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**Dilemma of small-scale fishers at the dawn of industrial  
fishing in Kenya**

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## **Abstract**

People of the Kenya coast have lived off the Indian Ocean for as long as memory can go. Folklore and legend reflect a history of dependence on the sea for livelihood, including fisheries. Due to technological limitation coupled with small human populations, harvesting from the sea had little effect in the past. Fishermen relied on simple fishing gear operated either from the shore or from dug-out and small planked canoes to supply needs of their families.

In the past three decades, human populations have increased tremendously leading to greater demands for marine fisheries products. Introduction of cash economy has also triggered the need for more efficient methods of fish capture to supply the new higher demand. Unfortunately, local fishers have not been able to participate effectively in supplying this new demand. The main reason for this handicap, is their inability to match the rapidly developing fishing technology.

Introduction of mechanised fishing by 'outsiders' has been seen by some members of the local communities as a boon in the sense that more employment opportunities have been created. This section of the communities argue that mechanised fishers are able to exploit areas of the sea that local fishers are unable to venture into.

On the other hand, mechanised fishers, especially trawlers, have often been accused of overexploitation of the resource to a point that some species of fish cherished by local communities have altogether disappeared. Trawler operators have also been blamed for destruction of small-scale fishermen's gear leading to huge losses.

This paper discusses the difficulties that communities of the Kenya coast are facing with the introduction of mechanised fishing. The paper also describes an on-going initiative aimed at resolving mounting conflict in the marine fisheries of Kenya.

## Introduction

Global economic trends indicate an ever increasing gap between the industrialised nations and the so called developing world. The uneven trend of development was demonstrated vividly by the UNDP in its annual report of 1992. The report demonstrated the inequalities with the help of a funnel indicating that 20% of the world population utilised some 85% of global resources leaving 15% to be shared by the remaining 80% of the population. Since 1992, this trend has worsened.

In many developing countries (particularly in Africa), local situations reflect well trends in the global scenario. The rich become even richer as they benefit from more and more of the available resources whilst the poor become even poorer as they access less and less of the resources. This inequality constitutes the main developmental and ecological problem. The dilemma for the poor, however, is the ever lingering hope (often futile) that industrialisation and increase in 'riches' in their locality would improve their livelihood by having some of the benefits flowing their way.

An analysis of the fisheries of the Kenya coast illustrates the foregoing. This paper describes the attitudes of small scale fishers towards the large mechanized fishers (particularly prawn trawlers) and some efforts being made to address conflicts that have developed between them.

## A historical background

Kenya's coastal peoples have lived off the Indian Ocean for their livelihoods for a long time. Folklore, legend and written history tell of a people with a close dependence on the sea for their livelihood, including food. Today, as it has been in the past, sea fisheries in Kenya is mainly artisanal relying on simple fishing gear operated either from the shore or from small no-motorised boats. This technological constraint limits fishing operations to within the shallow reef. Fishing gear include gill nets, cast nets, seine nets, handlines and traps. Since the late 1970s, new players have come in with more effective fishing technology utilising larger gear such as trawl nets and purse seines from much larger vessels. Longlines are also used for fishing the deeper offshore EEZ water.

It is estimated that there are about 5,000 coastal fishers in Kenya, 4,000 of whom are artisanal and a total of about 40,000 people dependent directly on fish production. With the introduction of cash economy it is not always possible to distinguish catch that is purely for home consumption and that for sale. However, all artisanal fishermen take home part of their catch for food.

Increase in human population at the coast from less than 500,000 people in the 1970s to more than 2 million today coupled with new patterns of consumption has led to greater demands for marine fisheries products. There are more local people to feed and tourist hotels and the export markets have higher demand for certain species such as prawns. This increased demand for marine fisheries products meant that fishing technology needed improvement to increase supply. It is at this point that the larger more effective fishing vessels were introduced. The trawlers target mainly prawns while purse seiners catch finfish. Bycatch has recently become a very important part of the prawn trawler fisheries with decline in the targeted species.

