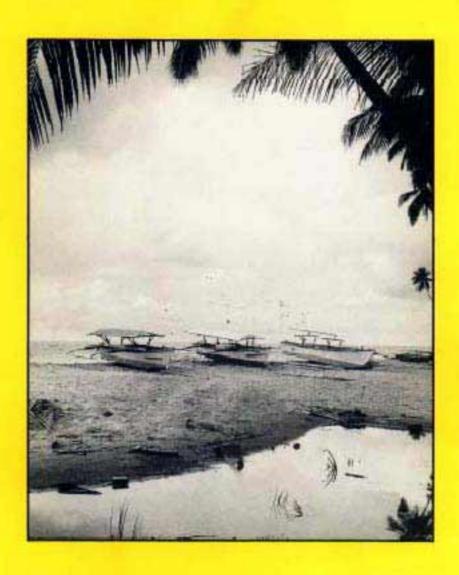
## THE FISHERIES AND FISHERFOLK OF NIAS ISLAND, INDONESIA



A description of the fisheries and a socio-economic appraisal of selected fisherfolk communities on this island off Sumatera



## BAY OF BENGAL PROGRAMME Small-Scale Fisherfolk Communities

BOBP/WP/78 RAS/118/MUL

THE FISHERIES AND FISHERFOLK OF NIAS ISLAND, INDONESIA

This paper is a background document for the planning and programming of a Fishing Technology subproject for support by the Bay of Bengal Programme (BOBP). It has been prepared in two parts.

Part I is a brief and factual presentation of data and information on the main features of the small-scale marine fisheries of Nias Island, Indonesia, which is the result of a preliminary field survey undertaken in June and October 1988 by O. Pajot, Senior Fishing Technologist, BOBP. It is based on observations and discussions during field visits to the main fishing villages and on information and data provided by the District Fisheries Service of Gunung Sitoli in Nias Island. In the absence of reliable statistics, some of the data given are estimates and should, therefore, be regarded as orders of magnitudes and trends.

Part II presents data and information on the socio-economic situation of the fisherfolk communities of Nias Island. It is the result of a socio-economic appraisal undertaken by Philip Townsley, a BOBP socio-economist, during the period October 1989 to January 1990 in eleven villages in seven subdistricts of Nias Island.

The preparation of this paper is an activity of the BOBP for the development of fisherfolk communities and has been undertaken jointly with the Provincial Fisheries Service of North Sumatera Province.

The BOBP is a multi-agency regional fisheries programme which covers seven countries around the Bay of Bengal — Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka and Thailand. The programme plays a catalytic and consultative role it develops, demonstrates and promotes new techniques, technologies or ideas to help improve the conditions of small-scale fisherfolk communities in member-countries. The BOBP is sponsored by the governments of Denmark, Sweden and the United Kingdom, by member-governments in the Bay of Bengal region, and also by UNFPA (United Nations Population Fund), AGFUND (Arab Gulf Fund for United Nations Development Organizations) and UNDP (United Nations Development Programme). The main executing agency is the FAO (Food and Agriculture Organization of the United Nations).

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

December 1991

COI	NTENTS	Page
PAI	RT I	
DES OF (base	SCRIPTION OF SMALL-SCALE FISHERIES NIAS ISLAND, INDONESIA. ed on a report by G Pajot, Senior Fishing Technologist, BOBP, in 1988)	
1.	Introduction	
2.	Marine environment	3
3.	Resources	3
	3.1 The coastal zone	3
	3.2 The deep water zone	4
	3.3 The offshore zone	4
4.	Fishing craft and gear	5
	4.1 Fishing craft	5
	4.2 Fishing gear	13
	4.3 Fishing areas	14
5.	Marine production	14
6.	Infrastructure and service facilities	17
<i>7</i> .	Handling and processing	19
8.	Marketing and distribution	22
9.	Coastal aquaculture	23
10.	Fisheries administration and institutions	23
	10.1 District Fisheries Service	23
	10.2 Research Training and Extension institutions	25
	10.3 Institutional credit organization	25
11.	Policy and development plan	25
Tab	les	
	I. Composition of fishing fleet	5
	II. Subdistrictwise distribution of fishing craft (1986)	6
	III. Types of fishing gear used in Nias Island	13
	IV. Subdistrictwise fishing management units	13
	V. Subdistrictwise production, by category of fishing gear	IS
	VI. Subdistrictwise production, by species groups	15
Map	os and Charts	
	1. Geographical location of Nias Island	vi
	2. The subdistricts of Nias Island	
	3. The continental shelf	2
	4. Roads, rivers and infrastructure facilities	18
	5. Organizational set up of the District Fisheries Service	24

