

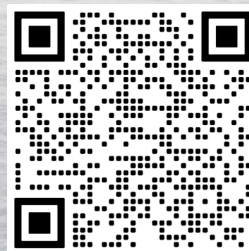


KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA)

Mulamkunnathukavu P O, Thrissur - 680 581, Kerala, India,
Ph: +91-487-2207000, 2201312, +91-487-2201062

Mail: info@kila.ac.in

Web: www.kila.ac.in



Scan QR code
to access digital copy

25 YEARS OF DECENTRALIZATION IN KERALA : IMPACT ON FISHERFOLKS



LIVES ON THE EDGES: FISHERFOLKS

25 YEARS OF DECENTRALIZATION IN KERALA: IMPACT ON FISHERFOLKS

RESEARCH STUDY



KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA)
Mulamgunnathkavu P.O. Thrissur, Kerala, INDIA
Email: info@kila.ac.in Website: www.kila.ac.in

Lives on the Edges: Fisherfolks

**25 Years of Decentralization in Kerala:
Impact on Fisherfolks**

Research Study



KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA)

Mulamgunnathkavu P.O. Thrissur, Kerala, INDIA

Email: info@kila.ac.in Website: www.kila.ac.in

Lives on the Edges
25 years of Decentralization: Impact on Fisherfolks

Author

Dr. P. Sivanandan
Director, KILA, Centre for Subaltern Studies

Research Associate

Ajmal A, KILA

Cover Design

Abhiram. K T K

Layout

Elizabeth Minu Mathews

September, 2023

ISBN: 978-81-966847-4-7

Printed in India at

Mulamkunnathukavu Panchayat Pattikajathi Services Cooperative Society Ltd.

Published by



KERALA INSTITUTE OF LOCAL ADMINISTRATION

Mulamgunnathkavu P.O. Thrissur - 680581

Kerala, INDIA

Email: info@kila.ac.in Website: www.kila.ac.in



PREFACE

Kerala has made significant progress in education, health, and social development over the past 25 years through decentralization efforts. However, marginalized communities like SC, ST, and fisherfolks continue to face difficulties in achieving parity with the mainstream population. The decentralized governance model adopted through the People's Plan Campaign has been instrumental in achieving progress. KILA has initiated three research studies through its 'Center for Subaltern Studies', focusing on communities living on the fringes, such as STs and fisherfolks, as well as those scattered among the mainstream population, the SCs. The research studies, "Lives on the Edges" and "Lives of the Scattered Margins," aim to identify interventions that have supported the development of marginalized groups and promoted inclusive and sustainable development in Kerala.

The fisheries sector plays a crucial role in contributing to a country's overall economy through exports. However, one pressing issue is that the quality of life for fish workers is often lower compared to other segments of the population. In this scenario, the focus of this report is on the socio-economic conditions of marine fisherfolks and the interventions made by Local Self Governments (LSGs) in Kerala to improve their well-being. Apart from empirical review and probing into public planning interventions, it is imperative to evaluate the level of priority given by local governments to the fisheries sector in current development efforts.

Local self-government institutions play a valuable role in addressing environmental and social issues that affect the fisheries sector, such as



climate change, pollution, disaster risk, and security. Strengthening local government institutions through a balanced approach is essential to effectively manage and ensure economic growth in the fisheries sector along with the well-being of fisherfolks, and address the environmental and social issues that impact upon their livelihoods.

Despite the numerous studies conducted on the fisheries sector, there is limited research that focuses on the development of fishermen under decentralized planning. This study is initiated during the twenty-fifth anniversary of the People's Plan campaign with the aim of filling the gap and conducting a comprehensive analysis of the situation. The report aims to contribute to efforts towards promoting equitable and sustainable development in the state, and its recommendations may guide policymakers, practitioners, and researchers working towards the development of fisherfolks and also highlights the critical role of LSGs in identifying the needs of these communities and developing effective plans for their upliftment.

Dr. Joy Elamon

Director General, KILA



ACKNOWLEDGEMENT

We would like to express our heartfelt appreciation to the numerous individuals and institutions whose collaborative efforts and support made this research study possible.

First and foremost, we are grateful to the Government of Kerala for giving us the opportunity to conduct this study under the Centre for Subaltern Studies, KILA and our sincere appreciation to Dr. Joy Elamon, Director-General of KILA, for assigning this responsibility and providing with necessary resources and freedom to organize the study.

We would like to express our sincere gratitude to Dr. John Kurien (Visiting Professor, Azim Premji University) Dr. JB Rajan (Faculty in KILA), Mr. Sunil George Kurien (Senior Consultant, Centre for Social Development) and Mr. A.J Vijayan (Social Activist) as well as all the activists and experts who made invaluable contributions and actively participated in the expert meetings and discussions held at various locations. We also extend our deepest condolences to late Mr. T. Peter (General Secretary, National Fish workers' Forum (NFF)), who supported the study in earlier times. Furthermore, we are immensely thankful to the district facilitators for their efforts in making the necessary arrangements for the discussions and arrangements for field surveys and to Dr. Rajesh RV (Research Associate, KILA) for his coordination during the focus group discussions. Their unwavering support and dedication have been instrumental in shaping the findings and recommendations of this study.

We would like to express our heartfelt thanks to the elected representatives and officials of the Gram Panchayats who have provided us with wholehearted support during the extensive fieldwork carried out in the sample villages. We are also grateful to the respondents of the sample households who have generously



shared their time and insights, which helped us to collect the necessary data. Our special thanks are to all the field investigators for their dedicated work in completing the data collection process.

Finally, we would like to thank everyone who supported us in completing this study, both directly and indirectly. Your encouragement and assistance have been invaluable, and we are grateful for the opportunity to work with such a supportive team.

Thank you all.

Sincerely
Dr. P. Sivanandan
Honorary Director
KILA Centre for Sub-Altern Studies



CONTENTS

Chapters	Titles & Sub-titles	Page no.
	Abbreviations	viii
	List of tables	xi
	List of figures	xvi
	25 years of People's Planning- A Success story of decentralization of power in India <i>M B Rajesh</i> <i>Minister for Local Self Governments,</i> <i>Rural Development and Excise</i> <i>Government of Kerala</i>	xviii
1	Introduction	1
	Context of the study	2
	Conceptual Framework	4
	Significance of the study	6
	Research Questions	8
	Objectives of the study	9
	Research design	9
	Research Methodology	12
	Limitations	14
	Chapterisation	15
2	Literature Review	16
	History - Approach of Decentralization in Kerala	17
	Fisherfolks & Economic Exclusion	21
	National Profile – Marine Fisheries	31
	State Profile – Marine Fisherfolks	33
	Decentralization & Fisherfolks	49



	Five year plans under Fisheries Sector of State	54
	Issues & Interventions	60
	Fisheries Development through Department	65
	LSGs on fisheries sector	71
	Performance of fisheries sector under Decentralised Plan	79
3	Focus Group Discussions of the study	87
	Views of Experts regarding the developments of fisher folks	87
	Discussion results of Trivandrum	89
	Discussion results of Thrikkunnappuzha in Alappuzha district	90
	Discussion results of Aroor in Alappuzha district	92
	Discussion results of Quilandy in Kozhikode	93
4	Data Analysis of the Report	100
	4.1 Analysis of the funding patterns in selected LSGIs	101
	4.2 Analysis of fund utilization under major & sub-category in the fisheries sector	109
	4.3 Analysis of Household Survey	126
	4.4 Analysis of Individual Survey	169
	4.5 Reporting of Interviews with stakeholders	201
	4.6 Compilation of Field Observation Report	208
5	Conclusion	216
	Findings of the Report	219
	Way forward and Policy suggestions	234
	Bibliography	258
	Appendix	
	Appendix.1.1. Household Survey Questionnaire	261
	Appendix.1.2. Individual Survey Questionnaire	



	<p>Appendix 2: Interview Questionnaire – Elected Representatives</p> <p>Appendix 3: Interview Questionnaire – Officials</p> <p>Appendix 4: Category wise classification of fisheries sector projects</p> <p>Appendix 5: Extremely Poor households in Coastal area /fisheries</p> <p>Appendix 6: Scale for the Questionnaire</p> <p>Appendix.7. Sectoral expenditure on productive sector and fisheries sector (LSGs)</p>	
--	--	--



LIST OF ABBREVIATIONS

AAV	:	Antyodaya Anna Yojana
ADAK	:	Agency for Development of Aquaculture, Kerala
APL / BPL	:	Above Poverty Line / Below Poverty Line
BLBC	:	Block Level Bankers Committee
CAD	:	Coastal Area Development
CDS	:	Community Development Society
CMFRI	:	Central Marine Fisheries Research Institute
CRD	:	Commissionerate of Rural Development
CRZ	:	Coastal Regulation Zone
CSS	:	Centrally Sponsored Scheme
DPC	:	District Planning Committee
EEA	:	European Environmental Agency
ERs	:	Elected Representatives of LSGs
FYP	:	Five Year Plan
GDP /	:	Gross Domestic Product / Gross State Domestic
GSDP		Product
GoK	:	Government of Kerala
GPs	:	Gram Panchayats
GVA	:	Gross Value Added
HS / HSS	:	High School / Higher Secondary School
HCR	:	Head Count Ratio
HDR	:	Human Development Report
HHs	:	Households



IAY	: Indira Awaas Yojana
ICDS	: Integrated Child Development Scheme
IKM	: Information Kerala Mission
JLGs	: Joint Liability Groups
FCA	: Finance Commission Award
FFDA	: Fish Farmers Development Agency
FIRMA	: Fisheries Resource Management Society
FMR	: Female Male Ratio
ITI	: Industrial Training Institute
KFWFB	: Kerala Fishermen's Welfare Fund Board
KILA	: Kerala Institute of Local Administration
KPR	: Kerala Panchayat Raj
KSCADC	: Kerala State Coastal Area Development Corporation
LIFE	: Livelihood Inclusion Financial Empowerment
LP / UP	: Lower Primary / Upper Primary
LPG	: Liquefied Petroleum Gas
LSGIs	: Local Self Government Institutions
MDPI	: Multi-Dimensional Poverty Index
MGNREGS	: Mahatma Gandhi National Rural Employment Guarantee Scheme
MLA / MP	: Member of Legislative Assembly / Member of Parliament
NABARD	: National Bank for Agriculture and Rural Development
NCDC	: National Cooperative Development Corporation
NFDB	: National Fisheries development Board
NFWF	: National Fishermen Welfare Fund
NGO	: Non-governmental Organizations
NIFAM	: National Institute of Fisheries Administration and Management



NRI	: Non Resident Indian
NUC / NIL	: Not Under Category / Not In List
OBM's	: Out-Board Motors
PMAY	: Pradhan Mantri Awaas Yojana
PHCs / CHCs	: Primary Health Centers / Community Health Centers
PPC	: Peoples Plan Campaign
PRIs	: Panchayat Raj Institutions
PwD	: Person with Disability
RIDF	: Rural Infrastructure Development Fund
SAF	: Society for Assistance to Fisherwomen
SAGY	: Sansad Adarsh Gramin Yojana
SC/ST	: Scheduled Castes / Scheduled Tribes
SCP / SCSP	: Special Component Plan / Scheduled Caste Special Plan
SHGs	: Self Help Groups
SPB	: State Planning Board
STEM	: Science Technology Engineering & Mathematics
TRP	: Tsunami Rehabilitation Projects
TSP	: Tribal Sub Plan
ULBs	: Urban Local Bodies
UNDP	: United Nations Development Program
UT	: Union Territories
WCP	: Women Component Plan
WGR	: Working Group Report



List of Tables

Table. No.	Titles	Page no.
1.1	Sample size of the household and individual survey	11
2.1	Proportion of poor in India and in Kerala (1973-74 to 2011-12)	23
2.2	Marine Fisheries Statistics 2021 - India Profile	31
2.3	Comparison of GVA in fisheries	34
2.4	Marine Fisheries Statistics 2021 – Kerala Profile	37
2.5	Socio-economic Indicators of marine fisher folks in 2016 (India & Kerala)	39
2.6	Budget outlay and expenditure of the state for fisheries sector	69
2.7	State Plan Outlay & Expenditure - Coastal Area Development(In crores)	70
2.8	Percent of fisheries sector expenditure with in the productive sector	84
2.9	Contribution from Women Component Plan fund to fisheries sector	84
4.1	Year wise amount on projects from different sources	102
4.2	LSG wise amount on projects from different sources	103
4.3	Sector wise amount of projects from selected LSGs.	105
4.4	LSG wise utilization of amount in different sectors	106
4.5	Year wise amount utilized under major categories	110
4.6	LSG wise utilization of amount under major category	112



4.7	Comparative analyse of fisheries sector with productive sector and total fund	115
4.8	LSG wise amount expended on fisheries sector under fishing livelihood assistance	117
4.9	LSG wise amount expended on fisheries sector under assistance for fish farming	118
4.10	LSG wise amount expended on fisheries sector for fishing allied assistance	120
4.11	LSG wise amount expended on fisheries sector under infrastructure assistance	121
4.12	LSG wise amount expended on fisheries sector for educational assistance	122
4.13	LSG wise amount expended on fisheries sector under other assistance categories	123
4.14	Classification of utilization under sub category in different LSGs	124
4.15	Distribution of sample households	127
4.16	Background characteristics of the selected samples	128
4.17	Percentage of Land holdings (in cents)	134
4.18	Percentage of the source of Land holdings	135
4.19	Distribution of condition on land holdings	136
4.20	Distribution of type of ration cards	136
4.21	Distribution of status of income	137
4.22	Percentage of household and distance from sea	138
4.23	Percentage of households facing sea incursion / attacks	139
2.24	Sea Incursion V/s living distance from sea	141
4.25	Percentage of rehabilitated households	141
4.26	Housing assistance for the sample households	143
4.27	Percentage of source of housing assistance	144



4.28	LSGI wise condition of houses	145
4.29	Percentage distribution of electrification of households	146
4.30	LSG wise distribution of households with sanitation facility	147
4.31	Percentage distribution of households with sanitation assistance	148
4.32	Distribution of households based on primary cooking fuel	148
4.33	Source of drinking water	149
4.34	Availability of drinking water	150
4.35	Quality of drinking water	150
4.36	Distribution of households having debt	151
4.37	Percentage of households indebted according to purpose of debt	152
4.38	Distribution of households which experienced natural disaster	153
4.39	Percent of households faced disaster relief during last 3 years	154
4.40	LSG wise assistance for households	155
4.41	Percentage of households initiated for assistance by various stakeholders	155
4.42	Health care: The role of PHC/CHC	156
4.43	Percentage of households satisfied with free treatment	157
4.44	Percentage of household's response to need for improvement of PHC / CHC	157
4.45	Conducting health camps by LSGs	158
4.46	Percentage of households participated in Health camps	159
4.47	Distribution of households utilizing Veterinary hospitals	159
4.48	Status of LSGs assistance to households	160



4.49	Percentage of households availing assistance under various schemes from LSGs	160
4.50	Stakeholders support households for assistance	161
4.51	Difficulties in availing services from LSGs	162
4.52	Information on grama sabha meetings	162
4.53	Grama sabha meetings in the LSGs	163
4.54	Performance of LSGs by various stakeholder ratings	164
4.55	Priority needs of the sample households	166
4.56	Percentage of individual respondents	169
4.57	Gender wise individual characteristics	170
4.58	Educational qualification of the samples (Other than students)	174
4.59	Educational status of students	176
4.60	Employment status of the selected samples	177
4.61	Method of fishing	179
4.62	Fishing units	180
4.63	Duration of fishing in a year	180
4.64	Monthly employment days of fishing population	181
4.65	Extent of unemployment	181
4.66	Technical and financial supports available for fishing activities	182
4.67	Percentage of fishing individuals' condition improved through assistance	183
4.68	Details of Allied fishing works	183
4.69	Percentage of students according to type of college	184
4.70	Percentage of students availing mid-day meal & uniforms assistance	184
4.71.1	Percentage of students having High-tech classes	186
4.71.2	Percentage of students having Educational	186



	backwardness	
4.72	Extent of required knowledge attained in higher studies	187
4.73	Percentage of individuals faced drop out condition from education	188
4.74	Status of individuals in pre-schooling	188
4.75	Educational assistance distributed to school and college students	189
4.76	Number of people having any disease	190
4.77	Percentage of respondents according to the type of disease	191
4.78	Assistance to persons with Disability	192
4.79	Women Empowerment	192
4.80	Program for women empowerment	193
4.81	Percent of Kudumbasree members	194
4.82	Social Security - Pensions	196
4.83	Membership in Social empowerment organizations	198
4.84	Type of organization	198
4.85	Membership of respondents in SAF initiative (Society for Assistance to fisher women)	199
4.86	Percent of assistance received by respondents from SAF	199
4.87	Membership of respondents in Matsya fed	200
4.88	Percentage of assistance from Matsya Fed	200
5.1	Amount & Highest percentage of utilization of projects under fisheries sector	223



LIST OF FIGURES (BOX & GRAPHS)

Sl.no.	Titles	Page no.
Box.2.1	Constitutional acts & Fisheries	28
Box.2.2	Sectoral functions assigned to Urban LSGs under Fisheries Sector	45
Box.2.3	Sectoral functions assigned to District Panchayats under Fisheries Sector	46
Box.2.4	Sectoral functions assigned to Block Panchayats under Fisheries Sector	48
Box 2.5	Sectoral functions assigned to Gram Panchayats under fisheries sector	49
List of graphs		
4.1	Average trend of expenditure of the total fund during the last 9 Years	101
4.2	Percentage of amount utilized from various sources	104
4.3	Trend in the amount utilization for various sectors	106
4.4	LSG wise percentage on different sectors	109
4.5	Percentage of amount utilized in fisheries sector under major category	111
4.6	Year wise utilization of amounts in the fisheries sector	111
4.7	LSG wise expenditure under different categories	114
4.8	Percentage of expenditure in productive and fisheries sector	116
4.9	Percentage on fishing livelihood assistance	116
4.10	Percentage on fish farming assistance	119
4.11	Percentage on fishing allied assistance	120
4.12	Percentage on fishing infrastructure development	121



4.13	Percentage on educational assistance	122
4.14	Percentage on other development	123
4.15	Percentage of amount spent by different LSGs under major category	126
4.16	Sample households selected for the survey	128
4.17	Graphical representation of sample households	132
4.17.1	1. Size of the Households	132
4.17.2	2. Type of ration card	132
4.17.3	3. Housing Status	132
4.17.4	4. Religious category	132
4.17.5	5. Income category	133
4.17.6	6. Expenditure category	133
4.17.7	7. Land Holdings	133



M B Rajesh

Minister for Local Self Governments,
Rural Development and Excise
Government of Kerala

25 years of People's Planning - A Success story of decentralisation of power in India

The People's Plan Campaign is a unique initiative that has transformed the landscape of developmental politics in Kerala. This great experiment encapsulated the democratic achievements, Kerala made over the decades. It included the land reforms initiated by the first Communist government led by EMS Namputiripad, the government which was the product of larger movement for land in the pre-independent era and also included the innumerable struggles for land- rights and surplus land in the post – land reform period by the tenants across the state.