Due to limited financial resources at the disposal of local fishing communities, their participation in industrial fishing has been limited to joint ventures with minority shares and virtually no control. Most of the large vessels are owned and operated by peoples of European origin (at present Greeks and Italian) with involvement of some rich politically well connected inland and coastal partners.

The industrial fishers were required by law to fish outside of the five nautical miles from the shoreline leaving the more shallow onshore fishing grounds to artisanal fishers. In practice, however, the larger vessels are commonly seen fishing within the prohibited grounds leading to major conflicts with the small scale fishers and causing serious damage to the environment.

#### Dilemma for the Kenya coastal fishing communities

In a series of stakeholder meetings held from September 2000 to March 2001, it was evident that conflicts exist between, particularly, the prawn trawlers and the small scale fishers of the Kenya coast. It was also clear that some members of the local communities are more tolerant to industrial fishing. The latter group (not surprisingly led by elected cooperative officials) agree that the entry of industrial fishing is justified for several reasons. The main reasons are: a) artisanal fishers are unable to venture into the more open water offshore and therefore, with liberalisation of the economy in Kenya, those areas should be open to those that have the means; b) the larger capacities of the industrial fishing vessels provide additional opportunities for employment; c) there is increased local trade with more fishing activities; d) not least, the cultural norm of making visitors feel welcome. It should be noted that this part of the fishing community is supportive of industrial fishing because of their loose liaison with the large scale fishers.

On the other hand, there is a long list of grievances raised by the communities involved in the fishing industry. Foremost, is the wanton destruction of set gear by the large vessels either during their fishing operations or on transit to and from fishing grounds. The question of fishing gear damage by trawlers and compensation claims is complex as it is not always easy to proof to incriminate

the culprits. In certain instances the claims appear overpriced, perhaps in a hope that compensation would provide the financing for new gear. A mechanism needs to be put in place that would clearly provide for resolution of gear damage claims.

Operations of prawn trawlers in the shallow inshore areas of the reef, cause a great deal of damage to the environment and thus affecting the integrity of finfish breeding grounds. It has also been observed that large amounts of non-target fish are caught and discarded. Many of such fish are juveniles of species that are valuable in directed fisheries as adults. In this way certain species of fish that were previously common in the catch have become rare or virtually absent.

Large scale fishing operations provide larger amounts of fish often of higher quality than those provided by the small scale fishers. This way, small scale fishers are unable to compete favourably in the marketing of their catch, particularly in the more lucrative niche markets of tourist hotels and the export trade.

In the stakeholder meetings it became evident that the small scale fishers have in the past looked to government to provide solutions to problems that afflict them, but in their view, they have received little support. This state of affairs has led to frustration and loss of self esteem.

#### Recent efforts to resolve the conflicts

The stakeholder consultative meetings that were held in late 2000 and early 2001, were a positive reaction by government to agitation by small scale fishers and their dependents affected by industrial fishing activities. Complaints and demonstrations were featured in public meetings and in the press. The gravity of the matters at hand was emphasised by the fact that the meetings were chaired by the Permanent Secretary (chief technical officer) in the ministry responsible for fisheries. Present in the meetings were fishing community leaders and representative fishermen, representatives of the industrial fishers, environmental pressure groups and officials of various government departments with interest in the marine resources.

During the first stakeholder meeting held on 27 September, 2000, a wide range of issues of concern were raised. Prawn trawling as a source of conflict was identified as the most pressing issue. A taskforce was then appointed to identify the conflicts that come with trawling activities and to make recommendations to a second stakeholders meeting. The taskforce made up of representatives of various interest groups, including fishers, held several meetings to develop recommendations for the next larger meeting. In the

meantime all trawling activities had been suspended until those recommendations were discussed and resolutions passed.

