat at \$34, permit levies \$136, SAMSA safety certificate \$56, and trailer maintenance \$113, while the Vehicle Monitoring System (VMS) costs \$795.

The deal between owner and fisher is that the owner/skipper pays for the maintenance of the boat, for fuel and for bait, while the fishers bring their own gear, hand lines, and other tools. A fixed rate of 50% of the catch goes to the boat owner to cover those costs, and the remainder is split between the crew in what they call a ‘gazat’ system, i.e., 50-50 split. If no fish is caught, then no money changes hands, and the boat owner gives the fisher an advance on credit (‘voorskot’) that will be deducted from future catches. This results in indebtedness and, once fishers have built up a debt they cannot repay, they often move to another vessel to earn a daily rate.

Fisher representation

There is little awareness regarding the governance of fisheries in the Ocean View community. According to the consumer survey only 62% of consumers in the community are aware of the ITQ rights allocation system, while a mere 18% know of the small-scale fisheries’ policy development process. There is also almost no (6%) awareness of local fisher organizations.

The snoek right holders are represented by the South African Linefish Association, but not one fisher in Ocean View is a member. Fishers reported that, because this association was established during the Apartheid regime, they feel it does not represent their interests, only those of white rights-holders. A report released by DAFF in 2012 substantiates this claim: 19 years after the end of Apartheid, the distribution of rights in the line fish sector remains skewed toward white rights holders (58%; DAFF 2012). National community-based organizations representing fishers in South Africa are the Artisanal Fishers Association, established in 1992, and Coastal Links, established through the NGO Masifundise in 2004. Currently, neither of these organizations is represented in Ocean View. Some members of Ocean View community attend meetings organized by Masifundise but are not part of the organization.

There are six or seven local community organizations representing fishers, but these, unfortunately, do not communicate with one another. Fishers claim that the representatives of local organizations only capture the benefits for themselves and their families. Some of the fishers residing in Ocean View were founding members of the Artisanal Fishers Association, but split in 2009 and rejoined a branch of the original 1992 fishers’ organization, the Ocean View/Witsands Artisanal Fishers Association (OVWafa). More recently formed organizations in Ocean View include the

Lighthouse Fishers Forum (LFF), established in 2009, the Association of Deep South Traditional Artisanal and Subsistence Fisheries Sectors (TASFS), established in 2004, the Deep South Fishers Collective Alliance (DSFCA), established in 2009, and the Deep South Fisheries Local Co-Management Committee (DSFLCC), established in 2011. The Rasta community, which follows the Rastafarian spiritual movement, has also claimed fishing rights.

In 2010, in an attempt to secure and maintain their existing fishing rights, some current right holders in the line fish sector formed a cooperative. However, I have been unable to establish whether or not this cooperative was supported by OVCF and if it has ITQs. It is represented by the Ocean View Community Fishing Forum (OVCF), which concerns itself with collective rights allocations as promoted by the new small-scale policy, but the group favors the ITQ system. Moreover, OVCF represent only the interests of a specific group of rights holders, perhaps those in the cooperative), and not those of the interim rights holders who own no infrastructure and operate under contract.

The new small-scale fisheries policy suggests cooperatives as the legal entity to represent fishers, however the challenge is to bring existing rights holders and interim rights holders into one system of allocation (Sowman and Cardoso 2010, Isaacs 2011a,c). A second challenge is establishing a representative body in a community where the legitimacy of existing and new organizations is questioned. There are clear benefits to one community entity representing all fishers, responsible for allocating the resource, co-managing the resource with the fisheries department, and being responsible for the development of infrastructure for the allocated species. However, elite capturing of organizations and benefits that were originally specifically directed at fishers has been especially prevalent in the communities that hold to the ITQ system. Thus collective rights allocations may well be affected by elite capturing, and so the necessary structures and systems need to be in place. The question is then, who will take responsibility for creating such representative institutions?

The noncorporate supply chain

The fish seller (langana)

The term 'langanas' was used by Cape slaves to refer to fish sellers who have been part of the snoek trade since the early 1700s. Traditionally, they used the snoek horn (made from dried kelp) to announce they have freshly caught snoek and they traveled by horse and cart, selling fish in Cape Town. The snoek supply chain is male-dominated: only one woman is involved in fishing, but some women are employed by langanas as contract workers to sell fish, if they are able to cut and gut them. Currently, the langana is still part of the informal economy of the Western Cape, selling fresh or frozen, salted and air dried, and smoked snoek. Many of these informal traders are involved in other income-generating activities, for

example, driving taxis, selling fruit and vegetables, and running 'shebeens,' i.e., selling alcohol either legally and illegally, thus moving in and out of the fishery, depending on fish supply and time of year.