In 1996, the state launched the People's Plan Campaign, which was designed and implemented as a successful methodology for transferring fund, functions and functionary that constitutional amendments in 1992 envisaged as the necessary condition to make the devolution of power possible. The campaign and the related process empowered the local level leadership and people at large to plan and implement their own development projects, ensuring inclusive development. Potential of our decentralized government system which was nurtured by the People's Planning process got its effective manifestation during the time of 2018 flood and Covid. Along with the Kudumbashree movement, decentralisation of



power through the people's planning has achieved remarkable success in enhancing the quality of life of people of Kerala and expanding the vistas for economic wellbeing and social development.

Today, in yet another transformative moment of Nava Keralam, new responsibilities are placed confidently on the shoulders of local governments in Kerala. Government expects local governments to become the leaders of economic development by fostering the growth and employment on par with that of developed nations, as it has been in the case of human development. In the journey of creating a Nava Keralam, we also pin hope on our local self-government institutions to make Kerala waste free by clearing the waste produced in our own neighbourhoods through the sustainable systems.

The series of 25 books published by KILA is a valuable contribution to the knowledge base on decentralization, documenting the experiences of the People's Plan Campaign and capturing the essence of decentralization and the role of local governments in development. I am confident that these books will serve as a valuable resource for other states and countries that are striving to achieve sustainable development through decentralization.

I congratulate the team at KILA and the local governments of Kerala for their outstanding work and am proud of the achievements of decentralization in Kerala. I am confident that the state will continue to scale new heights in the years to come.



1

INTRODUCTION

Kerala has made significant strides in social sectors such as education, health, and public distribution of food, and has established vibrant local governments through decentralized planning. The devolution of funds, functions, functionaries, and functional freedom has enabled local governments in Kerala to become genuine self-governments, resulting in significant achievements in providing basic infrastructure such as shelter, drinking water, sanitation, and rural connectivity. Moreover, there have been remarkable achievements in livelihood promotion, employment generation, and grassroots-level empowerment with effective targeting mechanisms. Local governments have been able to deliver goods and services to reduce poverty.

The edges of Kerala are facing different problems due to their topographical differences and also in terms of different causation i.e., we can classify it as social and economic. These aspects add up to form macro and micro-level problems of these communities. Tribes are facing problems of social inequality & economic deprivation whereas the fisher folk community is facing mostly economic exploitation. Tribes are supported by the government through several programs and constitutional protections while the fisher folk community is entirely out of such special programs and protections. They are spread all over Kerala from north to south and remain marginalized and experiencing risk in earning for livelihood.



Despite 25 years of democratic decentralized planning and development, some local governments still struggle to effectively plan and implement development functions for the marginalized populations. However, positive outcomes such as increased participation of women and weaker sections in planning and decision making process, and development of local infrastructure have been observed. Democratic forums such as grama sabha and subject working groups are crucial for the inclusion of weaker sections in the formulation of development planning, and their effectiveness can enhance the quality of planning and development for the marine fisherfolks. To achieve inclusive development initiatives for the fisherfolks, it is essential to involve all stakeholders in the planning process, starting from the grama sabha stage and utilizing a decentralized planning strategy.

Context of the study

This study examines the socio-economic conditions of fisher-folk, who are a marginalized group living in coastal regions and near water bodies in Kerala. They face risks and uncertainties due to natural catastrophes and historical deprivation caused by social, political, and economic marginalization. However, the decentralized planning process in Kerala has provided opportunities for intervention to streamline development, and local governments play a significant role in organizing livelihood activities and welfare programs for this subaltern section. The study aims to address critical issues, including livelihood and coastal zone concerns, the role of local government in uplifting fisherman welfare, exploitation by middlemen and traders, climate change and environmental issues affecting livelihood opportunities, and the significant extortions of marine resources by external agencies that deprive access to local communities. The literature review shows that traditional fisher-folk were excluded



from the development scenario, while the seafood exporters and traders dominated the sector, leading to the perpetual poverty and exploitation of the traditional fishers.

The 2004 socio-economic survey of the fisher-folk showed that their situation remained poor with high levels of poverty, indebtedness, and isolation from mainstream development. Girls had high mortality rates due to underfed and insanitary living conditions. Poor health and chronic illness were common with 64% below the poverty line compared to the state's 12.7%. Education levels were low, and landless households made up 23%, while land poor households made up 62%. Many houses were in a dilapidated condition, and alcoholism was prevalent among men, causing a ripple effect on women and children's basic necessities. Women were forced to work in difficult conditions to support their families.

A report on the fisher-folk in Kerala shows that they face significant challenges in achieving human capabilities compared to the general population. Underemployment is prevalent, physical quality of life is poor, and abuse of intoxicants is considerably high. The fisher-folk also face marginalization and deprivation, with a low human development index indicating a lack of basic material facilities and uncertain employment opportunities which perpetuate poverty. The traditional fisher-folk in Kerala remain poor and marginalized despite the availability of support schemes and development programs. The fisher-folk are further disempowered by frequent environmental disasters, exacerbating their already precarious conditions and leaving them unable to recover.

The fisherman population in Kerala has declined more than the national average, with 59.6% of fisher-folk below the poverty line. Traditional fisher-folk are the most impoverished and suffer in terms of land holdings, housing, education, income, and health. Recent government development



efforts have brought some relief, but more needs to be done to improve their livelihoods, including initiatives to provide better housing, access to education and skill development, land ownership, clean drinking water, and healthcare facilities. The persistent low female-to-male ratio is also a concern. It is important to empower the fisher-folk and improve their socio-economic conditions.

Despite progress in many areas in Kerala, fisher-folks remain vulnerable and marginalized. Policymakers and development practitioners should prioritize their needs and promote their economic and social empowerment through measures such as education and training programs, affordable housing, and sustainable fishing practices. Local governments play a crucial role in promoting development and addressing the needs of disadvantaged communities.

In this context, the study by KILA to examine the experience and potential of decentralized planning in Kerala with regards to the fisher-folk is a step in the right direction. It will not only shed light on the current situation of the traditional fisher-folk, but also evaluate the effectiveness of the local governments in implementing development schemes and promoting livelihood improvement.

Conceptual Framework

In Kerala, decentralized planning is a critical process that involves creating specific projects to achieve developmental goals. For the plan to be successful, the quality and viability of the projects formulated are crucial. These projects must align with the development goals of the local government and meet the needs of the community. The decentralized governance system in Kerala encourages the participation of stakeholders at all stages of project implementation, including officials, elected



representatives, and marginalized communities. The Grama Sabha, a democratic forum, empowers every citizen to participate in local governance and planning by expressing their opinions and articulating their needs. This forum plays a crucial role in improving the plans, enhancing the efficiency of local governance, and providing guidance for monitoring and assessing plan implementation.

The Panchayat Raj system in Kerala has made significant gains in decentralization efforts through the implementation of the 73rd Constitutional Amendment in 1993 and the Conformity Act in 1994. This has been possible due to the political will and vision attained from the People's Plan Campaign, which enabled enlarging the democratic potential of Panchayati Raj Institutions. The decentralization programs in Kerala empower local governments by upholding people's right to initiate and operate their projects. The system aims to provide institutional support for community participation and public management. This approach towards decentralization reflects the vision and the nature of local governments, which focuses on empowering the poor rather than being a political fad or a mere administrative gesture.

Kerala has undergone significant decentralization efforts through two campaigns: the People's Plan Campaign in 1996 and the Committee on Decentralization of Powers led by Dr. S.B. Sen. These campaigns aimed to encourage grass-root level planning and promote social change. Decentralization is considered necessary to address Kerala's development crisis, accelerate economic growth, and achieve equitable development. Participatory Planning, launched in 1997 involved governments and civil society in rational planning. Kerala's decentralized planning model has helped reduce poverty and deliver basic services to the poor by giving power to Village Councils and transferring 1/3 of the state's plan fund to



local governments. This has triggered social change, empowered local bodies, and redefined democratic decentralization rules. The success of this model depends on the development culture at the local level.

This study aims to assess the impact of decentralization on the development of fisherfolks in Kerala by examining their involvement in decision-making, access to and utilization of funds, and implementation of plans in various sectors. Since 1997-98, Kerala's local governments have been allocated plan funds by the state government, with a portion of the state plan fund being allocated under three separate account heads, including the General Fund, Special Component Plan (SCP), and Tribal Sub Plan (TSP). The local governments must use the fund for development activities based on broad sectoral guidelines, with specific guidelines for utilizing the SCP/TSP fund allotted for the development of marginalized classes such as SC & ST, respectively. Despite facing several issues, such as occupational hazards leading to economic backwardness and marginalization, fisherfolks' development activities rely mainly on the general fund, without any special allocation for their welfare and development through LSGs. The study will evaluate the effectiveness of this decentralization approach in promoting the development of fisherfolks in Kerala, considering their situation as a separate sector under the agriculture head for the development of the fisheries sector.

Significance of the study

The goal of decentralization is to develop marginalized social groups, including scheduled castes, scheduled tribes, and fishermen communities, through pro-poor development policies. In Kerala, the Panchayat Raj system specifically focuses on inclusive development for these marginalized sections. The success of these efforts is measured by the



extent of benefits gained. This study aims to evaluate the impact of participatory and decentralized governance on fisherfolks particularly in marine sector in Kerala over a period of two and a half decades. The study will assess the changed status of the community and the role of LSGs in this process.

The decentralized plan period in Kerala, starting from the 9th Five-Year plan, aims to uplift marginalized communities from their deprived status, inspired by the 25-year decentralized plan campaign. The Kerala Institute of Local Administration, responsible for providing capacity building initiatives for Local Self Governments (LSGs), has undertaken the task of studying the impact of decentralization on the development of these communities. Prioritizing development programs for marginalized communities is critical for providing them access to basic amenities and opportunities for growth. It is essential to continue making substantial efforts to create a more equitable and progressive social system.

In Kerala, marginalized communities still remain far behind the general population in terms of development. This study aims to identify the role of Local Self Government Institutions (LSGIs) in their development, through the involvement of grama sabha in preparing plans, ensuring proper implementation, transparency, and monitoring through beneficiary committees. The study will evaluate the role of LSGIs in the development of these communities over the past 25 years of decentralization, through analyzing expenditure figures and gathering experiences from actual beneficiaries through discussions. The proposed research methods include household surveys, interviews with officials and elected representatives, and focus group discussions. The study aims to provide a detailed understanding of the impact of decentralization on the development of the marginalized community particularly marine fisherfolks in Kerala and



identify strategies for further progress. The details regarding the research are outlined as follows:

Research Questions

The study focuses on the following research questions to identify the impact of the policies followed by LSGs for the development of fisherfolks in Kerala. The major research enquiries relate to the following aspects:

1. The current living condition of the traditional marine fisher folk communities in fishing villages under Local Self-Governments (LSGs) in Kerala, in terms of housing, sanitation, electricity, and other basic amenities
2. The employment and livelihood issues faced by traditional marine fisher folk communities in Kerala, including occupational hazards and the persisting income gap
3. The economic exploitation and environmental hazards that have impacted on the conditions of traditional marine fisher folk communities and how have LSGs addressed these problems
4. To what extent have LSGs provided supportive measures to improve the educational and health levels of traditional marine fisher folk communities?
5. How the funds for fisheries sector projects have been utilized, and how have they impacted on the marine fisherfolks?
6. What programs and projects have been implemented by LSGs to address the disempowerment experienced by the traditional marine fisherfolks?
7. Suggestions have been made by stakeholders for improving the conditions of traditional marine fisher folk communities in Kerala through LSG interventions.



Objectives of the study

General objectives

Analyze the current condition of marginalized section in the coastal area (marine fisher folk communities) and evaluate the effectiveness of Local Self-Governments (LSGs) interventions in improving their economic, social, and overall wellbeing.

Specific objectives

- To evaluate the interventions made by Local Self-Governments (LSGs) in the post-decentralization period and assess their impact on the development of traditional marine fisherfolks communities.
- To identify the issues related to economic empowerment of traditional marine fisher folk communities through interventions such as livelihood programs, education, and healthcare initiatives in the selected area.
- To examine the challenges related to the socialization of traditional marine fisher folk communities through their participation in decision-making processes at the local level.
- To analyze the institutional mechanism put in place for decentralized governance and assess the extent to which it has been utilized for the inclusive development of traditional marine fisher folk communities in line with the general growth process.

Research design

This study is designed using evaluation and analytical descriptive mode to investigate the effects of decentralization. Initial analyses include references to previous literature and the opinions of the experts through meetings conducted in the respective knowledge field. The focus group discussions were held to analyze the current scenario of the fisherfolks in

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



relation to their challenges they face. The impact of decentralization was evaluated using a variety of methods, including surveys, interviews and observations. The results are analyzed and presented in tabular and graphical forms for better understanding. Based on the findings, the research team has proposed future interventions to improve the welfare and development of fisherfolks and provide empowerment opportunities through LSGs. The study aims to provide insights and recommendations for improving the process of decentralization benefiting the entire community.

Universe and Sample selection'

This study aims to systematically assess the impact of decentralization on the living conditions of marine fisherfolks in Kerala. The study focuses solely on fishing villages located within LSGs of municipal corporation, municipality and Gram Panchayat in order to identify the conditions of these groups under rural and urban settings. Six out of nine coastal districts with highest distribution of marine fisher folks in Kerala were selected as the universe of the study which holds nearly 80 % of the total marine fishermen population in the state. The districts selected are Thiruvanthapuram, Alappuzha, Kozhikode, Kollam, Malappuram and Ernakulam.

From the districts, out of 222 fishing villages, 18 fishing villages were selected on the basis of high population and high landing from the Kerala State Coastal Area Development Corporation covering two municipal corporations, five municipalities and eleven Gram Panchayats are identified using Fisheries handbook 2020. A list of marine fisher folk households in the fishing villages was obtained from the fisheries offices at block level and LSGs and 5% of the sample households were randomly selected for household survey.



Sample size

For the household survey, a list of households was obtained from the 18 selected municipal corporations, municipalities and Gram Panchayats. From this list, a random sample of 5% of households was selected, resulting in a total of 778 households comprising 112 households from municipal corporation, 167 from municipality and 499 from Gram Panchayats for inclusion in the survey (See Table.1.2). Within these households, individual responses were also collected, resulting in a total of 3537 individual respondents. Interview with elected representatives such as Panchayat President and officials such as secretary or assistant secretary holds a total of 2 interviews each from the selected Gram Panchayats. This brings the total number of interviews across the coastal region to 36.

Sample Fishing Villages for Survey

Table.1.1. Sample size of the household and individual survey

District	LSG	Sl. No	Fishing Village	HHs	Individuals
TVM	Anjuthengu GP	1	Anjuthengu FV	68	282
	Varkala Municipality	2	Chilakkur FV	31	127
Kollam	Kollam Corporation	3	Shakthikulangara FV	82	347
	Allappad GP	4	Sraikkadu FV	46	202
	Paravoor Municipality	5	Paravoor South FV	48	181
Alappuzha	Mararikulam North GP	6	Chethy FV	52	233
	Purakkadu GP	7	Purakkad FV	49	203
	Ambalapuzha	8	Ambalapuzha FV	78	309



	South GP				
	Alappuzha Municipality	9	Thumboli S FV	24	115
Ernakulam	Cochin Corporation	10	Fort Cochin FV	30	109
	Njarackal GP	11	Njarackal FV	22	101
	Pallippuram GP	12	Munambam FV	20	81
Malappuram	Mangalam GP	13	Koottayi FV	75	551
	Perumpadappu GP	14	Palapetty FV	44	196
	Veliyancode GP	15	Veliyancode FV	33	183
	Ponnani Municipality	16	Mukkadi FV	26	110
Kozhikode	Azhiyoor GP	17	Azhiyoor FV	12	49
	Quilandy Municipality	18	Quilandy FV	38	158
			Grand Total	778	3537

(Source: KSCADC & Fisheries Handbook 2020)

Research Methodology

The study adopts a mixed research methodology that combines both qualitative and quantitative data collection tools. Qualitative methods, such as semi-structured key informant interviews and focus group discussions, were used to collect primary data. The questionnaire survey was used to collect primary quantitative data through a household survey. The structured close-ended questionnaire was developed, and responses were collected through the Open Data Kit platform.



The primary data collection methods included household surveys, stakeholder interviews, focus group discussions, and observations by field investigators. The individual surveys were conducted to analyze the impact and interventions among different groups based on age, gender, education, occupation, etc. Stakeholders, such as elected representatives and officials of the respective LSGs, were interviewed to identify the nature of interventions and programs undertaken for the development of fisherfolks. Focus group discussions were conducted to identify issues and solutions from the perspective of activists and union members, fisher folks, and representatives of LSGs from the selected areas covering the northern, central, and southern regions of the Kerala Coast. Observations from field investigators included the regional needs and priorities of the fishing villages.