	Page
llustrations	
Coastal erosion	3
Non-motorized dugout outrigger canoe (4-Sm)	7
Non-motorized dugout canoe (5-7m) used for beach seining	7
Sail rig of traditional outrigger canoe	8
Outboard motorized dugout outrigger canoe (4-5m)	8
Outboard motorized dugout outrigger canoe (5-7m)	ò
Inboard motorized dugout outrigger canoe (5-7m)	9
Outboard motorized dugout outrigger canoe (6-7m) used for beach-seining	10
Outboard motorized planked open boat (7-10m)	10
A small inboard motorized half-deck driftnetter (8m)	11
A larger inboard motorized half-deck driftnetter (10-l2m)	11
Padang-based inboard motorized trollers fishing off the west coast of Nias Island	12
Sibolga inboard motorized trawler-cum-longliner fishing in the coastal zone of Nias Island	12
Outrigger canoes on the beach	16
Newly introduced inboard motorized craft moored in river	16
Wooden jetty on stilts by the bank of the Gunung Sitoli river	17
A privately owned ice-making plant in Gunung Sitoli	17
Insulated ice box for preservation of fish	17
The public market in Gunung SitOli	19
Removing fish from gillnets on the beach	19
Gunung Sitoli airport	20-21
Airplane linking Medan – Gunung Sitoli	20-21
Passenger ferry linking Gunung Sitoli with Sibolga	20-2
A Bamboo raft used as ferry	20-21
Suspension bridges	20-2
Collapsed bridges	20-2
Cleaning and icing of fish in Gunung Sitoli for transport inland	22
A fish trader and his bicycle	22
Nias island: marketing of fish	22
The District Fisheries Office in Gunung Sitoli	23
PART II	
A SOCIO-ECONOMIC APPRAISAL OF SELECTED COASTAL FISHERFOLK COMMUNITIES IN NIAS ISLAND, INDONESIA.	
based on a report by Philip Townsley, APO, Socio-economist, BOBP, in 1989-90)	
Introduction	27
BOBP activities in Nias	28
Socio-economic appraisal of Nias fisherfolk communities	29

		Page
4. I	Findings of the socio-economic appraisal	29
4	.1 Definition of fisherfolk communities	30
4	.2 Typology of fisherfolk communities	30
4	.3 Socio-economic conditions of Nias fisherfolk communities	31
4	.4 Problems, resources and solutions as seen by fisherfolk	33
4	5.5 Economic activities other than fishing	36
4	.6 Formal and non-formal institutions	37
4	.7 Implications of the findings for future trials, demonstrations and introduction of improved outrigger canoes	38
Table	es	
	I. Subdistrictwise population	27
	II. Subdistrictwise distribution of fishing households	27
Ι	II. Employment in ancillary activities	28
I	V. Classification of sample villages according to access to land and access to markets for fisheries produce	30
Мар		
	6. Locations of the villages surveyed	26
Illust	rations	
	Homes and boat shelters in the villages surveyed Life in the villages assessed	50 69
APPI	ENDICES	
	I. Socio-economic data	44
	II. Common marine species	46
I	II. Features of the socio-economic appraisal	47
I	V. Village assessments	51
	Ladara (Tuhemberua)	52
	Botolakha (Tuhemberua)	53
	Afia (Gunung Sitali)	54
	Sisarahili Gomo (Gunung Sitoli)	55
	Fowa (Gido)	56
	Bozihona (Idano Gawo)	58
	Hilinamoniha (Teluk Dalam)	60
	Teluk Dalam Pasar (Teluk Dalam)	62
	Lagundhi (Teluk Dalam)	64
	Hilinamazihona (Lolowah)	66
Publi	cations of the Ray of Rengal Programme	70

