

Foreword

Fish constitute an important and plentiful source of high quality animal protein. Fisheries and aquaculture contribute 1.04 per cent to the national GDP and 5.34 per cent to agriculture and allied activities. Fishery resources are two types viz., marine and inland. India, Sri Lanka and Bangladesh have experienced a significant revolution in inland fishery production during the last six decades. Inland fisheries include fisheries in rivers, canals, reservoirs, ponds and tanks, beels, oxbow lakes, derelict water bodies and brackish water. In 1950-51 the share of inland fisheries was about 29.00 per cent in total fish production, which increased to nearly 52.00 per cent. Among the Asian countries, India ranks second in aquaculture and third in capture fisheries.

Having no coastal belt the fisheries sector in Bihar & Jharkhand is inland fisheries. It could play a significant role in realizing their development vision. Till date Bihar & Jharkhand states have not been able to fully exploit the given resource endowment. As a result the estimated annual fish production is much below its requirement. It is about 2.67 lakh tones against the estimated demand of 4.56 lakh tones in Bihar and in Jharkhand 0.83 lakh tones against the estimated demand of 1.40 lakh tones. In order to over-cover this sizeable deficit, Bihar imports 70-80 tones per day and Jharkhand imports 40-45 tones per day from outside the state (Andhra Pradesh and West Bengal). It is fully realized that both the states have diverse and highly suitable aquaculture with favourable agro-climatics, cheap labour, traditionally involved population and glorious history of fish, a fish rich state (Old Bihar).

In above backdrop, the present study, which examines the fisheries in Bihar & Jharkhand and its economics, will provide appropriate feed back to the policy makers and other stakeholders. The findings relating to CBRs viz., 1:1.81 in Bihar and 1:1.52 in Jharkhand clearly reveal that the fish farming in both the states is remunerative and thus, sustainable. Moreover, constraints their in have been identified, which need to overcome.

I have immense pleasure in putting on record the crucial work done by Dr. Ranjan Kumar Sinha and Dr. (Smt) Rosline Kusum Marandi and all other team members for completing this study with meaningful results. They all indeed deserve full appreciation.

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Preface

In developing economies, inland fisheries not only play an important role in the nutrition for the people but also provide livelihood for many people engaged in fisheries. The growth in inland fish production is spatial and intensive both, as scores of water bodies were brought under aquaculture and several schemes of development programmes in irrigation tanks and village ponds were introduced. The major driver of the growth has been the intervention of the Fish Farmers' Development Agencies (FFDAs) in training and technology of fish culture and improved fish management practices.

But in case of Bihar & Jharkhand states, interventions of FFDAs could not bring substantial change, despite the vast potentiality. Understanding of driving forces has been very little. Thus, the Ministry of Agriculture, Government of India has approved this study. Now it has been completed and its draft report has been evaluated by Prof. P K Mishra, Director, AER Centre, J N Krishi Vishwavidyalaya, Jabalpur (MP). We are grateful to him for giving us valuable comments and suggestions, which have been appropriately attended while finalizing the report.

We deem it our holy duty to acknowledge and appreciate the guidance and co-operation of all those who have greatly helped us to complete this study. First of all, we are grateful to Prof (Dr) Balkrishna Jha, Director of the Centre for his overall guidance. We sincerely express our thanks to the Director(s) of Fishery Department of Bihar & Jharkhand and their colleagues at the district level --- Bhagalpur, Purnea & Madhubani in Bihar and Dumka and West Singhbhum in Jharkhand. We express our thankfulness to the respondent fish farmers for providing us necessary information and sparing their valuable time.

At the last, the present work is the outcome of the dedicated efforts made by the research team of the Centre, so we take this opportunity to thank Dr. Rajiv Kumar Sinha and Dr. S D Mishra, Research Associates of the Centre for their co-operation in data collection, Mr. Jai Shankar Choudhary for final computer typing and Mr. Anil Kumar Saraf and Ganesh Prasad Vishwakarma for secretarial assistance.