In addition, secondary data were collected to understand general development issues, challenges, utilization of various government programs, vision and strategy for the development of the fisheries sector and the welfare of fisher folks, etc. The sources of secondary data included Sulekha application of Information Kerala Mission, budget documents of State Planning Board, and references from KILA documents. Overall, the study appears to have used a comprehensive approach to data collection, incorporating both primary and secondary data sources and using a range of qualitative and quantitative methods.

Data Analysis

The data analysis of the study primarily focused on the quantitative analysis of the household and individual survey. The primary data collected from household and individual questionnaire using Open Data Kit mobile application through field investigators. Structured questionnaires (Appendix 1) were developed as a tool for the primary data



collection from households and analyzed in percentage. The data were tabulated, interpreted and presented graphically for its clarity. It enables to categorize themes into different sectors and to group them for quantitative analysis. To identify the general problems the fisher folk face and their vision of life are expressed through focus group discussions conducted at three regions earlier. The impact of decentralization evaluated through interviews with elected representative and officials is included in the research design of the study.

The inclusion of stakeholder interviews with elected representatives and officials, as well as observations from field investigators, provides a well-rounded view of the situation (Appendix 2 & 3). The qualitative data collected through focus group discussions and observations were also analyzed, which added depth to the findings. The use of a descriptive analytical approach for analyzing the secondary data is appropriate for providing a detailed account of the development of fisheries sector under LSGs and the utilization of plan funds by selected LSGs. The data analysis of the study appears to be well-organized and thorough, with a good mix of quantitative and qualitative data.

Limitations

The study faced some limitations that need to be acknowledged. Firstly, due to the occurrence of local self-government elections and the COVID-19 pandemic, the research took a considerable amount of time to complete. Moreover, the study solely focused on marine fisherfolks residing in coastal fishing villages, thereby excluding inland fishermen who may be facing other challenges. As a result, this research cannot be considered as representative of the entire population of fishermen in the state and all local self-governments. The study concentrated on the social and economic development of marine fisherfolks, specifically those supported by



programs from respective local self-governments rather than departmental schemes. In this LSG wise utilization, the prime focus is given to the development of the fisheries sector, the fisherfolks were also beneficiaries of general schemes of LSGs such as housing, sanitation, services like CHC, and infrastructural projects but it is not possible to determine the extent to which fisherfolks specifically benefited from them.

Chapterisation

The overview of the chapters included in the study focuses on the social and economic development of fisher folks in Kerala, with a particular emphasis on the role of local self-governments (LSGs) in empowering them. Chapter one serves as an introduction to the study, presenting the problem statement and significance, as well as the methodology used in conducting the study. Chapter two provides literature review, discussing decentralization, Fisherfolks in India and Kerala, and various programs and policies for their overall development. It also evaluates the role of LSGs in providing empowerment opportunities to the fisher folks in Kerala. Chapter three appears to present the views and opinions gathered from discussions with experts and focus groups. In contrast, Chapter four analyzes secondary data collected from IKM and primary data collected through a household survey. The latter includes a socio-economic profile of sample fisher folk households, which are classified and presented graphically. The chapter also provides observations and perceptions of the respondents for the development of fishing villages. Finally, Chapter five presents the major findings of the study from the field level inquiry and provides policy suggestions for the social and economic development of marine fisher folks.



2

LITERATURE REVIEW

Decentralization is the process of shifting decision-making authority from central government to lower level governments or agencies. It has become an important strategy for effective local development and is often discussed in relation to democratization and local level participation. This focus has led to action for strengthening or reforming local government systems in Kerala.

Decentralized governance is a process that enhances participatory democracy and creates better citizenship, development and ensures freedom of expression. Administrative reorganization like 'deconcentration' or 'delegation' is sometimes called decentralization, but the transfer of administrative authority doesn't transfer the political power to make decisions, which lies with the higher authority. Local governments are not just agents, but self-governments. Administrative reorganizations like deconcentration or delegation are not the same as democratic decentralization, which involves giving political power to local councils. With democratic decentralization, functions and activities are transferred from higher-level government to local government and the responsibility for them falls on the local government. This allows for greater transparency and accountability, as well as increased participation from the public. Decentralization is often seen as a way to improve public services at the local level, but its primary value is in empowering the common people through local government empowerment.



To empower and build the capabilities of local governments, autonomy is essential. This includes autonomy with reference to assigned functions, fiscal decentralization, and administrative autonomy. While national goals and regional developments require guidance, autonomy does not mean complete independence. A clear set of guidelines must be developed through a consultative process, and departmentalism should be guarded against. Local governments should have adequate personnel and power to manage their financial responsibilities without being treated as appendages to any department.

The fourth aspect of decentralization is institutional decentralization, where critical institutions related to the functions being devolved must be transferred to the appropriate level of government. In Kerala, institutions like schools, primary health centers, and veterinary institutions have been transferred to local governments. However, creating parallel institutions and structures outside of local governments can undermine decentralization efforts. If parallel bodies are necessary, they should be brought into a symbiotic relationship with the local government so that they are fully involved with the work of the parallel bodies.

Decentralization brings government closer to the people, allowing local governments to make decisions that reflect the community's needs. The gram sabha/ward sabha exists to support this purpose. Creating an accessible and transparent grievance readdressal system is crucial to accountability within local government.

History - Approach of Decentralization in Kerala

Since the establishment of the first Kerala Ministry in 1957, the history of the panchayati raj system in Kerala has been a tumultuous one, heavily influenced by the ebb and flow of coalition politics in the state. Prior to the formation of present-day Kerala in 1956, which integrated Malabar with

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



Travancore-Cochin state, and exceeding the Kanyakumari district to Tamil Nadu, there were 892 panchayats. These panchayats relied on various sources of revenue, including land cess, building tax, profession tax, vehicle tax, and entertainment taxes.

In the early years of the Kerala state, an administrative reform committee was established, chaired by Chief Minister E.M.S. Namboothiripad. This committee proposed the strengthening of panchayats, or local government units, as a means of democratizing government and promoting development. The committee's recommendations led to the introduction of the Kerala Panchayat Bill and the District Council Bill in the state assembly, with the district council envisioned as an autonomous executive body responsible for development matters. However, these bills were not enacted into law due to the dismissal of the Ministry by the Central Government and the dissolution of the State Assembly. The subsequent government passed the Kerala Panchayat Act in 1960, which expanded the functions and financial resources of panchayats. Despite this legal expansion, village panchayats were limited to traditional civic functions in practice. The first panchayat election was held in 1963, and by January 1, 1964, there were 922 village panchayats in the state. Today, that number has increased to 1000.

In 1964, the Kerala government introduced the Kerala Panchayat Union Councils and Zilla Parishad Bill, which proposed an intermediate tier at the block level to plan and develop rural areas, and an advisory council at the district level called Zilla Parishad. However, this bill did not become law due to changes in government and President's rule. In 1967, a new bill called the Kerala Panchayat Bill was introduced, proposing a two-tier system at the village and district levels. The Zilla Parishad was to have executive functions and some revenue sources, with powers of



supervision and control over gram panchayats. However, this bill was also not enacted into law due to changes in government and the dissolution of the Legislative Assembly. In 1979, a slightly modified legislation called the Kerala District Administration Act was passed under the next government, but it faced problems and was not fully implemented. In 1986, the E.K. Nayanar Ministry attempted to renew the process of decentralization, appointing a committee to make recommendations. However, only minimum amendments were made. District Councils were finally established in 1991, but the following government reduced funding and dissolved the councils. The 73rd and 74th Constitutional Amendments were then introduced to address these issues.

To summarize, before the constitutional amendments, only Kerala had a Gram Panchayat system, and attempts to introduce a two-tier system with an intermediate block level were unsuccessful. The Gram Panchayats had a good revenue base and were able to levy property tax, profession tax and entertainment tax. Their expenditures were largely confined to traditional civic functions. Every panchayat was required to formulate an annual budget and maintain a five percent budgetary balance. Kerala has a tradition of raising its own revenue and had the highest average own revenue per panchayat among Indian states as far back as 1960-61. Own tax revenue as a percentage of total receipts were also high in the years extending up to the constitutional amendments.

The 73rd and 74th Constitutional Amendments in India paved the way for a new decentralized regime, and Kerala's initiatives helped to alter the character of democracy in the state. The People's Plan Campaign (PPC) launched by the government in August 1996 was a real watershed moment in this regard. The campaign devolved 35-40 per cent of plan



funds to local governments, and a new era of participatory planning from below was set in motion.

At that time, no one could have predicted that this would evolve into a new discourse on democracy and development. The Committee on Decentralization (popularly called the Sen Committee after its first Chairman SB Sen) was appointed almost at the time of the launching of the PPC, and it recommended the necessary institutional reforms (such as performance audit, ombudsman, state development council, right to information, citizens' charter, etc.) and legislative framework for functional, financial, and administrative autonomy. Through a series of amendments to the conformity legislations, viz. Kerala Panchayat and Municipality Acts of 1994, a radical restructuring was done by February 1999, and the necessary rules were also made. In order to provide proper space for local governments in the legal structure of the state, 45 legislations were identified, and 35 of them were amended. Some were even dropped. Overall, Kerala's experience with decentralization has been a success story. The state therefore has a long history of democratic decentralization, and the PPC has taken it to a new level. Kerala's initiatives have shown that decentralization can be an effective tool for development, and that it can empower people at the grassroots level to participate in decision-making and to take ownership of development initiatives.

So the committee was tasked with reviewing the performance of the decentralization process in Kerala since the enactment of the conformity legislations, which was around 25 years ago. The government which came to power in 2001 made significant amendments to the process and changed the name of People's Plan to Kerala Development Plan, possibly to give it a more institutional set up. The committee's review would thus



be based on the benchmark of the People's Plan Campaign, which was launched in 1996, making it a little over two decades since its inception.

Fisherfolks & Economic Exclusion

This study focuses on the socio-economic condition of fisher-folk, a marginalized group living in coastal districts and on the edges of borders in Kerala. These individuals lead adventurous and often perilous lifestyles, facing risks, uncertainties, and natural catastrophes that can lead to devastating experiences. In addition to these natural limitations, fisher-folk also bear the burden of historical deprivation caused by social, political, and economic marginalization. However, the decentralized planning process initiated in Kerala during the last decades of the twentieth century has provided opportunities for intervention to streamline development. Local governments, responsible for identifying development issues and formulating plans with beneficiary participation, play a substantial role in organizing livelihood activities and welfare programs for this subaltern section. The study proposes to address several critical issues, including livelihood and coastal zone regulations, the role of local government in uplifting fisherman welfare, the extent of exploitation by middlemen and traders, climate change and environmental hazards that impact on livelihood opportunities and the significant extortion of marine resources by external agencies, depriving access to local communities.

Marine fishers and coastal fishing communities face increasing vulnerability due to environmental, physical, occupational, economic, and social factors. Unpredictable sea and climate conditions, coastal erosion, changing occupational prospects due to climate change, and control over fish sales contribute to their vulnerability. Social protection measures that are tailored to their specific vulnerabilities can help build their resilience,



boost their confidence, and enhance their trust in the state. (14th FYP Working Group Report 2022)

Marginalization is a term used to describe the actions or tendencies of human societies to exclude individuals who are perceived to be without any useful function. These individuals are often outside the existing system of protection and integration, limiting their opportunities and means for survival. Marginalization is a complex, multidimensional, and historical phenomenon, with no general laws to understand and comprehend its nature. Analytical tools that can be used to study marginalization include examining class in relation to specific social, cultural, economic, and political conditions, as well as ideological systems. The nature of marginalization varies in different settings, and its causes are often multi-causal.

Ghana S Gurung and Michael Kallmair mentions, " The concept of marginality is generally, used to analyse socio-economic, political and cultural spheres, where disadvantaged people struggle to gain access to resources and full participation in social life. In other words marginalized people might be socially, economically, politically and legally ignored, excluded or neglected and therefore vulnerable to livelihood change."

The coastal zone is primarily characterized by its shoreline, which is the most prominent feature. The focus of this study is mainly on issues related to the coastal zone, particularly the challenges faced by the government in improving the living conditions of marginalized communities, such as fishermen. The study also highlights the exploitation of fishermen by middlemen involved in trade activities, as well as the impact of climate change and environmental hazards leading to their livelihood depletion boosting their poverty level in these areas.



Poverty is a complex phenomenon encompassing social, economic, and political aspects. Professor Amartya Sen argues that being poor means not just lacking money but also the inability to realize one's full potential. Over 900 million people worldwide lived below the global poverty line of \$1.90 in 2012, with one in five Indians living in poverty. However, the poverty index of Kerala shows that only 11.3 percent of the population falls under the poverty line compared to 29.5 percent in the rest of the country, due to factors such as land reforms, education, health care, decentralization, pension schemes, public distribution, Kudumbasree, and plan schemes, reduced the poverty ratios. The absolute poverty rate (as per the Rangarajan report) in Kerala and India from 1973-74 to 2011-12 are given in table.

Table.2.1. Proportion of poor in India and in Kerala (1973-74 to 2011-12)

Year	Kerala			India		
	Rural	Urban	Total	Rural	Urban	Total
Lakdawala Methodology						
1973-74	59.19	62.74	59.79	56.44	49.01	54.88
1977-78	51.48	55.62	52.22	53.07	45.24	51.32
1983	39.03	45.68	40.42	45.65	40.79	44.48
1987-88	29.10	40.33	31.79	39.09	38.20	38.86
1993-94	25.76	24.55	25.43	37.27	32.36	35.97
1999-00	9.38	20.27	12.72	27.09	23.62	26.10
2004-05	13.20	20.20	15.00	28.30	25.70	27.50
Rangarajan Committee Estimates						
2009-10	9.70	23.70	16.00	39.60	35.10	38.20
2011-12	7.30	15.30	11.30	30.90	26.40	29.50

Source: Economic Review 2022

Poverty and unemployment are significant challenges faced by India and the state of Kerala (Prakash, 1994). Although poverty is less prevalent in Kerala compared to other states in India, the state has the highest rate of



unemployment in the country. (Pillai, 1994) The per capita income in Kerala is below the national average, and the economy is stagnant. (Sankaranarayanan, 1985) However, despite these challenges, Kerala has achieved a higher quality of life for its people compared to other Indian states and even some developed countries. This phenomenon is referred to as the "Kerala Model of Development." Quality of life is measured by development indicators such as life expectancy, literacy rates, and birth, death, and infant mortality rates. Kerala's success in achieving a high quality of life is even more remarkable considering its economic challenges and high unemployment rates.

Although the head count ratio (HCR) of poverty was 11.3 in Kerala in 2011-12 as per Rangarajan Committee Estimate, the incidence of absolute poverty is high in some pockets of the State, among the scheduled tribes, scheduled castes and fisherfolks. Kerala Government initiated various measures for eliminating poverty from the State to make Kerala the first State in India to eliminate absolute poverty. The government's focus on providing basic necessities such as housing, sanitation, electrification, access to food, healthcare, and insurance, access to school education, employment guarantee, welfare pensions, and special care for the disabled, aged and infirm is essential for achieving this goal. To address this issue, various departments such as the Scheduled Caste and Scheduled Tribes Development Department, and Fisheries Department have implemented poverty reduction and livelihood programs. However, in addition to these efforts, local self-government institutions have also taken the initiative to plan and execute development schemes for these marginalized groups based on their specific needs and priorities through democratic forums during the last 25 years of people's plan campaign.



It is important to note that while government-led poverty reduction programs are important, the involvement of local self-government institutions through democratic decentralization can also play a significant role in identifying the specific needs and priorities of marginalized communities and implementing appropriate measures to address their concerns. This bottom-up approach to poverty reduction can be more effective in targeting the root causes of poverty and ensuring that resources are utilized in the most effective way possible. The success of such initiatives in Kerala can serve as a model for other states in India and even other countries facing similar challenges.

Salagrama (2006) found that many people in the fisheries sector, including those involved in production, processing, marketing, and ancillary functions, are unrecognized. To address this and reduce poverty and vulnerability in the fishing community, multidimensional policies and sustainable development strategies must be implemented. A study conducted using the computation techniques of multi-dimensional poverty indicators in marine fishermen, the poverty ratio of Kerala is 18.6 % as compared to the Tendulkar rate of 14.2 % in 2011 (Johnson & C Ramachandran, 2011)

The studies conducted by the Department of Fisheries in 1990 and 2004, as well as the 2009 Human Development Report by the State Planning Board. A quick review of the 1990 study revealed that the fisher-folk had very poor landholding, 75% of them being landless or land poor (with less than 10 cents each). Additionally, 70% of families had an annual income of less than Rs.5000, indicating a subsistence level of living. The traditional fisher-folk, who made up 90% of the population, were excluded from the development scenario, while the seafood exporters and traders dominated



the sector, leaving the traditional fishers in perpetual poverty and exploitation.

The 2004 socio-economic survey of the fisher-folk painted a picture of a continuation or even worsening situation for them. They remained largely subsistent, indebted, and isolated from mainstream development. Mortality rates among girls were high due to underfed, less cared for and insanitary situations. Poverty remained a perpetual phenomenon, with low consumption expenditure. Poor health and chronic illness were common among them, with 64% remaining below the poverty line, while the state average was only 12.7%. They could attain only a very low level of education, although they had better literacy levels. Landless households constituted 23%, and land poor households (with less than 10 cents each) made up 62%. 11% had no sanitation facilities, and 70% of the houses they lived in were in dilapidated condition. It is distressing to observe that alcoholism is prevalent among the fisher-folk, which further worsens their already poor living conditions. Men spend a significant portion of their income on alcohol, causing a ripple effect that deprives women and children of basic necessities such as food, housing, education, healthcare, and sanitation. As a result, women are forced to work in arduous conditions, such as retail vending and processing units, to support their families.