The snoek value chain in Ocean View is short: it starts with the rights holder and the skipper and his crew who catch the fish, which is then auctioned to the langana at the landing site. The fish is sold fresh to consumers directly off the bakkie on the day of harvesting. If the fish is not sold at the end of the day or if there is an oversupply, langanas and fishers will conserve it by salting, air drying, or smoking. Surplus snoek is also sold on credit to repay welfare payments. The langanas in Ocean View do not have fishing rights or boats, but this is not necessarily the case in the rest of Cape Town, where some langanas have fishing rights and are boat owners who contract workers to sell their fish. Many langanas use contract workers to sell the snoek as discussed above. Fish price negotiations take place between skippers and langanas, but boat owners and fishers complain that the langanas collude to bid down prices. They know 'cash is king' and many fishers are forced to sell at low prices to get some cash income. At the landing site in Kommetjie, Snoek is sold to the langanas for \$1-3 per fish. The langanas do not use ice because their goal is to sell all fish on the same day, either fresh or processed (salted, dried, or smoked). Gutting and cleaning add an extra \$1 to the value and they then resell it for \$3-5 per snoek (\$7-9 if sold on credit). Dried snoek are sold at \$1-2 per piece, snoek roe is sold at \$2-3 per kg, and smoked snoek costs \$1-2 per piece. In Ocean View there are two langanas selling fish for cash or credit to many poor households. Most fishers have preferences for one of the langanas, who also provides them with cash advances ('voorskoot').

Credit and voorskoots are key in the informal system: they provide food supplies, electricity, water, and rent. Many people go to the langanas for assistance and then have to repay them with interest. Although this creates a poverty trap of indebtedness for fishers and consumers, it also provides credit at those times when people need it most, because the fishers and poor households cannot qualify for help from financial institutions. The interdependencies between fishers, boat owners and sellers are evidence of the ways in which risk is managed through the way in which the catch is shared out.

Links between the noncorporate and corporate supply chain

The formal supply of snoek to poor Western Cape communities has two sources: the hake trawl companies that harvest local snoek off the west coast, and barracouta imported by wholesalers and established companies (see Table 1). Both types of fish are sold frozen in the poorer townships of Cape Town for cash or on credit. The majority of respondents to the consumer survey (77%) were unaware that snoek is imported from New Zealand; only fishers and those belonging to fisher

organizations had any idea. Their response to the question was: “Snoek from New Zealand is ribbon snoek, not the same species and it differs from South African snoek. It is smaller than the South African species and has lots of small bones”. Other responses included “Snoek comes originally from South Africa, not New Zealand. Snoek is a Cape Town thing.” This low level of awareness is linked to the fact that wholesalers import barracouta as “snoek”.

Informal shop owners in the local townships purchase boxes of 20 kg of imported barracouta, cut each fish into 10 pieces, fry it, and sell it with chips, or sell it whole to local consumers. Most local langanas in the Ocean View and Cape Town area, however, do not buy imported barracouta from the wholesalers in the area: those we interviewed reported that this fish is too expensive. Rather, they travel 180 km to Saldanha Bay to purchase locally caught frozen snoek from an established trawl company.

I found langanas in the Cape Town area who sell only fresh snoek, and some who sell both fresh and frozen. Some langanas state they only purchase fresh snoek from local small-scale fishers when there is an oversupply and the price is low, but when the catch numbers drop, the price is too high and they will then purchase frozen snoek from trawl companies. There is one langana who supplies local buyers, i.e., those selling fish, fruit and vegetables, and operating in poor townships, with fresh (in season) and frozen snoek that can be purchased daily from the trawl companies.

Food security

I also investigated the contribution of snoek to food security in Ocean View, concentrating on the snoek value chain from purchasing to consumption, food use, quality, and sanitation. The World Food Summit of 1996 (FAO/WHO 1996) defined food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life,” that is, access includes availability and affordability of food as well as how food is used. Sen (2000) also speaks about food entitlements, pointing out that although there is enough food produced globally for everyone, the political economy drives its distribution. Food sovereignty has become a very popular concept in recent years, and considers national food security and distribution. Recently, levels of malnutrition and lack of micronutrients have also been raised as key issues, especially in southern Africa. Food and health are linked, and the role of fish in providing micronutrients for breastfeeding mothers and children under the age of five is crucial. Kawarazuka and Béné (2011) argue for more research on the nutritional value of small fish in the lives of poor in southern Africa. Béné et al. (2010:934) note that “Africans have a relative high nutritional dependence on fish, and a significant high number depends upon small-scale fisheries as a source of full-time, seasonal, or occasional income.”

