ISBN 978-983-9114-80-5 SEAFDEC/MFRDMD/SP/43





MARKETING AND TRADE OF SHARKS AND RAYS IN JAVA AND SUMATERA (INDONESIA)



By DHARMADI ANDHIKA PRIMA PRASETYO

2019

MARKETING AND TRADE OF SHARKS AND RAYS IN JAVA AND SUMATERA (INDONESIA)

Prepared by

DHARMADI ANDHIKA PRIMA PRASETYO Center for Fisheries Research, Jakarta, Indonesia Ministry of Marine Affairs and Fisheries, Republic of Indonesia

In Collaboration with AHMAD ALI Marine Fishery Resources Development and Management Department Southeast Asian Fisheries Development Center (SEAFDEC/MFRDMD), Kuala Terengganu, Malaysia Perpustakaan Negara Malaysia

Dharmadi

MARKETING AND TRADE OF SHARKS AND RAYS IN JAVA AND SUMATERA (INDONESIA) / Prepared by: DHARMADI, ANDHIKA PRIMA PRASETYO ; In Collaboration with: AHMAD ALI.
ISBN 978-983-9114-80-5
1. Shark industry--Java (Indonesia).
2. Rays (Fishes)--Sumatera Utara (Indonesia).
I. Andhika Prima Prasetyo.
II. Ahmad Ali, Dr.
III. Title.
382.4312731

Published by: SEAFDEC/MFRDMD Taman Perikanan Chendering, 21080 Kuala Terengganu, Terengganu. MALAYSIA Tel: +609 617 5940 Fax: +609 617 5136

Copyright©2019 SEAFDEC/MFRDMD

All Right Reserved.

This publication may be reproduced for educational and other non-commercial purposes without permission of the copyright holder, provided the source is cited and the copyright holder receives a

FOREWORD

This study seeks to understand the domestic utilization and marketing of sharks and rays in Java and Sumatera as well as the international trade of Indonesia's shark and ray products. The study team would like to record their sincere thanks to the SEAFDEC Secretariat and Marine Fishery Resources Development and Management Department (SEAFDEC-MFRDMD) for initiating the idea to conduct the study in Indonesia. The study was conducted by officers from Center for Fisheries Research, Ministry of Marine Affairs and Fisheries, Jakarta Indonesia with financial and technical support from SEAFDEC-MFRDMD.

This pioneer marketing and trade study of sharks and rays in Indonesia sponsored by SEAFDEC has explored the status and trends of sharks and rays utilization, marketing and trade at 10 sites in Java and Sumatera. The findings of this study are useful to serve as an essential basis for developing appropriate fisheries management policies and actions, and thereby promote national responsibility for sharks and rays resource management issues including international trade issues such as Non-Detrimental Findings (NDFs). The findings from this study will also be useful as a guideline in expanding similar study to other islands in the future.

In particular, we are indebted to all officers from the Ministry of Marine Affairs and Fisheries and local officers based at all study sites in Jakarta, Palabuhanratu, Cirebon, Indramayu, (West Java), Tegal, Cilacap, Semarang (Central Java), Surabaya (East Java), Banda Aceh and Sibolga (Sumatera) for their continuous support and to facilitate our study either in terms of information or leads, is highly appreciated. Without their support, it can be safely said this study would have not been able to implement the field surveys and visits to landing centres and discussions with the fishers and industry players, who are the targeted stakeholders of the study. Their input serve as the core data for the study.

However, it was the readiness and warmness of the fishers at all study sites to share with us their experiences, insights and information that touched us deep with appreciation and admiration. Despite their struggle to earn a good income, their respect to the ocean and its content is remarkable that deserve respect and appreciation. This report is dedicated to them.

Last but not least, we would like to thank the Japanese Government for supporting this project under Japanese Trust Fund VI and express special thanks to Dr. Kom Silapajarn (Director-General of SEAFDEC), Mr. Raja Bidin bin Raja Hassan (Chief of SEAFDEC-MFRDMD), Dr. Kenji Taki (Deputy Chief of SEAFDEC-MFRDMD) for their endless support to conduct this study in Indonesia. Special thanks to Dr. Lilly Aprilya Pregiwati (SEAFDEC National Coordinator for Indonesia, MMAF) and Dr. Toni Ruchimat (Director of Center for Fisheries Research, Agency Research and Human Resources, MMAF) for their support in this study.

ABBREVIATION

CITES	The Convention on International Trade in Endangered Species of Wild Fauna and Flora		
FAO FMA	Food and Agriculture Organization of the United Nations Fisheries Management Area Name of software for Fisheries Statistical Time Series of FAO		
FishStatJ			
IPOA-Shark	International Plan of Action for Conservation and Management of Shark		
MFRDMD	Marine Fishery Resources Development and Management Department		
MMAF	Ministry of Marine Affair and Fisheries		
MPA	Marine Protected Area		
NDFs	Non-detrimental findings		
NPOA-Sharks	National Plan of Action for Conservation and Management of Shark		
PERSIPINDO	Perhimpunan Pengusaha Sirip Indonesia		
SEAFDEC	Southeast Asian Fisheries Development Center		

Table of Contents

List of figures	.1			
Key Findings	.3			
Introduction4				
Problem Statement5				
 Objectives of the Study				
. Methodology6				
 Production 5.1. Global 5.2. Indonesia 	7			
6. Trade				
6.1. Shark and ray products6.2. National trade				
 7. Marketing Channels. 7.1. Case 1: Marketing channels of sharks and rays in the province of 	13			
 Jakarta and Banten Area 7.2. Case 2: Marketing channels of sharks and rays in the West Java Province 7.3. Case 3: Marketing channels of sharks and rays in the Central Java Province 7.4. Case 4: Marketing channels of sharks and rays in the East Java Province 7.5. Case 5: Marketing channels of sharks and rays in the Aceh Province 7.6. Case 2: Marketing channels of sharks and rays in the North Sumatra Province 	16 18 21 22			
8. Conclusion	24			
9. Acknowledgment	25			
10. References	25			

List of figures

Figure 1.	Location of study.	6
Figure 2.	World trade in shark fins, 1976-2011 (FAO, 2013).	7
Figure 3.	World trade in shark meat, 1976-2011 (FAO, 2013)	8
Figure 4.	Sharks and rays national production in Indonesia (source: MMAF, 2016)	9
Figure 5.	Sharks production and composition in Indonesia by species group	
	2005-2014 (MMAF, 2016)	. 10
Figure 6.	Rays production and composition in Indonesia by species group	
	2005-2014 (MMAF, 2016)	.10
Figure 7.	Derivative products of shark	.11
Figure 8.	Derivative products of ray.	.12
Figure 9.	Trade flows of shark and ray product in Indonesia (study and initial	
-	information)	.13
Figure 10.	General marketing channels of shark and ray product in Indonesia	. 14

Figure 11.	Generalized marketing channels of shark and ray product	
	in the Province of DKI Jakarta and Banten	16
Figure 12.	Generalized marketing channels of shark and ray product	
	in the West Java Province	
Figure 13.	Generalized marketing channels of shark and ray product	
	in the Centra Java Province	20
Figure 14.	Generalized marketing channels of shark and ray product	
	in the East Java Province	22
Figure 15.	Generalized marketing channels of shark and ray product	
	in the Aceh Province	23
Figure 16.	Generalized marketing channels of shark and ray product	
	in the North Sumatera Province	24