The 2009 Human Development Report for the fisher-folk in Kerala, prepared by the Planning Board, reinforces the findings of previous inquiries and sheds light on their livelihood conditions. The child and total sex ratio among them is very low and unfavorable to females, indicating a significant gap in attaining human capabilities compared to the general population. Underemployment is prevalent due to lack of alternative job opportunities and desertion from traditional fishing



methods. Physical quality of life is poor, and abuse of intoxicants is considerably high. The deprivation index for the fisher-folk is around 28-30, while it is 22 for the general population, and 40 and 57 for the other two subaltern groups, SC's and ST's, respectively, indicating worse conditions among these groups. Per capita income varies significantly among the fisher-folk, depending on their access to various assets, equipment, skills, and support systems. While their literacy level is appreciable, attainment of higher education is poor. Low life expectancy is attributed to poor health and unhygienic living conditions. Overall, the Human Development Index is low, indicating that lack of basic material facilities and uncertain employment opportunities perpetuate poverty and intensify their marginalization.

In a recent publication by Dr. J.B. Rajan (KILA, 2019), various socio-economic issues in the fishing sector are discussed, highlighting the backwardness of the traditional fisher-folk in Kerala. Despite the availability of support schemes from the fisheries department and development programs under decentralised planning, the livelihood condition of the traditional fisher-folk remains poor and marginalized, as indicated by all socio-economic indicators. These findings corroborate previous inquiries conducted over the past three decades. In addition to the impact of capitalist fishing, tourism activities, and administrative neglect, the traditional fisher-folk are further disempowered by frequent environmental disasters, exacerbating their already precarious conditions and leaving them unable to recover.



Box.2.1. Constitutional acts & Fisheries

Article 243 of the Indian Constitution, Eleventh Schedule, designates fisheries as the 5th out of 29 subjects entrusted to Panchayats. As a result, 8 Coastal and 14 inland states have officially delegated the subject to the local level. This means that Panchayats have a significant role to play in the development and promotion of economic and social justice for the weaker sections of society, including marine and inland fisheries, fish workers, and their communities (both women and men). This includes ensuring the rights of fishing communities to housing, clean drinking water, education, healthcare, sanitation, employment, women's and children's development, among other things, and their interactions with Local Self Government (LSG) bodies through policies and schemes developed during the decentralization period. This approach is consistent with Schedule 11 of the Indian Constitution.

It is necessary to regulate fishing activities by fishing vessels in the sea along the coastline of the state to ensure sustainable fishing practices and conservation of marine resources. This has been addressed through various amendments to the Kerala Marine Fishing Regulation Act, including the Kerala Marine Fishing Regulation (Amendment) Act, 1986, the Kerala Marine Fishing Regulation (Second Amendment) Act, 1986, and the Kerala Marine Fishing Regulation (Amendment) Act, 2017. These acts provide for the establishment of regulations, procedures, and mechanisms to manage and monitor fishing activities, including registration requirements for boat building yards and fishing net production units, and the constitution of fisheries management councils to oversee fishing practices and promote sustainable resource management in the marine ecosystem.

The Indian government has taken steps to protect and manage coastal and marine resources, including wetlands, mangroves, and coral reefs. The Wildlife Protection Act provides legal protection to marine animals, while the National Committee on mangroves, wetlands, and coral reefs advises the government on relevant policies. The Coastal Regulation Zone notification prohibits development activities and waste disposal in fragile coastal ecosystems. The Biological Diversity Act and rules provide guidelines for the protection and conservation of biodiversity.



Fishermen in Kerala generally belong to middle age groups and have dropped out of primary or secondary education. Hindu fisher folk are mostly found in the central and northern districts of Kollam, Alappuzha, Thrissur, and Kasargod. Unemployment among the fisher folk is higher in Kasargod, Malappuram, and Kozhikode. The study also found that most fishermen in Kerala have bank accounts, but tend to spend their money on non-saving activities like liquor and playing cards. The introduction of mechanization in the 1960s led to further marginalization and poverty of traditional fishermen, who tried to avail loans from banks but often lacked the required collateral security. Fishermen are forced to borrow money due to poor earnings and low savings, with high levels of indebtedness and borrowing from money lenders at high rates of interest. Despite cultural and religious differences, Kerala's fishing communities have fostered close social and economic relationships with each other while coherently utilizing marine resources. (Pavithran.A.P, Sachin, Devi. D, Sarada, 2017).

Traditional fishermen are a vulnerable group due to their poor living conditions, limited resources, and lack of income. They face disadvantages such as resource depletion, bureaucratic obstacles, and gender inequality. Sustainability is important for future generations, but efforts by organizations have had limited success. Welfare schemes and programs are needed to address financial instability and natural hazards, and a holistic approach encompassing all sustainable development goals is required to achieve a better future for fishermen.

Coastal regions are almost replete with public enterprises and heavy mineral extraction units causing inconvenience to fishing and mining. There is need for resettlement of people from the crowded areas. LSGIs have to intervene for resettlement and ensure that all projects are



environmentally and socially relevant. Sustainability of these efforts will require resources and organizations for management and maintenance. The village is making progress in economic and educational areas, older generation prioritize education for their children for their empowerment. Social conditions have also improved significantly as drinking habits have decreased and saving for their children have become a felt need. Government initiatives such as renovation of colonies, provisions for free electricity and drinking water supply, etc. have contributed to the improvement of life in the village.

Globalisation and mechanisation in fisheries led to international involvement and competition, resulting in a decline in fish catch and profits for traditional fishermen. This led to poverty and discontent among the fisherfolks, causing communalism and violence in Kerala. Mechanisation also marginalized traditional fishermen, who were unable to compete with trawlers, adversely affecting their livelihoods. Traditional fishermen took loans from moneylenders at exorbitant interest rates, leading to the emergence of a new class of entrepreneurs, the moneylender-boat owner combine, who took control of the villages and acted as catalysts for clashes between mechanised boat owners and traditional fisher folk. (Chekutty, N.P., 2010).

The fisheries sector in India, particularly in Kerala, faces challenges such as conflicts, low income, low catch, overexploitation, and susceptibility to climate change, which can harm production and progress. To overcome these challenges, actions such as regulating overexploitation, finding alternative livelihoods, and increasing stakeholder participation in sustainable development measures are needed.



National Profile – Marine Fisheries

The fisheries sector plays a significant role in the national and state economies, contributing to GDP, employment, and stimulating growth in various industries. India is the second largest fish producing country in the world and accounts for 7.58 per cent of the global production, producing a total of 162.48 lakh metric tonnes of fish in 2021-22, with 121.21 lakh tonnes of the production coming from the inland sector and 41.27 lakh tonnes of fish production from the marine sector compared to 86.6 lakh tonnes of total fish production in 2011-12 with 33.7 lakh tonnes in marine sector and 52.9 lakh tonnes in inland sector. Although marine fish production has increased in recent years, the growth rate remains low, and the sector is facing a crisis due to over capacity and open access nature. The fisheries sector contributes about 1.1% to the National Gross Value Added (GVA at constant prices) which is 232620 crore to Indian economy and 6.72% to the agricultural GVA (2020-21). The sector also contributes to export earnings, with 12901.47 crore earned in 2010-11 and 57586.48 crores in 2021-22.

Table.2.2. Marine Fisheries Statistics 2021 - India Profile

Length of the Coast line	8129 Km
Continental Shelf	5.3 lakh square Km.
Exclusive Economic Zone	20.2 lakh square Km.
*No. of Fishing Villages	3477
*No of Fish landing centers	1363
*No of fishermen families	8,93,258
*No. of Traditional fisherfolks	8,18,491
*No. of BPL fisherfolks	6,00,890
Fisherfolk population (2020-21)	280.63 Lakhs#
Marine Fisherfolks	49.45 lakhs
Inland Fisherfolks	231.17 lakhs

(Marine Fisheries Statistics 2016 & 2022)

#includes fish farmers, workers and fisherfolks

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



India has a vast coastline with 3,461 marine fishing villages located in 9 coastal states, as well as union territories of Pondicherry, Daman & Diu, Lakshadweep, and Andaman & Nicobar. The highest number of marine fishing villages are in Odisha, Tamil Nadu, and Andhra Pradesh, with 739 (21.3%), 575 (16.5%), and 533 (15.3%) villages, respectively. There are 1,363 marine fish landing centers in the country, with the maximum number of centers in Tamil Nadu (349 or 25.6%), followed by Andhra Pradesh (234 or 17.2%) and Kerala (174 or 12.8%). The total population of marine fishermen in India is 37.74 lakhs out of which 21.1% are in Tamil Nadu, 14.9% in Kerala and 13.7% each in Odisha and Andhra Pradesh. Among them 19.52 lakhs (51.7%) are males and 18.22 lakhs (48.3%) are females. About 33.2% of the total marine fishermen populations are children and the percentage of children in the population is maximum in Gujarat (41.0%) and minimum in Goa (24.2%).

While 69.7% of the marine fishermen households are accommodated in Pucca houses, 30.3% reside in kutchha houses. Analyzing the ratios state-wise, it is found that the percentage of kutchha houses is maximum in West Bengal (81.0%) and minimum in Goa (3.8%). Nearly 59.3% of the marine fishermen houses have built-in toilet facility and 51.6% households have tap water supply. About 93.8% of the houses are electrified.

At national level, 66% of the eligible marine fishermen population have primary or higher level education while 34% of them are unschooled. Among the states/U.T.'s Andhra Pradesh (60.1%) has the maximum proportion of unschooled among eligible population and it is minimum in Kerala (15.3%). Gender wise profile puts proportion of eligible uneducated amongst males at 31.9%, while the same is 36.2% for females.

The total number of active fishermen in marine fisheries sector is 9,27,081. The number of fishermen engaged in full time fishing is 7,48,479 and part



time is 1,53,968. The number of people engaged in fish seed collection is 24,634. There are 9,632 fishermen families engaged in aquaculture activities, out of which, 4,428 received training. The census revealed that 1,70,154 fishermen households are in possession of lifesaving equipment of various kinds.

The religion based profiling of the fishermen households reveals that 74.3% of them are Hindus, 15.7% Christians and 10.0% Islam. A meager number of families (155) follow other faiths. There are 15.8% marine fishermen families belonging to Scheduled Cast and Scheduled Tribe category. Among the marine fishermen 7,07,833 are members in fisheries co-operative societies and 2,56,705 are members in other co-operative societies. These memberships are not exclusive of each other.

Nearly 91.6% of the marine fishermen families are traditional fishermen families. In the country, 6,00,890 marine fishermen families live below the poverty line, which is 67.3% of the total number of families. Tamil Nadu has the highest number of below poverty line families at 30.6%, followed by Andhra Pradesh (25.1%) and Kerala (12.1%). Within Kerala, 59.6% of the fishermen families belong to the below poverty line category. The livelihood opportunities provided by this sector have been instrumental in sustaining incomes of over 28 million people in India, especially the marginalized and vulnerable communities, and has promoted meaningful socio-economic development. (Marine Fisheries Census 2016)

State Profile – Marine Fisherfolks

The total fish production in Kerala is 8.26 lakh metric tonnes in 2021-22 with 6.01 lakh tonnes in marine sector and inland fish production at 2.25 lakh tonnes from the 6.81 lakh tonnes fish production in 2010-11 with 5.60 from marine sector and 1.21 lakh tonnes from inland. Kerala is the major



contributor of marine fish production to national level, there has been an increase in marine fish production in recent years, it is important to note that the growth rate of this increase has remained relatively low.

The fisheries and aquaculture industry is an essential contributor to Kerala's economy, accounting for about 8.75% of the Gross State Value Added (GSVA) from the primary sector. While the GSVA has been increasing, the share of the primary sector and fisheries sector has been declining.

Table.2.3. Comparison of GVA in fisheries

GVA comparison of India and Kerala in fisheries sector 2010-11 to 2020-21 at current Prices				
Indicators	Kerala		India	
	2010-11	2020-21	2010-11	2020-21
% share of primary sector in GSVA / GVA	15.71	9.52	18.16	16.3
% share of fisheries sector in GSVA / GVA	1.29	0.83	0.79	1.24
% share of fisheries sector to primary sector	8.23	8.75	4.34	7.28
GSDP / GDP from fisheries (In crores)	3409.9	3705.0	50370.0	232620.0

(Budget Documents)

From 2010-11 to 2020-21, the share of the fisheries sector in the GSVA decreased from 1.29% to 0.83%, and the share of the primary sector decreased from 15.71% to 9.52%. This decline is significant, as it indicates that the growth in these sectors is slower than in other areas, despite an increase in value added in absolute terms.

Fishermen make up a sizable portion of the state's population. The overall population of fisher folk in Kerala is 10.44 lakh, with 8.04 lakh working in the marine sector and 2.40 lakh working in the inland sector. There are



2.47 lakh active fishermen households (out of this total 1.94 lakh in marine sector and 0.52 in the inland sector) and 0.92 lakhs allied workers. 6.04 lakhs of active fishermen population in marine sector in 2019-20, 5.51 lakhs are engaged in fulltime fishing and 0.50 lakhs engaged in part time fishing.

Currently, there are 222 fishing villages in the marine sector and 113 in the inland sector, where fishing and related activities provide a living for the great majority of the inhabitants (Fisheries Handbook, Department of Fisheries, 2020). Allied activities such as marketing/repairing nets, fish vending, processing, and other fishery-related industries provide a living for over 12% of the fishing population. Fishermen in Kerala belong to three religious groups: Hindus, Muslims, and Christians. Fishermen face four key disadvantages when compared to other communities in the state: (1) habitat and housing, (2) sanitation and health, (3) literacy and education, and (4) safety at sea. Bene et al. (2007) recognize that the vast majority of small-scale fishers and fish workers live in rural areas, making geographical isolation and a lack of public infrastructure and services (such as roads, hospitals, and market facilities) more difficult for them. The government has taken numerous steps to improve the lives of the people in this area. Some of the schemes implemented by the government for the development of the village include the construction of colonies for the homeless in the village, free electricity to impoverished households, networking of water pipes provided to assure the provision of drinking water, and so on. (Peter, Jeseline & Ramachandran Alappat, 2013)

The Background of Kerala

Kerala, located in southern India, is separated from the rest of the country by the Western Ghats to the east and the Arabian Sea to the west. The state can be divided into three regions: highlands, midlands, and lowlands. The



highlands, part of the Western Ghats, are home to mountains ranging from 3000 to 8000 feet in height. The midlands are situated between the highlands and the lowlands, which are located close to the sea. Kerala has a long coastline along the Arabian Sea, which has facilitated trade with foreign countries and a thriving fishing industry. The state has a rich marine wealth, with a variety of fish and skilled fishermen, making it a leading fish producer and consumer in India. Kerala ranks 2nd in the consumption of fish products with 17.93 kg per capita / year in 2020-21 whereas all India level is 6.31 kg per capita / year.

The unique geography of Kerala has played a significant role in shaping both its economy and culture. The state's abundant rainfall, fertile soil, and rich marine resources, have developed a thriving agricultural and fishing industry. Furthermore, the presence of numerous rivers and lakes, especially the backwaters, has created a robust infrastructure for inland fishing. Kerala's location on the Arabian Sea has also facilitated trade with foreign countries and helped drive economic growth. However, the state's terrain also poses challenges, such as the risk of landslides and flash floods in highland areas, and coastal erosion and flooding during monsoon season in lowland areas. Despite these challenges, Kerala has succeeded in harnessing its natural resources and has become a model state in terms of social and human development.

Kerala is one of the leading fish producing states in India with over eight lakhs of fish workers who form 3.2% of the total population of the state (GoK, 1985). As part of the modernization of economy through the Five Year Plans, the Government of India introduced mechanization in the fisheries of Kerala in 1953 under the Indo-Norwegian Project. The mechanised trawling and purse-seining introduced as part of this project proved to be destructive fishing techniques leading to a depletion of



marine fish and decrease in its production. As a result, apart from causing a shortage of fish for consumption, it brought about a decline in productivity, income and the quality of life of the traditional fish workers. The traditional fish workers not only did not get any benefits from mechanization but also were deprived of what they had. It was against this injustice perpetrated by the mechanised boat owners who had the support of the government, that the fish workers organized themselves to protect their livelihood and fish resources. Their collective effort through agitations and struggles for 17 years evolved into a social movement. (Sankaranarayanan, 1985)

Kerala, a state in India, has a 590 km coastline which is about 10% of India's coast, and is rich in marine resources, accounting for 36.4% of total fish landing and 60.2% of total marine exports in India during the 1970s. Fishing is a major source of livelihood and protein intake for the people in Kerala, with fish constituting 70% of the per capita annual protein intake and the per capita annual consumption of fish in Kerala being 14.5 kilograms in 1984, four times the national average. (GoK, 1987) Mud banks along the Kerala coast are a specialty which results in a good harvest of fish, with certain districts like Kozhikode and Alappuzha being famous for it. (Platteau, 1985) The main varieties of fish harvested in Kerala are oil sardines, mackerel, anchovies, catfish, ribbon fish, tuna, shark, and prawns. (Dietrich, 1989)

The Fisheries in Kerala -an Overview

Length of the Coast line	590 Km
Continental Shelf	0.39 lakh square Km.
Exclusive Economic Zone	2.2 lakh square Km.
*No. of Fishing Villages	222
*No of Fish landing centers	174



*No of fishermen families (HHs)	1,21,637
*No. of Traditional fisherfolks (HHs)	1,16,598
*No. of BPL fisherfolks (HHs)	72,507
Fisherfolk population (2019-20)	10.44 Lakhs#
Marine Fisherfolks	8.04 lakhs
Inland Fisherfolks	2.40 lakhs

Source: *Marine Fisheries Handbook 2020*

Kerala has played a significant role in the export of marine products from India. During the 2015-16 fiscal year, Kerala exported 159,141 tonnes of marine products valued at 5008.54 crore. Compared to the previous year, there was an increase in both the quantity and value of marine product exports from Kerala. However, the share of Kerala in the total export of marine products from India has decreased, both in terms of quantity and value.

