

THE SHARK FISHERIES IN THE MALDIVES



The Shark Fisheries of the Maldives

A review

by

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Tuna fishing is the most important fisheries activity in the Maldives. Shark fishing is one of the major secondary fishing activities. A large proportion of Maldivian fishermen fish for shark at least part-time, normally during seasons when the weather is calm and tuna scarce. Most shark products are exported, with export earnings in 1991 totalling MRf 12.1 million.

There are three main shark fisheries. A deepwater vertical longline fishery for Gulper Shark (*Kashi miyaru*) which yields high-value oil for export. An offshore longline and handline fishery for oceanic shark, which yields fins and meat for export. And an inshore gillnet, handline and longline fishery for reef and other atoll-associated shark, which also yields fins and meat for export. The deepwater Gulper Shark stocks appear to be heavily fished, and would benefit from some control of fishing effort. The offshore oceanic shark fishery is small, compared to the size of the shark stocks, and could be expanded. The reef shark fisheries would probably run the risk of overfishing if expanded very much more.

Reef shark fisheries are a source of conflict with the important tourism industry. 'Shark-watching' is a major activity among tourist divers. It is roughly estimated that shark-watching generates US \$ 2.3 million per year in direct diving revenue. It is also roughly estimated that a Grey Reef Shark may be worth at least one hundred times more alive at a dive site than dead on a fishing boat. Various recommendations are made for the resolution of conflicts between the tourism industry and shark fishermen. Recommendations on other issues are also made in this review, which was undertaken with the assistance of FAO through their Technical Cooperation Programme (project TCP/MDV/2252).

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RECOMMENDATIONS

The following is a summary of the recommendations made as a consequence of this review of the shark fisheries in the Maldives:

- * MOFA should encourage private fishing businesses to develop offshore shark longlining using small vessels;
- * Newly developed commercial shark longlining operations to be restricted to fishing beyond a certain distance offshore;
- * Information on current status of Gulper Shark fishery to be broadcast, in order to minimize further investment in the fishery;
- * Economic options to be considered to regulate the Gulper Shark fishery;
- * Use of gillnetting within the tourism zone to be reviewed, and the banning of shark gillnetting in some atolls to be considered;
- * Fish Head in An Atoll to be considered for protection from all types of fishing, but particularly shark fishing;
- * Ministry of Tourism to draw up a list, of priority dive sites for protection;
- * Landing of shark at night by fishing resort tourists to be banned;
- * All fishing of Whale Shark to be banned;
- * MRS staff to be trained in fishery stock assessment and management; and
- * Extension material to be prepared for the fishermen, giving details of proper processing techniques, the potential of offshore longlining, and the problems of the shark fisheries.

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AKEY

Abbreviations

Abbreviations used in this report include:

CIF	Cost, Insurance, Freight (import price)
FAO	Food and Agriculture Organization of the United Nations
FL	Fork length
FOB	Free on board (export price)
IUCN	The World Conservation Union
LOA	Length overall
MATI	Maldives Association of Tourism Industry
MOFA	Ministry of Fisheries and Agriculture (MOF, earlier)
MPE	Ministry of Planning and Environment
MRf	Maldivian Rufiyaa
MRS	Marine Research Section of MOFA
SAM	Scuba Association of Maldives
STO	State Trading Organization
TL	Total length
Uss	United States Dollar

Exchange Rates

Exchange rates for 1983 to 1991 were:

1983	US\$ 1	=	MRf 7.00	1988	US\$ 1	=	MRf 8.78
1984	US\$ 1	=	MRf 7.05	1989	US\$ 1	=	MRf 9.04
1985	US\$ 1	=	MRf 7.10	1990	US\$ 1	=	MRf 9.51
1986	US\$ 1	=	MRf 7.15	1991	US\$ 1	=	MRf 10.32
1987	US\$ 1	=	MRf 9.22	1992	US\$ 1	=	MRf 11.00 (appx.)

Source: MPE, 1992

Units of Measure

Units of measurement as used by Maldivian fishermen, in old records and elsewhere, include:

1	<i>kaivah</i>	=	9 inches	
1	<i>muh</i>	=	18 inches	
1	<i>riyan</i>	=	27 inches	
1	<i>bama</i>	=	one arms' span = 72"	= 1.83 m
1	<i>udubama</i>	=	height of man's reach = 90"	= 2.29 m
1	foot (1')	=	12 inches (12")	= 0.3048 m
1	nautical mile (nm)	=	1852 m	
1	<i>adubaa</i>	=	1.12 litres (l)	
1	gallon	=	8 pints	= 4.546 litres
1	hundredweight (cwt)	=	112 pounds (lb)	= 50.9 kg
1	metric tonne (t)	=	1000 kilograms (kg)	

Fig 1: Map of the Maldives