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List of Tables

Chapter	Table No.	Particulars	Page No.
I.	1.1	Contribution of India to World Fish Production	2
	1.2	Contribution of Fisheries Sector to Gross Domestic Product	3
	1.3	Outlays and Expenditure for Fisheries Development over plans	3
	1.4	Distribution of Sample Fish Farming Households	8
I. Bihar			
II.	2.1	Outlay and Expenditure on Fisheries under State Sector Schemes	11
	2.2	Inland Fish Landings by Species	12
	2.3	Fish Seed Production	12
	2.4	District wise number of Ponds and Water area in Bihar	13
II. Jharkhand			
	2.5	Outlay and Expenditure on Fisheries under State Sector Schemes	15
	2.6	Inland Fish Landings by Species in Jharkhand	15
	2.7	Zone wise/District wise number of Ponds and Water area	16
I. Bihar			
III.	3.1	Demographic and other Macro Indicators of the Sample Districts	20
	3.2	Land use Pattern in Sample Districts	21
	3.3	Irrigational Status Source wise in Sample Districts	21
	3.4	Anchal wise Distribution of Jalkars in Sample Districts	22
	3.5	Socio-Economic Features of the Sample Respondents	23
	3.6	Population of the Family members of the Sample Respondents	24
	3.7	Land Holding Account of the Sample Respondents	24
	3.8	Cropping Pattern of the Sample Households	25
II. Jharkhand			
	3.9	Demographic and other Macro Indicators of the Sample Districts	26
	3.10	Land use Pattern in Sample Districts	27
	3.11	Irrigational Status --- Source wise in Sample Districts	28
	3.12	Anchal wise Distribution of Jalkars in Sample Districts	28
	3.13	Socio-economic Features of the Sample Respondents	29
	3.14	Population of the Family members of the Sample Respondents	30
	3.15	Land Holding Account of the Sample Respondents	30
	3.16	Cropping Pattern of the Sample Households	31
I. Bihar			
IV.	4.1	Details of Ponds area, Nature and Jamabandi of Sample Households	33
	4.2	Input Structure of Total Farms	34
	4.3	Per hectare Cost and Return of Fish Farming of Total Farms	35
	4.4	Per hectare Cost and Return of Fish Farming of Small Farms	36
	4.5	Per hectare Cost and Return of Fish Farming of Medium Farms	36
	4.6	Per hectare Cost and Return of Fish Farming of Large Farms	37
	4.7	Production and Disposal of Fish of Total Farms	37
	4.8	Quantity Marketed through different Channels	38
	4.9	Credit Status of Total Fish Farmers	39

II. Jharkhand

4.10	Details of Ponds area, Nature and Jamabandi of Sample Households	40
4.11	Input Structure of Total Farms	41
4.12	Per hectare Cost and Return of Fish Farming of Total Farms	42
4.13	Per hectare Cost and Return of Fish Farming of Small Farms	43
4.14	Per hectare Cost and Return of Fish Farming of Medium Farms	43
4.15	Per hectare Cost and Return of Fish Farming of Large Farms	44
4.16	Production and Disposal of Fish of Total Farms	44
4.17	Quantity Marketed through different Channels	45
4.18	Credit Status of Total Fish Farmers	46

I. Bihar

V.	5.1	Constraints Faced by the Sample Households	47
	5.2	Suggestions given by the Sample Households	51

II. Jharkhand

	5.3	Constraints Faced by the Sample Households	52
	5.4	Suggestions given by the Sample Households	55

Contents

Chapter	Particulars	Page No.
	<i>Foreword</i>	<i>i</i>
	<i>Preface</i>	<i>ii</i>
	<i>List of Tables</i>	<i>iii-iv</i>
I.	INTRODUCTION	1-8
II.	FISHERIES IN BIHAR AND JHARKHAND	9-17
III.	STUDY AREA AND THE SAMPLE RESPONDENTS	18-31
IV.	ECONOMICS OF FISH FARMING	32-46
V.	PROBLEMS AND PROSPECTS OF FISH FARMING	47-55
VI.	SUMMARY AND CONCLUSIONS	56-75
	<i>References:</i>	<i>76</i>
	<i>Annexure – I: Inland Fishery Resources by States & Union Territories</i>	<i>77</i>
	<i>Annexure – II: Fishermen Population – 2003</i>	<i>78</i>
	<i>Annexure – III: Structure of Fisheries Co-operatives</i>	<i>79</i>
	Appendix – I: Comments on the Study by the AERC, JNKVV, Jabalpur	80
	Appendix – II: Action Taken Report (ATR)	81