An analysis of the fish production figures by district reveals that Kollam is the leading producer of marine fish, followed by Ernakulam and Thiruvananthapuram, which together account for approximately 74% of the total marine fish production in the state. The district of Kollam is the leading producer of total fish production, followed by Ernakulam and Thiruvananthapuram.

The fish workers play a significant role in the population of Kerala. Among the fourteen coastal states in India, Kerala ranks eighth in terms of the number of fish workers. In 1985, the fish workers made up 3.2% of Kerala's total population, with 6.8 lakhs (77%) being marine fish workers and 2.0 lakhs (23%) being inland fish workers. Additionally, there were 1,43,000 active sea-going fishermen, accounting for 2% of the total labour force in Kerala during the same year. (Directorate of Fisheries, 1991)



Kerala has a population with a higher percentage of women than men. Its growth rate was lower than the national average, and has a high literacy rate, with women having a slightly higher rate. Kerala also has better life expectancy and lower mortality rates. These achievements stem from the education and health facilities, but fishermen did not benefit equally from development. (Manorama Year Book, 1995)

Table.2.5.Socio economic Indicators of marine fisher folks in 2016 (India & Kerala)

<i>Comparative analysis of marine fisherfolks in Kerala and India</i>				
Indicators	Kerala		India	
	Nos.	%	Nos.	%
Pucca Houses	108030	88.8%	622182	69.7%
Kutchra	13607	11.2%	271076	30.3%
Without toilet	9953	8.2%	363379	40.7%
Electrified	119859	98.5%	837996	93.8%
Tap water	72260	59.4%	460578	51.6%
Well	19797	16.3%	85148	9.5%
Hand pump	2228	1.8%	90918	10.2%
Bore well	19027	15.6%	177859	19.9%
Others	8325	6.8%	78755	8.8%
Total No. of HHs.	121637	100.0%	893258	100.0%
Educational Level				
No schooling	79300	15.3%	1160845	34.0%
Primary	183627	35.4%	1032852	30.3%
Higher Secondary	196127	37.8%	926214	27.1%
Above HS	41813	8.1%	194608	5.7%
Graduation & above	17431	3.4%	99732	2.9%
Total	518298	100.0%	3414251	100.00%
Membership in cooperative society				
Cooperative	142035	67.8%	707833	73.4%
Other cooperatives	67534	32.2%	256705	26.6%



Total membership out of marine fisherfolks	209569	40.4%	964538	28.2%
Population				
Active Fishermen	137248	64.7%	927081	60.7%
Allied Works	65347	30.8%	521745	34.1%
Others	9672	4.6%	79583	5.2%
Marine Fishermen (Population) In Lakhs	2.1	100%	15.2	100%
Type of fishermen job (out of active fishermen)				
Fulltime	120706	87.9%	748479	80.7%
Part time	15264	11.1%	153968	16.6%
Type of crafts				
Mechanized	3800	17.5%	42985	25.8%
Motorized	13868	64.0%	97659	58.7%
Non-Motorized	4016	18.5%	25689	15.4%
Total	21684	100.0%	166333	100.0%

(Marine Fisheries statistics 2016)

Kerala has made remarkable progress in various social service sectors; however, the fisheries sector has not kept up with this growth. Despite significant advancements made in education and health, the fishing industry in Kerala lags in these areas. For instance, in 1981, the literacy rate among workers in Kerala was 85%, while among fishermen, it was only 66%. Similarly, the infant mortality rate in fishing villages was 85 per thousand, whereas the general infant mortality rate in Kerala was only 40 per thousand in the same year. Although the situation may have qualitatively improved since then, the fisheries sector still struggles to match the progress made by Kerala society. These statistics indicate that the fisheries sector remains on the periphery of the Kerala development paradigm.



Despite commanding economic potential, the fishing community faces various development challenges due to their relative backwardness. The infant mortality rate in this community is alarmingly high, with 85 deaths per 100 live births compared to the state average of 12. The literacy rate, as of 2001, is only 57%, which is comparable to the levels seen in tribal communities. The Female Male Ratio (FMR) is also dismally low at 979, the only community in Kerala where it is less than 1000. Housing conditions are deplorable, as they are forced to live close to the sea for livelihood reasons. Overcrowding leads to high density, generating social tensions and unhygienic surroundings. It is estimated that around 40,000 families still live in temporary structures, and 20% of the fisherfolks houses are under threat of sea erosion every monsoon season. In fact, 37% of houses do not even have any land to claim occupancy rights. The sanitation and healthcare facilities in fisherfolks settlements are also inadequate.

The fishing villages face severe water supply shortages, both for general use and drinking purposes. The public wells available, on average 6 per fishing village, are inadequate for drinking purposes, and only 14% of fishing villages have adequate levels of safe drinking water. Adopting alternatives such as rainwater harvesting and desalination of brackish water on a large scale could help address this issue. The welfare requirements of the fishing community settlements are grossly neglected, with poor healthcare facilities that are poorly equipped to meet their needs. The incidence of communicable diseases, mainly water-borne diseases during the monsoon season, is disturbingly high in all fishing villages, with pulmonary diseases also being widespread. Women working in the "peeling sector" are affected by several occupation-related diseases, such as arthritis due to extended working hours in a cold environment, lesions in the hands, and ovarian disorders. Unfortunately,



their employers do not provide them with proper medical care. Safety at sea is also a serious issue in the marine fisheries sector, especially during the monsoon season. Due to low economic attainment, inadequate housing, poor education levels, poor road and information connectivity, and poor healthcare and sanitation facilities, the fishing community suffers from extreme marginalization.

The use of machinery and boats in the fishing industry has led to better catches and higher profits, but it has also caused depletion of resources and conflicts between traditional fishermen and capitalists. Climate change and extreme weather events also impact fishing operations and livelihoods, with some species adapting better than others. Many fishermen are struggling with debt, alcohol addiction, and lack of education or options for alternative employment. This could lead to illegal activities and attract more unemployed youth. The potential outcome is a decrease in production and value of fisheries, and decline in economic returns from fishing operations. (Vivekanandan, 2011)

The fisheries industry in Kerala has been a significant contributor to the state's economy since the first century. The traditional fish workers in the region possessed advanced technology and skills, using various crafts and gears suitable for different species of fish and marine terrain. Their knowledge of the ocean, including its winds and currents, was vast and based on astronomy and meteorology. One of the most valuable assets of Kerala's fishermen was their accumulated knowledge of fish behavior, waves, currents, and stars. This knowledge had been passed down from generation to generation through a tradition of learning by doing, making it an essential part of their cultural heritage. (Kurien, 1985)

The fishing industry involves three main processes: harvesting, processing, and marketing. In Kerala's traditional fisheries, 66% of



workers are involved in harvesting, which includes the use of crafts like boats and nets. Two types of ownership exist in the region: individual and collective. Individual ownership is found mostly in small canoes called catamarans, and earnings are shared among all workers. Collective ownership involves multiple people jointly owning a craft, and members contribute based on their investment. Hired workers can also be employed, either as contract or casual labourers. The distribution of earnings depends on the owner's contribution and expenses like payment rituals and charity to the poor are deducted. (Kurien 1978)

The indebtedness of traditional fish workers is a major issue in the fisheries sector. The middlemen's control over the market and the exploitation of fish workers have resulted in a situation where the workers are trapped in a cycle of debt. This has led to social and political dependence on the middlemen, and the workers have lost their bargaining power. Even with the introduction of mechanization, the indebtedness of traditional fish workers has increased. This is a reflection of the fact that the issue of indebtedness is not just related to the lack of access to technology or capital, but is also related to the social and economic relations that exist within the fisheries sector. Addressing this issue will require a comprehensive approach that takes into account the economic, social, and political factors that contribute to the indebtedness of fish workers. In spite of mechanization in the fisheries there is an increase in the indebtedness of the traditional fish workers. (Platteau, 1985)

Despite having access to new institutional sources such as banks, the borrowing patterns of fisherfolks have not undergone any significant changes. According to Nayak (1993), local money-lenders still hold a crucial role in this regard. This has led to a situation where the fishermen



are not only constantly indebted to the middlemen but also subjected to severe exploitation, as mentioned in the report (GoK, Fisheries, 1978).

About 27% of traditional fish workers do not own fishing equipment and work as employees or co-owners. Sea is a common property shared by all and the ownership of means of production does not include it. Processing of the fish involves unloading, sorting, icing, curing, and drying of fish, which is dominated by women however, there is no proper salary and service conditions for laborers which results in the exploitation of women and children in the peeling shed units in some states. Marketing involves 25% of the workforce and is largely done by men, except for a few districts of Kerala where women as head load fish vendors sell fish locally. The traditional method of preserving fish by salting or drying was used before the introduction of mechanization, and now fish and prawns are exported to countries like Japan and the United States of America. (Beacon group, 1979, Kurien 1985 & Nayak 1993)

Climate change, caused by greenhouse gases, aerosols, and solar activity, has resulted in global warming and various impacts such as sea level rise, extreme weather, and ecological imbalances. These effects can harm vulnerable ecosystems and human settlements. Pollution and overfishing also contribute to stressors on fisheries. The coastal zone is vulnerable to both natural and man-made threats, such as erosion, sea level rise, storms, and urbanization. Sea level rise could lead to inundation of coastal villages. The annual seawater temperature is expected to rise by up to 2.5 degrees Celsius by 2050 (Vivekanandan 2011). The climate change affects the distribution, phenology, and abundance of marine fish species, according to CMFRI. The vulnerability framework consists of geographical, social, environmental, technical, sectoral, equity-related, policy-related, and gender-specific aspects. Coastal erosion and measures



to control it have led to the loss of several beaches in coastal areas, including the barrier beaches and backwater islands of Kerala, which are sensitive environmentally, socially, and economically due to a large population depending on the system.

Box.2.2

Sectoral functions assigned to Urban LSGs under Fisheries Sector

- 1. Implementation of pisci-culture in ponds, fresh water and brackish in water and development of marine products.**
- 2. Promotion of fish seed production and distribution.**
- 3. Distribution of fishing implements.**
- 4. Providing assistance for fish marketing.**
- 5. Providing of minimum basic services for fishermen families.**
- 6. Implementation of fishermen welfare scheme**
- 7. Development of traditional landing centers**
- 8. Administrative control of fisheries schools.**

The fishing community of Kerala is a vital contributor to the state's nutritional security and economic growth, but unfortunately, they continue to suffer from neglect. Despite having a coastal belt of 600 km, which accounts for 20% of fish-landing in India, and contributing around 10% of the GSDP from the primary sector, the fishing community is still struggling. It is the responsibility of the local bodies, especially the gram panchayats, in these villages to take the necessary measures to improve the living conditions of this community.



In Kerala, national and state programs and plans are in place to steer coastal management efforts. Local governments are responsible for developing plans for coastal communities and reporting on their progress. These plans are subject to public consultation and actively involve private stakeholders. It is crucial that the general public and responsible authorities are aware of coastal and marine issues. This awareness is best achieved through public involvement in the development of plans that are tailored to specific local circumstances. When the public is involved, plans are more effective and conflicts between local governments and other stakeholders are minimized. Additionally, customizing disaster risk and climate information for local stakeholders can enhance community-based development.

Box.2.3

Sectoral functions assigned to District Panchayats under Fisheries Sector

- 1. Arrangements for fish marketing.**
- 2. Management of Fish Farm Development Agency.**
- 3. Management of district level pisci-culture centers, net making units, fish markets, feed mills, ice plants and cold storages.**
- 4. Management of fisheries schools.**
- 5. Introduction of new technologies.**
- 6. Provide inputs required for fishermen.**
- 7. Promotion of fishermen's co-operatives.**

The rural and urban local government units are called Panchayat Raj Institutions (PRI) and Urban Local Bodies (ULB) respectively. Each tier of the Panchayat Raj system functions independently. The government can provide general guidelines to local government units based on national and state policies, but they have autonomy in their functional domain. LGs have six main functions including mandatory and general functions,



sectoral responsibilities, coordinating with transferred institutions, maintaining assets, annual plan formulation and implementation, and collecting taxes and non-tax revenue. Local Self Governments (LSGs) have sector-wise responsibilities including promoting agriculture, animal husbandry, minor irrigation development, and fisheries. They also handle social forestry, small-scale industries, water supply, education, village roads, and public health. Identifying homeless individuals and implementing rural housing programs for them, as well as carrying out poverty alleviation schemes, are also under their jurisdiction. A detailed depiction of their sectoral responsibilities is provided in a box.2.2, 2.3, 2.4 & 2.5

Due to transfers of local level government institutions, LGs have partial control or coordination of their administration. Gram Panchayats can play a crucial coordination role in various aspects of fisheries management. This includes activities such as (1) prohibition of illegal fishing, sea rescue operations, and other conservation measures as mandated by the fisheries department. Gram Panchayats can facilitate (2) the integration of fisheries activities with agriculture and animal husbandry programs, ensuring a holistic approach to rural development. They can also (3) participate in the implementation of various central and state schemes related to the fisheries sector. Furthermore, Gram Panchayats can (4) ensure effective functioning of Matsya Bhavans, the fishery resource centers, and oversee the activities of the fisheries department and allied agencies to ensure their efficient execution.

Local government institutions receive some control over certain government posts and departments transferred to them under fisheries. However, these institutions remain under the administrative control of the parent department, and staff appointments and transfers are made by the



state government. While local institutions can partially control or coordinate activities and allocate plan funds and development schemes, their role is limited. They are responsible for maintaining the assets of transferred institutions but are under dual control of the government departments and local institutions, which creates chronic problems. Local institutions demand full control of these institutions. Proper maintenance is necessary for the prolonged and guaranteed lifespan of assets. LSGs have a maintenance fund for items such as office buildings, vehicles, equipment, and local roads. They are responsible for maintaining their own assets as well as transferred institution assets.

Box.2.4

Sectoral functions assigned to Block Panchayats under Fisheries Sector

1. Development of traditional landing centers.

Decentralization & Fisherfolks

The Peoples Plan movement was introduced to implement the Ninth Five Year Plan in local government bodies in Kerala, which aims to collect knowledge needed for development locally and involve disadvantaged groups in the process. Kerala has been able to make exemplary contributions to decentralization of power through public planning compared to other states in India. However, sector-wise share under the broad sector has not been fixed for productive, infrastructure and service sector projects.

The socio-economic status of traditional fishermen in Kerala and how the peoples plan has been implemented to address overcapacity and changes in fish habitats. The plan aims to bring economic development and social



justice to marginalized communities. The study explores the impact of the plan on the resources, economic, and social well-being of traditional fishermen. The plan allows for regional planning, which could positively impact the socio-economic status of fishermen if effectively implemented. However, there is still a need for improvement, particularly for those who are sick and do not have access to their own sanitation facility. It aims to examine the impact of local planning on the livelihoods of traditional fishermen, identifying ways to improve their lives, and prioritizing their needs and resources in the planning process.

Box.2.5

Sectoral functions assigned to Gram Panchayats under Fisheries Sector

- 1. Development of fisheries in ponds and pisci culture in fresh water and brackish water fish culture, Mari culture.**
- 2. Fish seed production and distribution of off-springs.**
- 3. Distribution of fishing implements.**
- 4. Fish marketing assistance.**
- 5. Provision of basic minimum services for the families of fishermen.**
- 6. Welfare schemes for fishermen.**

The study by J.B. Rajan discusses the implementation of public planning in the fisheries sector in Thiruvananthapuram Corporation. The socio-economic challenges faced by traditional fishing communities in Kerala have been well-documented, and it is clear that targeted interventions are needed to improve their living conditions. In particular, efforts need to be made to improve education, healthcare, and employment opportunities for community members, especially women and children. This will require investment in infrastructure, including schools and healthcare facilities, as well as programs that provide training and support for alternative livelihoods, such as small-scale farming or tourism. It will also



be essential to address the issues of overcapacity and changes in fish habitats, which have contributed to the decline of the fishing industry and further exacerbated the challenges faced by traditional fishing communities. By prioritizing the needs of these marginalized communities, it is possible to create more inclusive and equitable societies and improve the overall well-being of the population.

Traditional fishing communities in the coastal areas face challenges such as low income, lack of basic amenities, poor education and health status. To improve their socio-economic conditions, there is a need for targeted interventions and policies that prioritize their needs such as access to basic amenities, education, and employment opportunities. In particular, interventions that prioritize the needs of women in the fishing sector can have a positive impact on their health and well-being. A multi-faceted approach is necessary to address the various challenges faced by these communities and promote inclusive and sustainable development. A fisher-centric approach involves protecting the marine environment and resources for the sustainability of the fisheries sector. This can include marine protected areas, sustainable fishing practices, regulation of fishing activities, and support for new technologies. Traditional fishermen should have access to markets, credit, and support to improve their incomes and livelihoods. The government should also promote social inclusion and empowerment of women and marginalized groups within fishing communities. A holistic and inclusive approach can make the fisheries sector a driver of sustainable development and social progress in coastal communities. (JB Rajan, 2000)

The cyclone Okhi along the Kerala coast negatively impacted upon the livelihood of the fishing community, with storm surges limiting offshore activity and harming the fishing industry. Poor monsoons and floods can



also affect fishing, while sea level rise can alter currents and wave patterns. Pollution is another danger, leading to resource depletion and contamination of water sources. Open access to fisheries can bring in bigger players and marginalize the traditional stakeholders. Addressing these issues requires ensuring food supply, promoting cohesion within the fishing community, building awareness of fishing laws and schemes, and encouraging capacity building. Trade policy tools and competition with more powerful forces are also factors to consider. Adaptive capacity can be increased through fair distribution of resources, resource conservation, and participation in management. The fishing community can have greater involvement in the development and conservative management of fishery resources with the help of active fishermen, social workers, and voluntary associations. Artisanal fishermen are more affected by poverty and open and regulated access to new technologies can be emphasized. Fisherwomen play an important role in the fisheries sector, but are more vulnerable than men. Gender-specific strategies like establishing self-help groups are recommended to create additional livelihood opportunities for them. The sector may have to respond to shifting fish populations and species with the right types of craft and gear combinations and on-board processing equipment. Governments should consider establishing weather watch groups and decision support systems on a regional basis and allocating research funds to analyze the impacts and establish institutional mechanisms. (E.Vivekanandan, 2010)

Development of regional adaptation networks is necessary to improve the condition of fishing communities. Formal adaptation strategies are inadequate for the fishing community, and their own adaptation strategies should be considered. Evidences should be gathered and documented to strengthen linkages between scientific aspects, policies, and practice. The establishment of a network between members and identifying priority



needs helps address problems more efficiently. (Devi, Arunachalam, and Pavithran, 2018)

The crisis in Kerala's fisheries sector can be attributed to several factors, including the lack of policies to promote sustainable productivity growth and balance production methods and technological diversity that traditional fish workers have developed over several decades. Additionally, reforms implemented in the sector did not consider the survival of fish stocks or the overall ecosystem of the sea, prioritizing short-term gains instead. This centralized planning style has contributed to a widening socio-economic divide within the fisheries sector. The findings suggest that the fisheries sector and its workers are not receiving the benefits they deserve from various projects. It is important to recognize that local government bodies face challenges in assessing the involvement of different local bodies in decentralized planning at the district level and implementing suitable measures. Therefore, the District Planning Committees should acknowledge the concerns raised by this study and prioritize efforts to ensure that marginalized sectors and groups, such as the fisheries sector, receive their rightful portion of resources.