The second stakeholder meeting was held on 15 March 2001 during six main resolutions were passed:

1. *Research to be carried out to establish the current status of the marine resources (particularly prawns).* It was noted that the last survey to assess the prawn stocks was reported in 1982 (this was a FAO funded survey). Therefore it was difficult to effectively assess viability of the present stocks for commercial exploitation. This resolution required that the survey a) establish the current population structures and distribution of prawns, b) assess the level of environmental damage by prawn trawlers and c) evaluate the economic viability of the prawn fishery.

To facilitate research activities, commercial trawlers would be allowed to operate under special license with strict guidelines. Research scientists would be accommodated on board to collect data as commercial fishing took place.

2. *Clear fishing zones and fishing times should be established.* The present law provides for trawling only beyond five nautical miles from the shore with unlimited time. Industrial fishers admitted that they fished within the 5 n.m. limit as it was not economical to fish in the deeper water.
3. *Limit number and capacity of fishing vessels.* It was agreed that the number of trawlers allowed to fish in Kenya water be limited to the four vessels presently registered with the Fisheries Department.
4. *Provide for observers to be on board fishing vessels.* As a means to monitoring the fishery, it was found desirable to have observers stationed on board all the fishing vessels.
5. *All trawl nets be fitted with turtle excluder devices.* It was noted that both trawlers and small scale fishers are responsible for the present decline in marine turtles through their fishing operations.
6. *Develop effective surveillance and enforcement mechanisms.* It was noted that all the efforts made would be in futility if the fishing regulations and guidelines were not strictly enforced. The fisheries department admitted its limitation to carry out effective surveillance for lack of patrol boats and limited staff.

## Future prospects

Excessive uses of natural resources eventually exerts strain on the resource. The strain is felt more and more as the resource diminishes and becomes scarce. Scarcity inevitably leads to competition and ultimately conflicts as users attempt to maintain or even increase their own use of the resource to satisfy their perceived needs and wants. This then raises the crucial questions of allocation. How much is there? Who gets what? Who gets the first priority?

The case we have at hand is one of a strained natural resource. A resource that has in the past provided means of living to various groups of people (clearly not in exactly the same way). But now it is obvious that there are serious conflicts resulting from a diminished resource. Unfortunately, we don't even know exactly how much of the resource is remaining in order to make a sensible judgment on allocation.

Technical knowledge is required for guiding the planning and management process of natural resources. This does in fact underline the correctness and importance of the first resolution by the stakeholders meeting - that a survey be carried out to establish the current status of the marine fisheries stock. Stock surveys should be continuous as a monitoring process by which danger signals can be detected in good time.

The question of how much is allocated to each group and priorities would only be answered effectively by establishing ownership of the resource. All the stakeholders would then collectively decide on the allocation and management of the resource. The stakeholder meetings held at the coast were an important step towards empowering the coastal fishing communities to voice their concerns and aspirations and to provide them the chance to get involved in the management the marine fisheries resources.

Conventionally, government has been the sole player in the whole process of planning and management of natural resources. The current involvement of communities in decision making requires that government supports and encourages development of strong community leadership. This may involve relinquishing much of decision-making powers to the communities. The role of government would then remain as that of support and guidance in the planning and management process. Government would provide the framework by which the resources would be managed.

Surveillance is crucial part of natural resource management. Compliance with or enforcement of regulations has to be a joint effort between resource users and the governing authority. Successful natural resource management is much easier to achieve where there is a strong sense of ownership leading to user

compliance. Where compliance is weak, enforcement of regulations must be effected.

In the case of Kenya coastal fisheries, the situation remains generally unchanged. The trawlers are still fishing nearshore and the conflicts are still real. To achieve positive results from this present initiative to remove conflicts, it is required of government to be forceful in ensuring compliance to all resolutions and enacted regulations. There is such a great goodwill from most resource users that this is an opportune time to turn around the management of the Kenya coastal fisheries to provide for equitable sustainable use of the resource.