## A REVIEW OF THE TUNA FISHERY IN TANZANIA (MAINLAND) FROM 1989 TO 1993

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## **INTRODUCTION**

Tanzania's marine waters form part of the southwest Indian Ocean region. Tanzania has a coastline of about 800 km, running north-south, and a declared Exclusive Economic Zone (EEZ) of 200 miles. Annual fish production from these waters in 1989-1993 ranged from 50,242 t tons to 56,779 t (Table 1). On average the marine catch constitutes about 13.6% to 15% of the total national catch; 20 years ago the figure was about 25%. This reduction is attributed to increased catches from the freshwater fisheries, especially for Nile perch in Lake Victoria.

The marine fishery in Tanzania is still largely artisanal. In 1989 the number of artisanal fishermen was 15,491; it increased to a peak of 16,361 in 1991, then leveled off to 15,027 in 1993 (Table 2). These fishermen catch the bulk of the marine fishes, including tunas. Large industrial fishing vessels are few, and are mainly involved in the prawn fishery.

The fishing gears most commonly used by the artisanal fishermen in the tuna fishery are gillnets (shark nets), baited handlines and trolling lines. Vessels used include plank-built boats driven by sail or powered by outboard motors or inboard diesel engines.

## TRENDS IN PRODUCTION OF TUNA AND RELATED SPECIES

Mackerels, mainly *Rastrelliger* spp. and *Decapterus* spp., are the predominant marine species caught in Tanzania (Tables 3 and 4). In 1989 2274 t were recorded, followed by a decreasing trend in 1992, when a low figure of 104 t was obtained. The trend peaked up again in 1993 to a figure of 2542 t.

Kingfishes are the second most important group. Catches show a declining trend, falling from 2730.4 t in 1990 to 593.6 t in 1993, with a low of 100.5 t in 1992.

Tunas are the third dominant group in this fishery. Like the previous groups, catches show a declining trend, dropping from 1053.3 t in 1989 to 530.5 t in 1993, with the lowest figure of 67.7 t in 1992. The species involved are bluefin, yellowfin, and bonitos. All these are recorded as tunas.

The last group is swordfish. Like the others, they show a declining trend, although the 1993 figure shows a significant upward trend, reaching 530.5 t, the highest for the group in five years.

On the whole there is general declining trend in the tuna fishery during the 1989-1993 period. Total production has fallen from 5119.8 t to 4202.9 t.

## **CONCLUSION AND COMMENTS**

The reasons given for declining catches in the 1980s were the unavailability of fishing gears, credit facilities, and suitable vessels in which the artisanal fishermen can venture far offshore. These reasons are still valid in this decade. Although trade has been liberalized and restrictions have been removed, fishing equipment is still expensive. Thus the artisanal fishermen still use their old methods, while some have switched to other activities.

The effects of a policy of attracting joint ventures with private local or foreign entrepreneurs have not yet been felt in the tuna fishery. Most such ventures are concentrating on the more easily lucrative prawn fishery.

 Table 1. Production (t) from fresh water and marine waters of Tanzanian mainland.

Year	National total	Marine waters	%
1989	377,773.0	50,242.0	13.3
1990	414,111.6	56,779.4	13.7
1991	326,712.8	54,342.0	16.6
1992	333,501.2	43,886.2	13.2
1993	331,466.8	36,684.8	11.1

Table 2. Fishing effort (number of fishermen and fishing vessels) for marine waters of Tanzanian mainland.

Year	Number of fishermen	Number of vessels		
1989	15,491	4,399		
1990	16,178	4,354		
1991	16,361	4,402		
1992	15,027	3,514		
1993	15,027	3,232		

Year	Mackerels	Kingfish	Tuna	Sword	Total
				fish	
1989	2,274.1	1,400.8	1,053.3	391.6	5,119.8
1990	1,356.9	2,730.4	513.5	231.1	4,831.9
1991	3,167.3	132.5	832.2	222.7	4,354.7
1992	104.1	100.5	67.7	51.4	323.7
1993	2,542.0	593.6	537.4	530.5	4,202.9

 Table 3. Production trends (t) for Tanzanian marine fisheries, 1989-1993.

Table 4. Production trends, in percentages, for Tanzanian mainland marinefisheries, 1989-1993.

Year	Total marine	Mackerels	King	Tuna	Sword	Total
	catch		fish		fish	
1989	50,242	4.5	2.8	2.1	0.8	10.2
1990	56,789	2.4	4.8	0.9	0.4	8.5
1991	54,343	5.8	2.4	1.5	0.4	10.1
1992	43,886	0.2	0.2	0.2	0.1	0.7
1993	30,685	6.9	1.6	1.5	1.4	11.4