The primary objective of local development pursued through the five-year plans was not to produce fish for the domestic market and provide relatively cheap meat to the people. Rather, the development of the fisheries sector prioritized export-oriented growth based on only a few fish species and the foreign market. This policy has led to local fish scarcity and has only contributed to the economic upliftment of a small minority who produce fish for export.

The fisheries sector is a crucial contributor to Kerala's economy, but it is currently grappling with severe crises. Despite the investment of millions



of rupees in its development during the past five-year plans, it has not kept pace with other sectors in Kerala's economy. The sector has remained impoverished while other areas have witnessed growth over the last few decades. In 1997, during the preparatory phase of the Ninth Five Year Plan (1997-2002) in Kerala, a Task Force was constituted to suggest measures to support "Livelihood Secure Fishing Communities." The Task Force was composed of representatives from various fish worker organizations, civil society organizations, trade unions, academicians, and the chairpersons of Matsyafed and the Matsyaboard. Due to the lack of current data at that time, a rapid appraisal survey was conducted with the assistance of Matsyafed, covering various aspects such as demography, housing, water and sanitation, health, education, role of women, community representation in local bodies, accidents at sea, cultural and social facilities, credit and indebtedness, and fish marketing.

For instance, a report from the Ninth Plan Action Committee, formed by the State Planning Board in 1980-81, revealed a significant disparity between the per capita income of the state and that of fishermen, with a difference of Rs. 514. However, by 1994-95, the per capita income of fishermen had increased to only Rs. 1108, a rise of merely Rs. 14 from the previous figure, while the state's average per capita income had increased by Rs. 605. (Working group report 1998, SPB) The Task Force Report also included an alternative vision for coastal village housing and sanitation, contributed by experts in the field. Social protection measures initiated by the state in the mid-1980s were found to have made an important contribution to the overall development of fishing communities until 2000, as assessed by Kurien and Paul in 2000. Subsequent assessments of human development progress among fishing communities showed significant progress, though there was recognition that more could be done, as noted by Shyjan in 2009.



People plan campaign

In Kerala, the process of decentralised planning that began during the 9th Five-Year Plan period has now completed twenty five years. During this time, the local governance system has been strengthened and institutionalised by the State government. The primary financial support for local governments in Kerala comes in the form of Plan grants-in-aid devolved from the State government.

The first people's Plan campaign improved democratic decentralization in the State, but there is a need to integrate local plans with the overall Five-Year Plan perspective of the State to make a significant impact in production. The second People's Plan campaign emphasized the integration of local plans with the overall Five-Year Plan perspective of the State, which will be implemented during the 13th Five-Year Plan period with support from the State Planning Board. The second phase of people's planning will ensure effective public service delivery, gender equity, inclusive development and genuine people's participation in local governance.

The 13th Five-Year Plan period will prioritize environment protection, conservation of natural resources, agricultural production, waste management, water management and addressing the issues faced by differently abled, children, women and marginalized sections. The 1200 local governments in the state will receive financial allocation from the state plan as recommended by the State Finance Commission.

Five year plans under Fisheries Sector of State

During the 10th Plan period, the marine sector's major initiatives included modernizing country crafts, promoting new generation crafts, and distributing suitable fishing gear components. Other programs focused on assisting integrated fisheries development, constructing new fishing

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



harbors and centers, providing assistance after the Tsunami, and ensuring social and livelihood security for fishermen. The approved budget for the 10th Plan period was `161.28 crore, and an amount of `190.26 crore was put towards these goals. The fisheries sector did not receive significant attention despite the classification of development sectors into production, service, and infrastructure categories. Decentralized governance is seen as a means of addressing fundamental development issues, but the fisheries sector's intensive and multifaceted problems require innovative solutions. Unfortunately, the potential benefits of decentralized planning were not fully utilized in the fisheries sector.

The available information for assessing the performance of local government bodies in the fisheries sector during the 10th Five Year Plan period is limited. While the majority of projects focused on resource management, a few initiatives prioritize for exploitation of marine resources and emphasized sustainability. Furthermore, the development plan for the fisheries sector, which is a significant aspect of local government institutions, lacks adequate information and promising prospects. The Matsya Bhavan, which is responsible for fisheries development in coastal areas, does not effectively collaborate with Panchayati Raj institutions, hindering progress in the sector.

The 11th Plan focused on sustainable development of fisheries and aquaculture with goals of increasing production and productivity, exporting marine products, creating employment opportunities, and improving socio-economic conditions for fisher communities. Efforts were made to develop inland fisheries and aquaculture, conserve and manage fisheries resources, modernize fishing infrastructure, and promote livelihood security. Initiatives included NFDB-assisted schemes, fish market modernization, community capital institutional credit, and debt



relief programs, among others. Six fishing harbors were established during the plan period.

During the 11th Plan, the approved outlay for the fisheries sector was `255.25 crore (budgeted outlay `380 crore), but the expenditure was `456.34 crore. Some achievements during the plan included an increase in inland fish production from 0.80 lakh tonnes to 1.21 lakh tonnes, completion of 2 fishing harbors, construction of 3500 houses under NFWF housing scheme, organization of 3000 women SHG's in coastal districts, start of 1300 micro enterprise units, and the University of Fisheries and Ocean studies continued to function.

The marine fish production in the state of Kerala has fluctuated, while inland production has shown improvement. Efforts to increase marine fish production during early five year plans have led to depletion of fishing resources and marginalization of traditional fishermen. The Working Group recommends resource conservation, improvement of basic amenities, utilization of inland resources for agriculture, livelihood security projects, responsible and sustainable agriculture, establishment of agriculture and fishermen villages, exploration of grants for hygiene retail markets, total housing for fishermen, development of women micro-enterprises, establishment of value-added fish production units, interest-free loans, and social awareness and legal support programs. (12th Five Year Plan (2012-17) Pg.54)

The 11th five year plan saw growth in infrastructure for the marine fisheries sector, and the goal for the 12th plan was to ensure sustainable growth for nutrition, food security and economic growth. This will involve conserving inshore fishery resources, enhancing offshore fish production, and maximizing the utilization and value addition of harvested fish. Key issues to address include price exploitation, ineffective



regulation, and over-increasing fleet size. Improvements to the marine environment can be made with the introduction of artificial reefs and sea ranching. Proper storage, transportation, and distribution of harvested resources are important for maximizing utilization. Quality control measures are needed for both domestic and export markets, and insurance coverage for registered fishing crafts and engines is recommended.

The 12th plan aimed to reduce fishing costs and improve the value of fishermen's catches through better technology and marketing. They plan to modernize hygiene conditions in harbors, improve social infrastructure and provide safe shelter, drinking water, public health, education, solid waste management, coastal roads and sanitation. The Model Fishing Villages scheme is included in the plan, and they plan to develop remaining villages. A comprehensive coastal area development project was prepared during the 12th plan. Department scheme Theera-Mythri launched to support marginalized fishing communities through micro-enterprises and SHGs.

The state has many fishing harbors, but most of them are in poor condition, leading to lower quality of fish and distress sales. The government should take steps to improve the condition of the harbors, including adopting technology for value addition of trash fish. The government has already launched initiatives such as modernization of traditional crafts, insurance coverage for fishing implements, and interest-free loans for fishermen. Another major concern is the quality of seed in aquaculture, which should be ensured through certification involving various organizations. Additionally, the post-harvest infrastructure should be strengthened, including better fish landing and handling facilities, cold chains, storage facilities, and marketing facilities. The



production of value-added products, micro-enterprises, credit support, and social security coverage should also be improved.

Kerala's marine exports have decreased in both quantity and value. Unlike the rest of India, Kerala has a higher focus on marine production. Kerala has reached peak levels of production in marine fish resources and must now focus on sustainable fish management and responsible fishing. In the 12th Fiscal Year plan, the Total State Plan outlay was Rs 1,420.89 crore with an expenditure of Rs 1,307.36 crore.

Fishermen are one of the most economically and socially backward communities, with only a quarter of them owning fishing implements. Many work for others who own the implements, and they are often exploited by middlemen. The introduction of mechanized boats has increased fish production, but it has not benefitted the traditional fishermen. Rather, it has led to overexploitation and a decline in social status. Future interventions should focus on increasing fish production while ensuring benefits reach traditional fishermen. The approach to the 13th Plan intended to prioritize enhancing fish production for nutritional security and improving the socio-economic conditions of the fisher folk.

The 12th plan for Marine Fisheries aimed to promote sustainable growth of fish and fisheries for nutrition, food security, and economic growth. The plan included an outlay of Rs 1815.16 crore, including Rs 126.10 crore for RIDF and Rs 200 crore for FCA. The plan's sector-wise allocation specified that 23.16 crore for marine fisheries, 137.38 crore for social security, 610.60 crores for coastal infrastructure development, 151.65 crores for socio-economic development of fisherfolks, 240.48 crores for development of fishing harbor and so on.



The 13th Plan will focus on improving the livelihood security and amenities for fish workers in coastal regions while reducing mortality at sea. Sustainable fishery management measures will be adopted to improve marine fish production, with an emphasis on responsible fishing and stock enhancement. Focus will also be placed on reducing fish wastage, improving fishing harbors, and obtaining EU approval for quality standards to enhance exports. Efforts will be made to provide alternative employment, credit support, access to fishing implements, and social security for fisherfolks.

The 13th Plan aims to make Kerala self-sufficient in fish production by adopting sustainable fishery management measures, conservation efforts, and innovative technologies while also improving the basic social facilities in coastal areas. The plan includes increasing aquaculture production, mitigating housing problems for fish workers, setting up an Oceanarium in Kochi, and constructing two new fishing harbors in Thiruvananthapuram and Kasargod districts.

The Department has set targets for the 13th Plan to achieve a 6% annual growth in GSDP from the fisheries sector by enhancing marine fish production, and aquaculture production. District level disease management teams and aquatic animal health labs will be established to ensure quality and to manage fish diseases. Two university centers will also be established to meet the requirement of fisheries professionals in the state. The per capita income of the fishing community will also be enhanced to bring them above the poverty line

Local governments should focus on empowering disadvantaged groups such as scheduled castes, scheduled tribes, fish worker communities, and plantation labours by promoting active participation through community-based organizations like self-help groups, farmers clubs, and



neighbourhood groups. Resident associations and self-help groups will become subsidiary organizations of gramasabha to increase representation. This will help tackle the second-generation problems faced by these communities. The prime focus of the plan is the development of inland fisheries sector and promotion of aqua culture

Issues & Interventions

In Kerala, the sea has been considered as a common property, but the issue of retention has complicated the situation further. Long-term measures have not been taken to regulate access to coastal waters, leading to fishing being viewed as a profitable investment area. As a result, investments from outside the sector have poured into the sea, leading to a significant increase in competition within the fishing sector. Traditional fishermen are forced to compete with outsiders, whose goal is to increase capital investment. Consequently, the cost of production has increased tenfold, even though there has been a rise in production levels. Fishing has become a capital-intensive sector, where the primary objective is to maximize fish production regardless of the fishing gear used. As a result, there is no control over the fishery, which has turned into a race to dominate the sector.

The fisheries sector in Kerala is facing a crisis due to overfishing in coastal waters. Although there have been attempts to enhance the technical skills and knowledge of fishermen and promote deep-sea fishing opportunities, these efforts have not been effective. The fishing techniques used are not well-suited to the ecosystem of the seas in Kerala and have not utilized the potential available in deep-sea areas. Instead of developing deep-sea fisheries, there has been a rise in competition for coastal fisheries, leading to overfishing and worsening the crisis in the sector.



The sustainable development of deep-sea fisheries requires a comprehensive understanding of the ecosystem and the characteristics of fish resources. The traditional fishing techniques used in coastal areas may not be suitable for deep-sea fishing. Therefore, there is a need to develop appropriate fishing techniques and technologies for deep-sea fishing while ensuring the sustainability of the ecosystem. This will require investment in research and development and the provision of technical assistance to fishermen. The development of deep-sea fisheries should also be accompanied by appropriate regulations and management strategies to prevent overfishing and the depletion of fish resources.

The role of middlemen in the fisheries sector has become increasingly significant, leading to a substantial increase in the cost of production and a decline in the income of fishermen. Moreover, middlemen control the fishing industry's economic activities and have made it difficult for fishermen to access credit facilities and other necessary support services. Therefore, there is a need to empower fishermen to have more control over their products, marketing activities, and decision-making processes. The government should take proactive steps to regulate the activities of middlemen, promote transparent pricing mechanisms, and enhance access to credit facilities and other support services for fishermen. This would help reduce the cost of production, increase in the income of fishermen, and enable them to contribute more effectively to the development of the fisheries sector.

The lack of control over the price of fish is a serious drawback faced by fishermen in Kerala, and middlemen play a crucial role in this. While the government has attempted to regulate the fish marketing sector, these efforts have not been effective in preventing the exploitation of fishermen by middlemen. Additionally, the domestic fish processing industry in



Kerala is underdeveloped, leading to reliance on exports for economic growth. A common marketing network could potentially help alleviate some of the difficulties faced by fishermen in accessing markets and achieving fair prices for their catch.

Despite implementing numerous welfare activities in the fisheries sector for decades, the goal of social security for fishermen has not been fully realized. Many welfare schemes have not yielded desired results due to their centralized implementation, and the fact that various agencies in the fisheries sector are implementing similar projects has been overlooked. To ensure effective implementation of welfare schemes and achieve the goal of social security for fishermen, a decentralized approach is necessary, along with collaboration between different agencies in the fisheries sector.

The debate surrounding the precise duties specified in the Act is no longer relevant due to recent state budgets allocating over 35% of the annual plan to local governments. The remaining funds are reserved for implementing projects in sectors such as power, large-scale industry, irrigation, and other development areas that require planning at the state level. However, there is a strong argument that the 65% of projects intended for state-level programs will not suffice. As a result, local planning in areas such as fisheries is now being carried out by local governments according to priority, which is beneficial for the sector's development. The importance of local planning in developing the fisheries industry has been emphasized, as well as the inevitability of such changes based on the 73rd and 74th constitutional amendments. This situation applies to all development sectors, including agriculture, education, healthcare, roads, and social welfare, but creating a comprehensive regional program that includes all these areas is a challenging task. Currently, no state in India has experience with gram panchayats and municipalities independently



developing such a program. Although these entities have the authority to implement schemes prepared at the state level, they have yet to create any local plans of their own.

Extensive preparation is made for successful implementation of decentralized planning, including ensuring sufficient personnel for local institutions, establishing planning and implementation rules, collecting local statistics, organizing comprehensive training, and educating the populace. Without such preparations, top-down planning is unlikely to succeed. Unfortunately, our country has failed to make these preparations for the past fifty years.

The decentralized plan has remained unattainable thus far, prompting the formation of the People's Plan Movement in Kerala. The movement aimed to delay the centralization of planning until the 10th Plan and instead implemented it during the 9th Plan due to inadequate advanced planning. Officials, experts, and volunteers were mobilized behind the movement to strengthen local government institutions for planning. From August 1996, a year-long series of studies and planning activities were organized across six stages. It is not possible to delve into the specifics of these activities here, but one can refer to the manuals and books published last year to gain a better understanding of the process involved.

The local government bodies, known as Gramasabha, held meetings to evaluate the resources in their communities and their potential for development. Development seminars were then held to determine what needed to be done in each area, and proposals were written down as projects. Each sector had its own governing council, and their projects were prioritized and documented. The plans were then reviewed by expert committees and approved by District Planning Committees. Mass participation and transparency were important features of the process.



The goal is to continue to improve and decentralize planning. The first annual plan will be briefly reviewed to identify areas for improvement.

The efforts towards local resource mobilization in the fisheries sector are commendable, particularly the allocation of funds from the own fund. However, the first plan did not give enough consideration to the fish sector, despite its objective of uplifting weaker sections such as fishermen. While it is positive to focus on fish farming, expanding connectivity projects in the fisheries sector are not currently desirable. The reasons for the fisheries sector's weaknesses in the First Annual Plan are not clear. It is unclear why more funds were not invested in this sector. However, the introduction of people's planning provides an opportunity for people and activists to participate in the decision-making process, which was previously absent.

To address the issue of neglect of the fishing community, it is important to analyze their participation in the decision-making process of Local Self Government (LSG) bodies. The participation of fishing communities in Gramasabha/Matsya sabha is crucial, and the conduct of Oorukoottams and Matsya sabha is mandatory for drafting development reports. Without these meetings, the District Planning Committee (DPC) will not accept the proposals of the Panchayat. Matsya sabha is an exclusive assembly with a minimum quorum of 25 registered fisherfolks in the ward.