Purchasing practices

Most of our respondents (71%) reported they purchased snoek directly from langanas in their bakkies, because this is fresh fish, “straight from the sea.” Around two-thirds (69%) purchased only one fish and the rest (31%) purchased more than one at a time. Only 4% of our 300 questionnaire respondents said that they purchased on credit and paid the langana interest when they received their social grants. However, focus group interviews with fishers suggested that at least 30% of the Ocean View community purchased fish on credit.

Ocean View consumers did not purchase frozen snoek or snoek products from the local retailers such as Shoprite, Pick n Pay, or Woolworths: to them, snoek should be fresh and bought from the bakkie. The discerning consumers living in fishing communities, or those who have parents and grandparents who fish, would not purchase frozen snoek and would only buy fresh fish from the langanas. In other poor communities that have less explicit links to the fishery, langanas were involved in smoking and drying even the frozen stock, which would yield the same price or more than fresh or frozen snoek. Woolworths is keen to source snoek locally rather than sell barracouta from New Zealand. However, incorporating locally caught snoek into the buyer-driven supermarket value chain could mean taking an important protein source and cultural value away from poor households. By contrast, a well-managed local fish market in Ocean View would provide cheap protein to the poor and encourage local consumers to buy and support local markets with snoek that have been locally harvested.

Consumption practices, quality, and sanitation

The survey showed that the main sources of protein in Ocean View were chicken (48%), fish (43%), and meat (15%). Chicken was still the cheapest form of protein that was regularly available; 48% of our respondents said that they got their protein mainly from chicken, while 43% said snoek was their main source, and also their preferred form of protein. Regularly consumed fish species other than snoek were cape bream, mullet, hake, and crayfish, as well as canned sardines and pilchards. Fresh sardines were not consumed locally and were instead mainly used as bait. Cooking was done mostly with electricity and gas. Snoek was popular among the poor and the well-off alike. Most of our respondents said they would buy and consume more fish if it was available, with 70% reporting that they consume snoek more than once per week during the snoek season (May to August). Many purchased snoek every week or even every day. If they purchased more than one fish, they froze it for later use or sent it to family members living far from the coast. Most households could make more than one family meal from an average snoek of 6 kg (with head and gut). Air-dried snoek was a popular family meal for the poor, who used it to make a stew with onions and potatoes. Many households preferred fresh snoek over frozen.

When consumers froze snoek for later use they first rubbed the fish with salt because that preserves the taste. Smoked snoek was also preferred as a midday meal with bread. Snoek heads and snoek roe were also popular local delicacies.

Generally, those who bought snoek usually ate every part of the fish: nothing went to waste. Respondents, when asked how they prepare snoek, said the most popular dish is 'langsous' (snoek boiled in water, salt, pepper and served with brown bread). Boiled snoek with water, potato, onions, and tomatoes was also popular among the poor. Most people said they prefer to fry snoek with salt, pepper, lightly floured and served with tomato bredie (stew comprising of onions, tomatoes, and chillies), but this meant they could only make one meal for the family and thus they only fried the fish when it was cheap and they could purchase more than one at a time. Another popular meal was fish soup made of snoek heads, tomatoes, onions, lots of chillies, green peppers, and potatoes.

About 74% of respondents indicated that they were concerned with the quality of both the fish and the sanitation around it, especially because the bakkies had no cold chain (temperature controlled supply chain) and clean water. However, most of the respondents (80%) said they know how to determine the quality of snoek and would not purchase if it was spoiled, unless sold at a reduced price. This 'pap snoek,' spoiled, soft-flesh snoek, still had its uses: many used it to make 'frikkedel' (fish cakes). Smoking and drying was also best when the snoek was partly 'pap'.

CONCLUSION

Snoek is one of the most well-known fish species in South Africa and dominant in the Western Cape Province, so there is a strong market for it locally. At present, the Ocean View snoek fishery can be described as informal, which means that no proper cold chain is maintained, which impacts on sanitation. Also catches are unrecorded, there is no taxation, and information about the fishery is limited and fragmented. The increasing snoek bycatch of established trawl fishing companies impacts on the potential catches of snoek that are needed for the small-scale line fishers' livelihoods, and to maintain the supply of cheap protein to poor communities.

