

Dream or nightmare?

With little evidence of overfishing by artisanal fishermen, the ban on fishing for barracuda in Guinea-Bissau may be just an ecologist's dream

Until recently, the fisheries of Guinea-Bissau were largely regulated by a decree dating to 1986. However, since 1994, the Guinean government has been preparing a new set of regulations. For a country like Guinea-Bissau, regulating the fishery is certainly an important matter, perhaps more so for the country's economic development than for the protection of its natural resources.

On 7 June 1994, the Ministry of Fisheries introduced a new decree regulating fishing activities in the Rio Grande de Buba. On the whole, this regulation features standard restrictions. It, for example, defines the permissible mesh size of the nets, and the number of artisanal boats allowed in the fishery, among other stipulations.

However, one requirement deserves special attention. This is the one which forbids fishing with drift-nets between 31 July and 1 October each year. Such a ban specifically affects the fishing of barracudas (*Sphyraenidae*). The barracuda is actually a coastal fish. It enters the estuaries during the rainy season (July to October) to breed. Hence, at first sight the decision to protect it during this period seems logical.

But, to understand the practical consequences of such a decision, a few specificities of this fishing area should be noted. The first is the influence of the continental shelf in Guinea-Bissau. Extending far into the sea, it widely overlaps the industrial fishing area, which is between 12 and 200 nautical miles. So, on the one hand, barracuda fishing has been opened up on a larger scale to the industrial fleet in Guinea-Bissau. On the other hand, the decree almost exclusively affects the artisanal fishery.

The total catch by the international industrial fleet fishing in Guinean waters has diminished from 121,000 tonnes in 1990 to 38,400 tonnes in 1993. During the same period, the number of trawlers has dropped too, from 208 to 144. Although it is not possible to draw serious conclusions from the existing surveys and available estimates, these figures could be the first signs of a decline in productivity of the Guinean waters. If that were the case indeed, useful measures to protect the natural resource should be taken. But who should bear the brunt of such measures? And who are the fishers actually affected by this decree of 1994?

The populations living on the border of the Rio Grande do Buba are not really involved in fishing. For them, it is an occasional activity, their principal one being agriculture. The traditional fishers who are actually affected by the decree are 'Nhomınca', originally from Bolama, but settled in Guinea-Bissau for several generations now. Also affected are the 'Bijagos' from the island of Canhabaque. More recently, these few fishers have been joined by a few 'Soussou' people from Guinea Conakry. According to our surveys, the total number of canoes was 12 in 1992 and 17 in 1993. The maximum annual production of these fishworkers amounts to 20 to 30 tonnes of barracuda.

Restricted level

According to the decree, the number of fishers active in the Rio Grande do Buba is not too high. The decree further limits their number to 15 boats, on an annual average. Since the fishers in the Rio fish there only during the rainy season, for four months a year, the number of boats operating each year is lower than the restricted level imposed by the decree. The real problem, however, is that the fishermen choose to enter the fishery

precisely during the time of year they are not allowed to fish with drift-nets.

During the rainy season, the estuary of the Rio is a naturally protected and safe area: On the other hand, at that time, the open sea is quite dangerous for small boats. Storms can rage rapidly, throwing fishermen into a hopeless situation before they can find any shelter.

In the middle and long term, such a ban short-circuits the organization of a professional artisanal fishery in the Bijagos archipelago. If the fishers wish to remain in the Rio, they have to resort to hook-and-line fishing. This is undoubtedly a more selective technique and may therefore be labelled more 'ecological'. But, for many fishermen, fishing for barracudas during the rainy season with a line rather than a net is quite a painful experience. Indeed, during the breeding period, the barracuda just does not take the bait.

Of course, there remains the possibility of fishing in the open sea, but, at that time of the year, the sea is rough and, moreover, artisanal fishery in Guinea-Bissau is only in its early developing stages yet. As for industrial fishing, the activity of the fishworkers in the Rio seems negligible. According to official statistics of the Ministry of Fisheries, industrial trawling caught 283 tonnes of barracuda in 1993. However, there are good reasons to

consider these figures as underestimates. A more careful analysis of the statistics shows that while 83 per cent of the catch is declared by boats of the former Soviet Union, none is declared by the Koreans, the Spanish or the Portuguese.

What is also astonishing is that we received two different sets of statistics for 1993, both from the Ministry of Fisheries. The second one reported 465 tonnes of barracuda, of which 94 per cent were from the ex-Soviet fleet. In this case, it seemed that the Chinese, the Koreans and the Spanish did not catch any barracuda. At any rate, if any activity is altering the natural resource of barracuda, it seems to be industrial rather than artisanal fishing.

Discouragement

There is enough to discourage the novice fisherman in Guinea-Bissau from getting more professionally involved. Last year, for instance, he was informed at the very last moment (end-July) that the barracuda season he was anticipating stood cancelled. This year, the suspense is greater. Asked if the decree would be pursued, the National and Regional Directors of Fisheries of Guinea-Bissau termed the ban on net-fishing in the Rio as obsolete, even though the decree as such had not been modified.

Yet, In June 1995, the Minister of Fisheries confirmed the application of the decree "because IUCN (International Union for

Conservation of Nature) was insisting to have it extended." IUCN bases its recommendation for a ban on net-fishing in the Rio during August and September on a survey of the size of barracudas caught by *Nhominca* fishermen. IUCN observes that for these months, 57 to 73 per cent of the catch is at least 1.20 m long, and that most of the barracuda are females.

But we have reservations with these findings. In addition to the fact that this survey has only lasted six months (from May to October 1993), we do not see its logical link with IUCN's recommendation. When sexually mature, a four-year old barracuda approaches 70 cm. Those, which have grown to 1.20 m or more have already reproduced many times. Fishing them would not jeopardize the resource base of the species. Rather, the more dangerous finding would large quantities of catch between 60 cm and 80 cm.

At first sight, the ban on net-fishing in the Rio during August and September may appear very 'ecological', but we do not believe it has any positive effects. Such a measure would have no serious effect on the protection of halieutic resources, which really depend mainly on the behaviour of the industrial fishery. Measures like defining the mesh size of the nets and limiting the number of boats are sufficient to regulate the artisanal fishery of Guinea-Bissau.

In this regard, the country cannot be compared to Senegal, for example. There is no overexploitation by artisanal fishery. On the other hand, the current ban will simply make life more difficult for the fishers of the Rio who are urged to become more and more professional.

So why go to all this trouble? The Ministry of Fisheries, which we have consulted, does not seem to stand by this ban. It considers it as a request from IUCN. We understand that this demand seems to have been insisted on by Switzerland, which probably relates it to the repayment of a debt of US\$6 million outstanding from Guinea-Bissau. ♣

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