Funding for coastal areas is provided by Panchayats from the General Plan Fund under the agricultural purpose, which accounts for 10% of the total allocation. However, there are no separate funds for the fishing community, like the Tribal Sub Plan (TSP) or Special Component Plan (SCP). Resource planning in LSGs should be based on the availability of funds, local needs, and the considerations of grass-root level stakeholders.



Convergent plans and programs are highly suitable for coordinating different departments and organizations. LSGs allocate funds to various components, such as TSP/SCSP, Women Component Plan shares, shares for children, differently-abled, transgender, aged and palliative care, and ASRAYA (shares for destitute). These plans are also for the fishermen population of the state in the form of general development benefits in spite of development share in the fisheries sector.

Fisheries Development through Department

The State Department of Fisheries is responsible for implementing the government's development and management programs in the fisheries sector. The department is led by the Director of Fisheries and is focused on promoting the development of both inland and marine fisheries. The department's primary goal is to foster economic growth, ensure food and nutritional security, and drive socio-economic development for fisher folk. To achieve these objectives, the department works to support and uplift the livelihoods of those in the fisheries sector, while also ensuring sustainable management of fisheries resources. Through its various initiatives and programs, the Department of Fisheries is committed to promoting the growth and sustainability of the fisheries sector in the state.

The government's developmental programs for the fisheries department can be categorized into various schemes such as marine fisheries development, inland fisheries development, the Blue Revolution - CSS Scheme, extension, training and service delivery, modernization of markets and value addition, social security for fisherfolks, development of fishing harbors and management which includes CSS components, the Fisheries University scheme, and Coastal Area Development. These programs aim to enhance the growth and development of the fisheries industry in India. They focus on improving the productivity of both



marine and inland fisheries, promoting sustainable fishing practices, providing training and extension services to the fishing community, modernizing markets, and improving value addition to fish products. Additionally, the schemes aim to ensure social security for fisherfolks, develop fishing harbors, and manage coastal areas effectively. The establishment of the Fisheries University is also part of these programs, which is designed to impart education and research in the field of fisheries. Overall, these schemes aim to promote the development of the fisheries industry in Kerala, which plays a crucial role in the state economy and provides livelihoods to millions of people. Some agencies are functioning under the department with different objectives. They are:

1. Kerala Fishermen's Welfare Fund Board (KFWFB)
2. Kerala State Cooperative Federation for Fisheries Development Limited (Matsyafed)
3. Agency for Development of Aquaculture, Kerala (ADAK)
4. Fisheries Resource Management Society (FIRMA)
5. National Institute of Fisheries Administration and Management (NIFAM)
6. Fish Farmers Development Agency (FFDA)
7. Kerala State Coastal Area Development Corporation (KSCADC)
8. Society for Assistance to Fisherwomen (SAF)

The major initiatives under the department providing direct benefits to marine fisherfolks are through the following specific organizations.

Kerala State Coastal Area Development Corporation (KSCADC)

Kerala State Coastal Area Development Corporation (KSCADC) is a company owned by the state government that focuses on developing the coastal area of Kerala through infrastructure and fisheries development,



technology acquisition, commercial operation, and consultancy. Kerala State Coastal Area Development Corporation Limited (KSCADC) is a state government-owned company in the state of Kerala, India. It was established as the Coastal Area Development Agency (CDA) in 2004 with the aim of integrating development activities in the coastal areas of Kerala. The government reconstituted the agency to pool financial resources for total integrated coastal development. Its primary focus is on accelerating socio-economic development of the fisher folk and facilitating coastal and fisheries infrastructure, coupled with technological support and sustainable management through futuristic policies and appropriate interventions. Basic infrastructure facilities are provided by KSCADC in rural areas of the State making use of the financial assistance from NABARD under Rural Infrastructure Development Fund (RIDF)

KSCADC expended Rs.273.07 crore for projects under state plan fund from 2007-08 to 2014-15 and through centrally sponsored scheme an amount of Rs.1.23 crore expended for modernization of Kattamaram in Kerala. National Fisheries Development Board provides 90 % financial assistance for the construction of Modern Fish Markets across Kerala. NFDB has accorded sanction for the construction of 41 markets out of which 18 are completed. The total outlay of the project is Rs. 78.71crore with NFDB share of Rs. 64.43 crore and State share of Rs. 14.28 crore.

Social Security and Livelihood Support to Fisherfolks Community Kerala Fisherman's Welfare Fund Board

The government of Kerala has implemented various schemes to provide social security and livelihood support to the fisherfolks community. These schemes are implemented by the Fisheries Department, Kerala Fisherman's Welfare Fund Board, and Matsyafed, and some schemes are supported by central plans. The schemes include housing, insurance,



pension, and support for continuous livelihood. Many fisherfolks have benefited from these schemes, including thousands of workers who were provided with group accident insurance and old age pension. Additionally, funds were provided for the motorization of fishing crafts and purchase of fishing gear, and support was provided during off-season. Over the years, the state has been able to expand its social security net for the fisher folk community.

Matsyafed

Matsyafed is a federation of over 650 co-operative societies made up of fish workers. They have developed self-help groups and encouraged savings among their members. They provide microfinance and interest-free loans, benefiting over 26,000 people in 2016-2017. They also provide subsidies for fishing gear to help over 800 fish workers.

Society for Assistance to Fisherwomen (SAF) and Women Empowerment

The Society for Assistance to Fisherwomen (SAF) is an organization that supports the development and empowerment of fisherwomen in the State. SAF provides financial, technological, and managerial assistance to help fisherwomen start micro enterprises and run their businesses sustainably. They have provided assistance and training to hundreds of beneficiaries in order to promote alternative livelihood activities and ensure the sustainability of existing units.



Table.2.6. Budget outlay and expenditure of the state for fisheries sector

State Plan Outlay & Expenditure - Fisheries Sector (In crores)			
<i>(Excluding CSS, NCDC)</i>			
Year / FYP	Outlay	Expenditure	% of Expenditure
2007-08	51.66	57.07	110.5%
2008-09	90.69	70.01	77.2%
2009-10	50.00	85.59	171.2%
2010-11	59.46	56.83	95.6%
2011-12	105.79	130.10	123.0%
11th FYP	357.60	399.60	111.7%
2012-13	160.85	139.50	86.7%
2013-14	193.35	157.00	81.2%
2014-15	232.52	164.20	70.6%
2015-16	293.12	272.80	93.1%
2016-17	268.79	267.90	99.7%
12th FYP	1148.63	1001.40	87.2%
2017-18	320.08	364.20	113.8%
2018-19	389.43	298.60	76.7%
2019-20	280.15	211.10	75.4%
Total	2495.89	2274.90	91.1%

(12th & 13th WG Report & Fisheries Handbook 2020)

The state fisheries department has implemented various welfare schemes in the marine sector to provide assistance and support to fishermen and their families. One such initiative is the housing scheme, which provides financial aid of Rs. 2 lakh per unit to construct new houses. The department also offers assistance of Rs. 0.50 lakh per unit for repairing the houses through house repair scheme. In addition, the department has implemented a sanitation scheme, which provides assistance to construct toilets. The education concession scheme is another attempt that provides educational concessions to the children of registered fishermen. The



Savings cum Relief scheme has been implemented to promote their thrift habit and provide relief during lean periods.

During the 12th Plan, the total outlay provided for schemes in the sectors Fisheries and Coastal Area Development is Rs 1148.63 Crore. The expenditure reported is Rs 1001.40 Cr, which is 87.2 % of the outlay. Under CAD during the 12th FYP period, Outlay was Rs 595.99 cr. Expenditure is Rs 537.10 cr. which is 90.1% of the outlay. Year wise outlay and expenditure for Coastal area development under 12th Plan is in the following table.

Year / FYP	Outlay	Expenditure	% of Expenditure
2012-13	64.00	48.69	76.1%
2013-14	58.35	48.75	83.5%
2014-15	87.27	47.72	54.7%
2015-16	189.37	201.17	106.2%
2016-17	197.00	190.75	96.8%
12th FYP	595.99	537.10	90.1%

(Source: 13th WG Report)

The state fisheries department also provides old age pension and widow pension. Additionally, a group insurance scheme is offered to provide insurance coverage to active/allied fishermen who have registered at KFWFB for death while fishing. The department has also introduced the modernization of country crafts scheme, which offers assistance for changing Out-Board Motors (OBM). To support fisherwomen self-help groups, the state fisheries department provides assistance to develop their micro-enterprises. Women fish vendors can avail themselves of interest-free loans provided by the department. Overall, these initiatives are aimed at improving the standard of living of fishermen and their families and promote the growth of the marine sector.

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



LSGs on fisheries sector

Local self-government can provide additional support to fisher folk through various initiatives for improving their livelihoods. In recent years, decentralization has become a global trend and it is on the political agenda in many countries. Decentralization involves the transfer of decision-making powers and responsibility from central government to lower levels of government institutions. This could be a transfer of responsibility such as that of distribution of resources, administrative and management tasks, and planning (Dyer and Rose, 2005)

For a thorough examination of the effects of the decentralized government's actions on the fishing community, a more efficient and cohesive monitoring approach is imperative. The analysis should aim to establish a clear cause-and-effect relationship to differentiate the impacts of local government bodies. However, monitoring data alone may not be sufficient for policy evaluation, and it is essential to convert the data into relevant indicators for policymaking. This knowledge is critical for informing policy decisions, creating public awareness, and enhancing institutional and societal capacity, as emphasized by previous studies (Breton 2006; Martí et al. 2007; EEA 2012).

The fishing community is currently facing a multitude of internal problems that vary depending on their location. These issues range from land-based environmental problems such as mining and pollution to ocean pollution caused by the dumping of plastic and other waste. These problems hinder the regeneration of migratory fish and result in the bulk catching of fish stocks by large fishing vessels operated by exporters. To truly understand the problems faced by these communities, it is crucial to involve the people engaged in these activities. Analyzing the role and responsibility of Local Self Government in improving their living



conditions, infrastructure, and employment opportunities, educational advancement, and social status assume utmost importance.

It is unfortunate that the traditional fisher-folk in Kerala continue to face such depressing socio-economic conditions. It is important for the government and other stakeholders to take effective measures to address these issues and improve their livelihood. The framework of local governance provides a broad perspective to address them. The involvement of Local Self Government Institutions in coordinating plans for different sectors and levels of government is crucial. In the coastal zone, additional requirements arise from the highly dynamic natural land-ocean interaction; it requires protective measures to prevent loss of life. Initiatives to provide them with better housing, access to education and skill development, land ownership, clean drinking water, and healthcare facilities have to be made mandatory. Measures should also be taken to reduce the impact of environmental disasters and provide support to the fisher-folk during such crises. It is crucial that efforts are made to empower the traditional fisher-folk and improve their socio-economic conditions so that they lead a dignified life.

In order to achieve sustainable development goals, it is crucial for local governments to have a strategic vision and invest in capacity building and resource mobilization at the local level. KILA conducted a study to identify the challenges faced by the fishing community in the planning process, with the aim of promoting a more inclusive and equitable socio-economic situation. The study's findings can serve as a roadmap for policymakers and practitioners to address the gaps and ensure that the needs of fisherfolks are adequately addressed in the planning process. The insights gained from the study can be used to design training programs and awareness material for local governance institutions, contributing to a



more effective and responsive planning process that recognizes the needs of all members of society.

Matsya Bhavan

The Matsya Bhavan is a single umbrella system where the services and benefits of various agencies working in Fisheries Sector such as Department of Fisheries, Matsya Fed, Matsya Board and Fish Farmers Development Agencies (FFDA), Society for Assistance to Fisher Women (SAF), Kerala State Coastal Development Corporation (KSCDC), Agency for Development of Aquaculture Kerala (ADAK), Fisheries Resource Management Society (FIRMA) etc. are available. Matsya Bhavan is also responsible for the formulation and implementation of the Local Self Government Plans as per G.O. (M.S) No: 41/97 F&PD dated: 22.11.1997.

The Matsya Bhavan, which is led by an officer designated by the Director of Fisheries, has several general responsibilities. Firstly, it serves as a single window system for the total development of the fisheries sector, with a focus on the welfare of fisher people in the areas assigned by the Schedule III of KPR Act. Secondly, it acts as a nodal center for coordinating government plans and policies related to fisheries. Thirdly, Gram Panchayats have control over the day-to-day business and administration of Matsya Bhavan. Additionally, Matsya Bhavan should have Committees such as Matsya Sabha to support and monitor its activities, with the participation of elected members and interested organizations. Functionaries for Matsya Bhavan are to be provided by the Department of Fisheries. Matsya Bhavan is expected to actively participate and take a lead role in providing necessary information and support to Matsya Sabhas, which represent different sectors. It is also responsible for ensuring that the Matsya Sabha planning process adheres to government



guidelines. The Fisheries Departmental Officer in charge of Matsya Bhavan acts as the Convener of the fisheries sub-group for the preparation of five-year and annual plans. Matsya Bhavan also plays an important role in conveying the voice of fishermen in the Working Group through the Matsya Sabha, converting their needs into viable plans. Lastly, it is the responsibility of the Matsya Bhavan Officer to present the suggestions of Matsya Sabha in the Grama Sabhas.

In accordance with the Administrative Manual for Transferred Functions of 2017, the Matsya Bhavans are mandated to provide a comprehensive range of 29 services to the fishing community. These services are designed to cater to the diverse needs and requirements of the fishing community. They include schemes such as saving cum relief, educational concessions for students from fishing families, registration and licensing of free nets, sea rescue operations, group insurance against accidents and missing, financial assistance for disability, hospital treatment due to accidents, compensation for death while fishing or immediately thereafter (not due to accidents), financial assistance for marriage of daughters of fisher folk, old age pension, financial assistance to dependents after the death of fisherfolks, treatment of fatal diseases, family planning activities, maternity benefits, education promotion schemes, widow pension, motorization of country craft, assistance for the purchase of nets, subsidy on bankable schemes, interest-free loans for selected schemes, compensation for loss of fishing implements due to natural calamities, financial assistance to small scale self-employment schemes for fisherwomen groups, revolving fund under Theera Samurthy Scheme, additional life security scheme against death and disability while fishing, assistance for construction of new houses under housing schemes, assistance for construction of latrines under sanitation schemes, assistance for repair of existing houses, information about various schemes



implemented by the government of India and sister concerns of the Fisheries Department such as Society for Assistance of Fisher Women, Agency for Development of Aquaculture, Fish Farmers Development Agency, NFDB (National Fisheries Development Board), etc., and up-to-date details of existing rules and regulations related to the fisheries sector. (KILA 2017)

In spite of these there are sectoral responsibilities assigned to Matsya Bhavans under the concerned LSGs. These services aim to promote the well-being, livelihoods, and sustainability of the fishing community, and are carried out by the Matsya Bhavans in accordance with the guidelines and policies outlined in the Administrative Manual for Transferred Functions of 2017. (The Manual states that the services rendered to fisher folk are equivalent to the services provided to Scheduled Tribes as per G.O. (M.S).No.80/2017 dated 03.04.2017.)

As the designated officer by the Director of Fisheries, the Matsya Bhavan Officer has general responsibilities related to the fisheries sector entrusted to the Gram Panchayat. These include:

- i) Matsya Bhavan Officer will be designated by the Director of Fisheries and he will be the Implementing Officer of the Gram Panchayat in the Fisheries Sector.
- ii) He/she will be responsible to ensure the general restrictions prescribed under Kerala Marine Fisheries Regulation Act, 1980 and Kerala Inland Fisheries and Aquaculture Act, 2010.
- iii) Following the guidelines for setting up farms and hatcheries, which includes adherence to best practices for fish farming and aquaculture operations.



- iv) Maintaining the PANFISH book, which is a record of fishery resources in the area, and providing necessary information to the Gram Panchayat as and when required.
- v) Attending the Block Level Bankers Committee (BLBC) meeting and providing input in the drawing up of credit plans for the Fisheries sector, which includes facilitating access to credit for fisher people and promoting financial inclusion.

The Matsya Bhavan Officer plays a crucial role as a liaison between the Gram Panchayat and the Fisheries Department, facilitating the effective implementation of fisheries-related policies, regulations, and schemes. The Matsya Bhavan has been transferred to local self-government institutions, and the Matsya Bhavan Officer holds the responsibility at the local level. At the local government level, the Matsya Bhavan Officer is responsible for a variety of tasks and responsibilities. These responsibilities include:

- a) Formulating and implementing projects on transferred schemes as per Schedule III and Section 166 of the Kerala Panchayati Raj Act, 1994, following the procedures prescribed by the Government of Kerala from time to time. This involves planning, budgeting, and executing projects related to fisheries in the Gram Panchayat area.
- b) Integrating State and Central schemes and schemes of other governmental institutions, including those related to Fisheries, Agriculture, Irrigation, and Forest departments, as well as MLA and MP funds, with the local plan to ensure effective utilization of resources and maximize benefits.
- c) Utilizing various awareness creation programs, camps, sponsored by Government/NGOs, and incorporating them into the local plans to promote awareness and participation of local communities in fisheries-related activities.