The purchasing, consumption and food use practices in Ocean View indicate that snoek is an important part of the diet of the poor, and it is situated within the culture and traditional practices of the community and indeed also the rest of the Cape Town metropolis. There is an increasing demand for fresh snoek in the urban areas of Cape Town and the rest of South Africa. Hence, there is a great opportunity for the snoek value chain to provide a low value, processed, dried, or smoked fish for the Western Cape poor, working class households, which matches the demand for protein in these households. However, the supply chain of snoek in poor areas is limited by the kind of rights allocations that has been given to small-scale fishers. After 19 years of democracy and over 20 years of fisheries

reform (since 1992), the majority of the rights holders in traditional line fish sector are still white. Few traditional line fish permits (6) exist, and many interim relief permits (60) were allocated in Ocean View. The implementation of the collective allocation system will only come in 2014; in the meantime fishers' harvest with insecure rights, and still depend on the boat owners and lanaganas. Established trawl companies also target snoek and declare it as bycatch, while supplying some established retailers. This is why the new small-scale fisheries policy should ensure access to snoek for small-scale fishers only. Such an action would go a long way toward ensuring food security.

The new small-scale fisheries policy in South Africa created an action space for fishers to participate in a formalized value chain with a development agenda that is concerned with poverty alleviation, food security, access to financial capital, and subsidies. In the new small-scale policy, the state will make budgets available through national, provincial, and local governments to strengthen the capacity, training, and skills of local community entities or cooperatives. The Fisheries Department, however, has one official with some administrative support whose task it is to implement the new policy, while the Ministry has thus far not allocated any money to formalize small-scale fisheries, and the implementation plan has been outsourced to a consultancy.

At the community level, the elite and existing rights holders are already creating and recreating organizations designed to benefit from the new policy. Along the coast, as was the case with ITQ allocation after 1994, at local level, the nature and structure of the organizations have been, and may well now again be, often set by the elite to serve their needs, and they effectively exclude poor fishers who are without much agency (Isaacs 2006). This is actually a local example of a global problem: Agrawal and Gibson (1999) also warn us of elite capturing the benefits of the devolution of rights and responsibilities, thus indirectly reducing access for the poor.

I conclude with recommendations for action. Snoek is already on the consumer awareness campaign of the World Wildlife Fund (WWF), the Southern African Sustainable Seafood Initiative (SASSI) 'green list.' I suggest that the WWF go further in the SASSI campaign and look at opportunities for supporting cold chain technology, sanitation, quality, and safety of food. Small-scale fisheries are on the agenda for WWF and the Marine Stewardship Council (MSC), and now Fair Trade. Links to awareness-raising campaigns is creating a local label for locally caught snoek: such products will not only support the local market and improve the livelihoods of many small-scale fishers but also create direct and indirect form of food security. The imported product from New Zealand should be labeled as barracouta when sold in South Africa. Conservation NGOs like WWF and MSC, working closely with the retailers on the sustainable harvesting of fish,

should advocate for, and support, the ethical labeling and certification of small-scale fisheries and support the process of formalizing the local markets. It would be interesting to see to what extent these organizations are committed to securing livelihoods, food security, market access, labeling, and certification of sustainably harvested fisheries separately from the buyer-driven supermarket value chains. Whatever action they take will directly impact on the livelihoods of fishers' household income. I also call on conservation NGOs, MSC, and Fair Trade to support legislation to exclude large trawlers from fishing in the inshore zone and from fish stocks such as snoek, which the small-scale sector can catch (Sunde 2003).

If poverty alleviation, food security, local economic development, pro-poor value chains are goals of the new small-scale policy, and if there is an established community entity to allocate rights, there will be better negotiated prices at the snoek auction, and value-added products, such as air-dried snoek and smoked snoek, created when there is an oversupply of product. If the sale of snoek is formalized through establish local fish markets, there will be a proper cold chain, improved sanitation, and quality standards. If the necessary political will exists to change legislation in favor of small-scale fishers, then there is an opportunity to not only impact the lives of fisher households but also to protect an important protein source for poor communities.

Responses to this article can be read online at:
<http://www.ecologyandsociety.org/issues/responses.php/5863>

Acknowledgments:

Funding support was provided from the National Research Foundation of South Africa and the Ford Foundation. I would like to thank Rosemary Ommer and Barbara Paterson for their inputs to my paper.

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