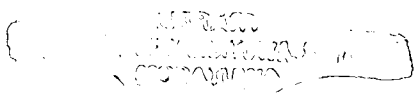
LB/DON/58/06

TECHNOLOGY AND POVERTY IN SRI LANKAN FISHERIES SECTOR, THE CASE OF FOUR FISH VILLAGES IN TANGALLE

By

L. Bandula Perera



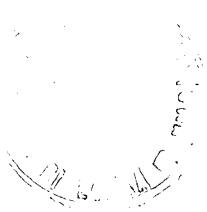
University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

The Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfilment of the requirement for the Degree of Master of Business Administration.

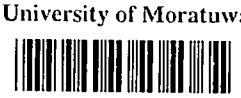
Department of Computer Science & Engineering
University of Moratuwa

December 2005

004 "05"
004:65(043)



University of Moratuwa



86333

86333

86333

DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any University to the best of my knowledge and belief it does not contain any material previously published, written or orally communicated by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations.

.....Bandula..... 30th January 2006

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

(L. Bandula Perera) Date

Signature of the Candidate

To the best of my knowledge, the above particulars are correct.

UOM Verified Signature

Dr.Sarath Dasanayaka

Supervisor

ABSTRACT

Poverty is the greatest challenge we ever face aftermath of the Tsunami tidal waves which hit two third of the coastal belt on 26th December 2004, throwing normal Fishermen life into the dark. People who lived around the coastal areas were lost their lives irrespective of any status. People who escaped from the tsunami have lost their properties and the way of living, pulling them to the poverty of any measurement. A substantial part of the Northern, Eastern and Southern coastal areas were devastated. It clearly showed that the nation is far below with the latest advanced technology and how poor economically to face with such situations. 80% of the fisheries sector damaged; in which 75 per cent of the fishing fleet were damaged which is more than 24,000 boats destroyed which comprising large number of fishing crafts, small-scale fishing crafts and the fishing gears. Of 12 harbours, 10 were severely damaged, including breakwaters, buildings, machinery and equipments. Generally hundred of small businesses and entrepreneurs were badly affected through damage to property, premises, stock; machinery as well as employees displaced injured or perished.

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Now it requires a clear mission to fight back poverty Fisheries Sector with a passion and professionalism, integrating every aspect of eradicating poverty, essentially a successful development of a comprehensive, multifaceted and properly integrated policy framework. It has identified the importance of the integration of global and local forces and technological advancement, which must be harnessed to improve the quality of poor people.

The research was carried out as a case study of four fish villages Kudawella, Mawella, Unakuruwa, and Rekawa in Tangalle Fish District in Southern Province. A survey was conducted to identify the current life situation of the fishermen who live in these areas and the hard factors that are affected to their industry such as technological methods, pre and post harvesting planning activities, financial activities, infrastructure and access to new technologies. It has been studied the services and the management activities that have been provided by the key stakeholders as governing bodies of the fisheries sector and to what extent the fishermen effectively use these services. It was identified the roles

and responsibilities of the key stakeholders and introduced a new conceptualized framework by identifying and integrating the key stakeholders to overcome the current barriers in developing the lives of the poor fishermen.

According to the recent survey carried out by the DCS, 30 per cent of the people who are living in Sri Lanka are below the poverty line which Rs.1423.00 on real food and non-food consumption expenditure per person per month (DCS 2002 survey report). It has been studied the historical development in Sri Lankan and studied the technology available, specially the Information Communication Technology which the Sri Lankan Fisheries sector can use to overcome the current pressing issues.
All the key stakeholders in the Fisheries sector must work towards clear objectives such as to assist in the reconstruction and rehabilitation of affected people to enable them to recommence operations immediately with the improved technology, training, accessibility to the world market with improved quality of products.

Total fish production has marginally dropped by 0.1 per cent in the year 2004 (Statistical Unit Ministry of Fisheries 2004). The main causes for the above drop are the price increase in world oil, instability of the government, lack of proper integrated policy implementations system, human diversification for other jobs, lack of latest technology and lack of access to the available technology, the waste of the production, lack of economic value for the product and the lack of proper resources management to introduce a value added product to the market apart from the Tsunami catastrophe.

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

Therefore it requires a sustainable development to the fisheries sector having a new framework integrating all the stakeholders in the industry aiming for the objectives to eradicate poverty of the bottom level of fishermen in the hierarchy. A mechanism, which will really impact on the livelihood of the fishermen, is required. It shows the importance of such integration and share expert's knowledge and the funds for the future research and development in the industry through monitoring such large investments in the industry. The implementation of new technological innovations within the framework for the beneficial of fishermen who are marginalized and application of technological policies within the framework for sustainable development.

ACKNOWLEDGEMENTS

This work could not be completed without the help of many people and institutions. I thank specially to my supervisor, Dr. Sarath Dassanayake (Management of Technology, University of Moratuwa) for his highly skilled guidance and supervision of the research. His comments from the day I started the project until the drafts I presented to him greatly encouraged me to continue the work. Without his support and supervision this thesis would not have been what it is.

Thank you for your support Mr.Piyasena, Director General of Department of Fisheries to allow me to conduct survey within the department and its regional office District Fisheries Extension Office Tangalle. Mrs. Sumana Ediriweera and Mr.Lal De Silva for supporting me with the current industry position. Thank you Dr.Candana, Head of the Department of Fisheries University of Ruhuna and Mr.Prasad, NAARA, giving me your support to enhance the knowledge fisheries technology and to conduct interviews.

I must thank to my employer, Dr.C.N.A Nonis of Mackwoods IT (Pvt) Ltd. who supported & advised me on the research study and my colleagues helping me in various ways to make this effort success.

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

I greatly thank to my friends who assist me in conducting the survey in fish villages and helped me in various ways make this report success.

Finally, special mention should go to my loving wife Kumudini and my little kids. She has been supporting and encouraging me at all the time staying with me. She also had to compromise her carrier in support of mine. Things I achieved are because of you.

Bandula Perera

TABLE OF CONTENTS

University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

University of Moratuwa, Sri Lanka.
www.lib.mrt.ac.lk

LIST OF TABLES

LIST OF FIGURES

University of Moratuwa, Sri Lanka
Electronic Theses & Dissertations
www.lib.mrt.ac.lk

LIST OF SYMBOLS, NOTATIONS, ABBREVIATIONS AND ACRONYMS

MFAR	– Ministry of Fisheries & Aquatic Resources
MOT	– Management of Technology
GDP	– Gross Domestic Product
GNP	– Gross National Product
ICT	– Information Communication Technology
DFEO	– District Fisheries Extension Office
DCS	– Department of Censes & Statistics
FAO	– Food Agricultural Organization
NARA	– National Aquatic Resources Research and Development Agency
WHO	– World Health Organization
PL	– Poverty Lines

University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations
www.lib.mrt.ac.lk