

Bay of Bengal Programme

Development of Small-Scale Fisheries

PROMOTION OF BOTTOM SET
LONGLINING IN SRI LANKA

BOBP/WP/40



SWEDISH INTERNATIONAL DEVELOPMENT AUTHORITY



FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS

BAY OF BENGAL PROGRAMME
Development of Small-Scale Fisheries

BOBP/WP/40
GCP/RAS/040/SWE

PROMOTION OF BOTTOM SET
LONGLINING IN SRI LANKA

BOBP/WP/40

by K. T. Weerasooriya
S. S. C. Pieris
and M. Fonseka
National Aquatic Resources Agency
(NARA), Colombo

Executing Agency:

Food and Agriculture Organization
of the United Nations

Funding Agency:

Swedish International
Development Authority

Development of Small-Scale Fisheries in the Bay of Bengal. Madras, India, August 1985
Mailing Address: Post Bag No. 1054, Madras 600018, India
Street Address: 91, St. Mary's Road, Abhiramapuram, Madras 600 01 8, India
Cables: FOODAGRI;Telex: MS-311 FISH; Phones: 71294,71296,71587, 77760

This document is the third report of bottom set longlining trials conducted by BOBP in cooperation with the Ministry of Fisheries, Sri Lanka. The two earlier reports covered trials off the south west coast of Sri Lanka between October 1979 and March 1980 (BOBP/WP/6) and on the east and west coasts of Sri Lanka during August 1980—July 1981 (BOBP/WP/16). This report summarizes the results of the trials conducted between 1981 and 1983 and also discusses biological information obtained from the trials during the period 1979—82.

The report concludes that bottom longlining might be a viable alternative fishery for both the 28-footers and the 18' GRP boats during the lean season for driftnet fisheries. This conclusion is based on trials conducted in Negombo, 1981/82 and Puduwakattuwa, Dehiwala, Panadura and Ratmalana, 1982/83.

This report, and the trials on which it is based, are activities of the small-scale fisheries project of the Bay of Bengal Programme (BOBP). It began in 1979 and covers five countries bordering the Bay of Bengal — Bangladesh, India, Malaysia, Sri Lanka and Thailand. Funded by SIDA (Swedish International Development Authority) and executed by the FAO (Food and Agriculture Organization of the United Nations), the project seeks to develop, demonstrate and promote appropriate technologies and methodologies to improve the conditions of small-scale fisherfolk and the supply of fish from the small-scale sector in the member countries.

This document is a working paper and has not been officially cleared by the Government concerned or the FAO.

CONTENTS

	<i>Page</i>
1. Bottom set longlining in Negombo, 1981/82 by K. T. Weerasooriya	
1.1 Introduction	1
1.2 Craft and fishing gear	1
1.3 Results of fishing operations	2
<i>Tables</i>	
1.1 Weekly analysis of catch data	6—A
1.2 Percentage catch composition of different species	7
1.3 Summary of catch data – wide gap hooks experiment (January—March 1982)	7
1.4 Performance of fishing boats undertaking bottom set longlining in Negombo	8
1.5 Summary of fishing trials data	8—A
2. Bottom set longlining in Puduwakattuwa, Dehiwala, Panadura and Ratmalana, 1982/83 by K. T. Weerasooriya and S.S.C. Pieris	
2.1 Introduction	9
2.2 Craft and fishing gear	9
2.3 Fishing operations	9
2.4 Catch and catch rates	11
2.5 Catch composition	11
2.6 Economics of operation	11
<i>Tables</i>	
2.1 Monthly summary of BSLL operations off Puduwakattuwa, 1982	13
2.2 Monthly summary of BSLL operations off Dehiwala, 1982/83	14
2.3 Monthly summary of BSLL operations off Panadura, 1983	15
2.4 Monthly summary of BSLL operations off Ratmalana (oru), 1983	16
2.5 Percentage species composition of BSLL catches	16—A
2.6 Performance of fishing boats undertaking BSLL fishing in Puduwakattuwa, Dehiwala, Panadura and Ratmalana	17
3. Some biological observations from bottom set longlining trials around Sri Lanka, 1979-82 by M. Fonseka	
3.1 Introduction	18
3.2 Catch composition	19

3.3	Catch rates	21
3.4	Conclusions	22

Tables

3.1	Summary of the general features of bottom set longlining trials, October 1979—August 1982	24
3.2	Percentage catch composition in bottom set longlining trials	25
3.3	General catch rates in the areas covered during bottom set longlining trials	25
3.4	Monthly mean weights of dominant demersal species of fish caught in BSSL trials at various depths in Kalkudah and Negombo	26

Figures

3.1	Schematic topographic profile of sea bottom in the area	28
3.2	Seasonal catch composition by weight	29
3.3	Seasonal catch composition by number	30
3.4	Catch composition according to fishing depth	31
3.5	Monthly catch rates by weight	32
3.6	Monthly catch rates by number	33
3.7	Catch rates according to depth in Negombo	34
3.8	Catch rates according to depth in Kalkudah	35

Appendix

	Geographic location of bottom set longlining bases	36
--	----------------------------------------------------	----

	<i>Publications of the Bay of Bengal Programme</i>	37
--	----------------------------------------------------	----