- d) Convening Matsya Sabha, vetting proposals, and adopting them according to plan procedures. Matsya Sabha is a statutory body constituted as per G.O (Rt.) No: 350/09 F&PD dated 25.06.2009, to manage and provide sustainable support to the institutions and assets created under Tsunami Rehabilitation Projects (TRP).
- e) Participating actively in Grama Sabha and Development Seminar, explaining and answering questions as required, assessing needs, requirements, and suggestions, and formulating projects as per the norms to ensure community participation and input in fisheries-related decision making.
- f) Preparing the Status report and the Annual as well as the Five Year Plan, providing technical information and advice, identifying sources of finance, addressing legal issues, and exploring possibilities of integration to ensure effective planning and implementation of fisheries-related projects.
- g) Providing all necessary files and records for Performance audit, Kerala State Audit Department, and AG's Audit, and addressing audit notes and objections related to expenditure made by the Implementing Officer of Fisheries Projects, taking necessary action for clearance of audit objections/disallowances.
- h) Maintaining regionally specific background information on various aspects of fishery activities, including acceptability, legal support, details of successfully implemented projects in neighboring Gram Panchayats, and updating/adoption of such information in the planning and implementation of fisheries-related projects.
- i) Preparing resource maps on available potentials, over-exploited, underutilized, and other potentials for fisheries development, as well as identifying resources that are already extinguished or under extinction and declared as heritage property, ecologically sensitive



- zones, protective or restricted zones, etc., to inform decision-making and planning.
- j) Conducting Theera Mythri management council meetings of the Gram Panchayat, as per GO: (Rt) No: 350/09 F&PD dated 25.06.2009, to manage and provide sustainable support to the institutions and assets created under Tsunami Rehabilitation Projects (TRP).
 - k) Preparation of action plans and obtaining approval from MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) related to the Fisheries sector, ensuring effective utilization of MGNREGS funds for fisheries-related activities.
 - l) Conducting awareness camps to educate and inform local communities about various aspects of fisheries, including best practices, regulations, and schemes, to promote awareness and participation in fisheries-related activities.

Overall, the Matsya Bhavan Officer plays a crucial role in the planning, implementation, and monitoring of fisheries-related projects and activities at the local government level, ensuring effective utilization of resources, community participation, and compliance with regulations and guidelines.

Matsya Sabha

One of the responsibilities of the Matsya Bhavan is to form Committees such as Matsya Sabha to support and monitor the activities of Matsya Bhavan under the leadership of elected members and ensure the active participation of interested organization and individuals. The Matsya Sabha was expected to articulate the views of the community to the Local Self Government institutions and ensure that the voice of the fishers and their genuine needs are met through proper planning and implementation of the numerous development assistance programs of the Government.



With the inclusion of three agencies (Department of Fisheries, Matsyafed, Matsya Board) representing three crucial sectoral needs in the Matsya Bhavan, active participation and lead role is expected from the Matsya Bhavan in providing necessary information and support to the Matsya Sabhas in their deliberations. The main purpose of the Matsya Sabha was to ensure peoples' participation, and to plan guidelines to suggest strengthening the Grama Sabha. This can be achieved by convening, Ayal Sabha (Assembly of neighborhoods), Matsya Sabha for traditional fisher people. Matsya Sabhas of traditional fisher people have to be convened in the wards that cover fishing villages as declared by the Department of Fisheries. The membership eligibility to the Matsya Sabha is restricted to households with at least one family member who is an active fisherman. The adult members from such families whose name is in the voters list are eligible for participation in the Matsya Sabha. The purpose of the Matsya Sabha is to strengthen democratic participation of fisher people in the local planning process of LSGIs. The participation of fisher people – one of the most backward sections in the State – in the Grama Sabha has not been satisfactory for several reasons. Creating inclusive platform for fisher people, the Matsya Sabha should provide them the space to express their needs freely. Convening the Matsya Sabha prior to Grama Sabha ensures that their demands are represented in the democratic process; thereby ensuring social justice to the fisher people by proportionate distribution of resources, funds, and functional mechanisms. (14th Working group Report, SPB)

Performance of fisheries sector under Decentralised Plan

In the first year of the Ninth Five Year Plan, the fisheries sector was not adequately represented, and plans were poorly formulated. The local administration was criticized for their inefficiency in dealing with the complicated issues faced by Tribal-Dalit-Fishermen areas. A study found

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



that the situation of fishes, which significantly contributes to the state's economy, was dire, and fishermen who relied on the sector for their livelihoods were facing complex problems. The study recommended that animal husbandry and fisheries be included under a separate category in planning guidelines to ensure proper representation of the fisheries sector in the coming years. However, the amount allocated for animal husbandry and fisheries, which should be 40-50% of the allocation for productive sector projects, is unspecified. Therefore, a separate heading for the fisheries sector or a specific allocation based on the needs of the coastal population must be specified to prevent the fisheries sector from losing its rightful share.

Despite the implementation of people's plan, little effort has been made to understand the unique characteristics of the coastal zone and the complex issues faced by the fisheries sector. In response, the Planning Board formed two high-level committees to provide guidance: the Livelihood Strategies in Fisheries committee, chaired by Dr. John Kurien, and the Fisheries Management committee, chaired by Prof. PC George. Although both committees submitted expert reports to the Planning Board, their recommendations were not made public, nor were their reports published. Thus, it is essential to study the specificities and problems of the fisheries sector and formulate suitable strategies to incorporate them into public planning. It was recognized that development strategies should focus on improving the quality of life of fishermen, rather than solely increasing production, from the perspective of fishing community development.

In the second year of the 9th Five Year Plan, practical training was conducted to identify issues in the fisheries sector and create appropriate projects. Awareness programs were also organized for women and youth to encourage their participation in village councils. These interventions



had a positive impact on various local government bodies, including the Thiruvananthapuram Corporation, where ward councilors, the fisheries department, and voluntary organization workers collaborated to develop numerous suitable projects. The share of the fisheries sector in the village panchayats of Karumkulam, Anjuthengu, and Chirayinkeezhu increased as a result. The contribution of the fisheries sector projects in gram panchayats increased by 11.32 percent, and their share in projects rose to 7.72 percent. By involving voluntary organizations and fishermen's movements, their expertise, government officials, voluntary organizations, and councilors, more project proposals were generated in Thiruvananthapuram Corporation. This successful approach should be replicated in other local government bodies.

Despite the challenges faced by local governance in the coastal region, there have been several positive efforts to improve the situation. For instance, during the 9th Five Year Plan period, Gram Sabhas in Thiruvananthapuram district became more creative due to the street dramas performed by the youth in Thiruvallam gram panchayat. These actions not only helped the authorities but also raised awareness among the people and made the gramasabha more dynamic. These isolated actions serve as examples of strengthening the local system through alternatives to mass mobilization, policy-making pressure, and research and knowledge dissemination. Despite the challenges, there is hope that these positive endeavors will continue to contribute to improving the governance of local administrations in the coastal region.

During the 10th Five Year Plan period (2002-07), the Kerala Development Plan aimed to establish decentralized planning in the coastal panchayats of Kerala. The plan was based on the assumption that the three-tier panchayat municipal bodies, established on a democratic basis, had the



capacity and capability to perform their duties satisfactorily. The plan aimed to vest development activities that touch all aspects of people's daily life in local government institutions, providing an opportunity for people who are socio-economically backward to participate in the development process.

Under the Kerala Development Plan for Decentralized Planning, the budget allocated to the marine fisheries sector during the plan period (2002-07) from the plan document published by the local governments during the 10th five-year plan period was studied. The study focused on analyzing the budget amount proposed for the marine fisheries sector under the production sector during the 10th Five Year Plan period. However, the situations for the coastal population, who depend on the fisheries sector and play a vital role in the state's economy, remain backward despite their contribution to the state's economy. (Rajan JB & Haribabu TP, 2005)

During the 11th Five-Year Plan, significant progress was made in the marine fisheries sector, particularly in the realm of infrastructure development. In the subsequent 12th Five-Year Plan, the focus shifted towards promoting sustainable growth of Fish and Fisheries for the purposes of enhancing nutrition, ensuring food security, and driving economic growth. This was to be achieved by leveraging the infrastructure that had been developed during the previous plan, with particular attention paid to the conservation and management of inshore fishery resources, boosting offshore marine fish production, optimizing the use of harvested fish, and increasing value addition.

The 12th Five-Year Plan in the fisheries sector focused on improving the coastal area by providing infrastructure, housing, sanitation, drinking water, and livelihood. It also aimed to increase inland fish production to 2



lakh tonnes, strengthen post-harvest infrastructure, and improve the production of value-added products. The plan also included support for micro-enterprises, credit support, and social security coverage. The fisheries sector was allocated 1,471 crore during the 12th Five-Year Plan, which makes up 1.44% of the total State Plan outlay and 16.66% of the outlay in Agriculture and Allied Sectors. However, the actual amount spent during the plan period was 1,292.69 crore, which is 91% of the budgeted amount. The State Plan for Fisheries and Coastal Area Development had a budget of 345.03 crore in 2016-17, but the expenditure reported was 381.22 crore, which is 104% of the State Plan outlay. CSS schemes received a budget of 63.99 crore and had an expenditure of 77.44 crore, including a scheme with NCDC assistance that exceeded its budget.

As the State embarks on its 13th Five-Year Plan, the Fisheries sector is poised to play a significant role in driving development. To achieve this, the sector must prioritize two key objectives: (a) enhancing fish production to ensure nutritional security, and (b) reducing poverty among fisherfolks by ensuring equitable distribution of production benefits to the community on a sustainable basis. However, these goals must be pursued while also addressing the challenges posed by climate change and environmental degradation. The State's resource base presents ample opportunities for the growth of aquaculture, particularly in inland waters.

The active participation of Local Self Government Institutions (LSGIs) can be a game-changer in this regard. Future efforts must also focus on resource conservation and the elimination of harmful fishing practices to ensure a sustainable catch in the years to come. With appropriate technological support and extension activities, the Fisheries sector can be expected to flourish and emerge as a sunrise sector in the coming years.



Utilization of funds from productive sector by the LSGs to fisheries sector during the last 10 years

Table.2.8. Percent of fisheries sector expenditure with in the productive sector

	Gram Panchayat	Block Panchayat	District Panchayat	Municipality	Corporation	Total
2012-13	1.4%	1.1%	3.8%	6.4%	16.0%	2.2%
2013-14	1.6%	0.7%	4.6%	4.2%	30.4%	3.0%
2014-15	1.0%	0.6%	2.0%	3.9%	17.4%	1.8%
2015-16	1.2%	0.1%	1.7%	2.7%	18.2%	1.9%
2016-17	0.8%	0.4%	2.6%	3.7%	20.0%	1.8%
2017-18	0.8%	0.3%	0.2%	4.8%	14.4%	1.3%
2018-19	1.5%	0.6%	0.9%	3.6%	19.4%	1.9%
2019-20	1.2%	0.6%	1.7%	3.1%	5.7%	1.4%
2020-21	2.1%	1.0%	2.0%	3.3%	10.3%	2.5%
2021-22	2.6%	0.9%	2.9%	3.2%	11.3%	2.7%
GT	1.5%	0.6%	2.0%	3.7%	14.2%	2.1%

(Economic Review 2016, 2018, 2020, 2022)

In fisheries sector, expenditure in 2012-13 was 2.2 % of the primary sector, and it increased to 2.7% in 2021-22. Overall, it shows that 2.1 % of the amount is spent from the productive sector to fisheries sector during the last 10 years. Amountwise expenditure of 2012-13 to 2021-22 (Appendix.7)

Table.2.9. Contribution from Women Component Plan fund to fisheries sector

WCP & Fisheries in the 13th FYP (In crores)			
	WCP Total	Fisheries	%
2017-18	169.74	0.63	0.37%
2018-19	194.64	0.33	0.17%
2019-20	131.28	0.09	0.07%
2020-21	244.05	0.99	0.41%
2021-22	226.78	1.82	0.80%
Total	966.49	3.86	0.40%

(Economic Review 2022)

LSGs during the 13th five year plan period had utilized some amount for fisheries sector, development from its women component plan. Fisher folk



females engaged in the allied activities would benefit from the women component plan; however a large majority depends on other jobs. It is clear that the fisher-folk in Kerala are facing significant deprivation, including poverty, poor health, lack of access to education and poor sanitation facilities. Examining these problems, this study intends to provide review of the factors involved the challenges before the fisher-folk and identify the ways to improve their socio-economic condition. Concerted efforts from government, NGOs, and other stakeholders are required to ensure that the fisher-folk are active producer of consumption wealth and they are included for basic support. Overall, it is imperative that policy makers and local authorities continue to prioritize the needs of this marginalized section and work towards promoting inclusive and sustainable development.

Despite the progress made in many areas in Kerala, the fisher-folk still face various difficulties and remain as vulnerable and marginalized group. Promoting their economic and social empowerment should be a priority for policymakers and development practitioners in the state. This can include measures such as improving access to education and training programs, providing affordable housing and basic amenities, supporting sustainable fishing practices, and promoting community-led development initiatives that take into account the specific needs and aspirations of this group. Ultimately, it will be crucial to ensure that the voices and perspectives of the traditional fisher-folk are heard and included in the development agenda of the state. It is important to acknowledge the crucial role that the local governments play in promoting development and addressing basic and professional needs of disadvantaged communities. Through decentralized planning and beneficiary participation, local government institutions identify and target specific areas of backwardness and work towards improving the social and



economic conditions of marginalized communities, such as the traditional fisher-folk.

The policies implemented during the last eight five-year plans for fisheries development in Kerala that a comprehensive vision for fisheries development, which ensures the long-term and balanced exploitation of fisheries resources while uplifting fishermen socially and economically, has not been developed. The lack of this holistic view has resulted in the overexploitation of fisheries and the socio-economic backwardness of fishers. Additionally, quality control measures must be implemented to ensure that the fish produced meet the required standards. The ban on trolling during specific periods is a good step towards sustainable growth, but there is a need for strict enforcement of regulations to prevent overfishing and indiscriminate fishing practices. Overall, a holistic approach is necessary to ensure the long-term sustainability and growth of the fisheries sector in Kerala.

In summary, the evidence indicates that the fisher-folk in Kerala continue to face poverty and deprivation of essential support systems, despite their vital contribution to the state's food basket. Their participation in local government planning processes is rare, and they lack basic livelihood amenities, including poor land holdings, housing, and health, resulting in high mortality and morbidity rates, low sex ratio, and a high prevalence of intoxicant abuse. This study empirically evaluates the depressing situation of the marine fisher-folk in Kerala. This study initiated by KILA to examine the experience and potential of decentralized planning in Kerala with regard to the fisher-folk is a step forward to shed light on the current situation of the traditional fisher-folk, and it evaluates the effectiveness of the local governments in implementing development schemes to promote their livelihood opportunities.



3

FOCUS GROUP DISCUSSIONS OF THE STUDY

Marine fisherfolks in Kerala make important contributions to society and the economy through their daily requirements and export earnings. However, they face marginalization, poor living conditions, and risks in rough weather. They are among the most vulnerable communities in society and seek improvements in land ownership, infrastructure, employment, education, and social status. Despite some progress, there is still a significant gap between their needs and current state. This chapter examines their challenges through focus group discussions with stakeholders in decentralized planning and governance. It is important to acknowledge their contributions and work towards improving their living conditions and social status.

Views of Experts and Activists regarding the developments of fisher folk in the state

(Based on the discussion held in RC, KILA, Trivandrum on 29-1-2021)

Experts in the field of fisher folk studies have made serious concerns over the prevailing deprivation situation among this community in the state. The activists expressed their anguish over the prevalence of the marginalization, exploitation and helplessness experienced by the fisher folk in the southern region. They also have critically viewed this role of LSGIs in extending development support for this vulnerable section. While recognizing the positive effects of certain welfare policies, the

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



neglect of crucial livelihood requirements seem to remain as negative consequences.

- Drinking water shortage is a crucial problem and they incur high cost for sustenance.
- Infrastructure limitations pose severe constraints to their mobility and livelihood operations.
- Many schemes, though initiated for quick relief of the poor do seem to get abandoned mid-way largely to enable the needs of the corporates holding regional control.
- The living areas of the fisher folk opened get destroyed due to environmental hazards and neglect of public intervention.
- Much of the amount allocated for fisher folk development remain unspent disregarding the needs of the poor while the influential sections manage to get benefits.
- Bureaucrats from fisheries department also remain unconcerned about timely completion of project for the poor.
- Co-operative initiatives, both governments sponsored and group attempts also provide limited roles to empower the poor.
- The fishers who catch fish braving unfriendly climate at great risk, do not enjoy the right to get fair price for their catch, it is decided by auction and commission agents of traders. They offer paltry sums to the fisher folk and fix huge sales price to be extracted from consumers.
- In the distribution of new motor boats and kerosene fuel for fishing boats, corruption prevails rampant. The fishermen get damaged boats while the new ones are then clandestinely sold and the supply of ration fuel also seem manipulated.

In short the activists have brought out serious irregularities prevailing in the fishing sector where the traditional fisher folk remain disadvantaged



in all their livelihood activities and living facilities. They insist this Local Self Government Institutions to provide priorities for all development needs of this subaltern section. The experts and activists argued for a detailed Investigation on all aspects of development disadvantages experienced by the traditional fisher folk covering habitation, infrastructure, education, land ownership, natural disasters, employment and income, exploitation by external interests, limitation of Co-operative attempts, bureaucratic disinterest in programme implementation etc.

[However, in the actual survey conducted later could include much of the suggestions they made but kept silent on certain sensitive issues like investigating bureaucratic disinterest which cannot be captured through direct enquiries.]

Focus Group discussion at Trivandrum

The initial round of discussion on the study of fisher folk in the state started with social workers assembled in the Pastoral Church, Trivandrum. Apart from activists a few clergy men closely associated with the fisher folk social life in the region also joined the discussion. The major issues highlighted include:

- The continuous exploitation by middleman traders under the influence of marine exporting companies. It was commonly seen during the arrival of traditional fishermen with their catch, the powerful trading lobby grabs the fish at their terms.
- The traditional fisher folk knowing only traditional technique of fishing, often experience high risk of life during catastrophic weather turbulence.
- Education of their children often gets disturbed due to livelihood uncertainties.
- Health care system available in the coastal region is meager and the patients with serious illness often remain untreated.



- Shortage of basic infrastructure in the shore area is a serious drawback affecting their social and economic activities. Lack of protection for offshore fishing attempts limits their earnings prospects.
- Dumping of plastic waste and other pollutants into the sea creates heavy damage to the natural habitation of fish leading to its deterioration. Throughout the coastal region from South to North, the practice goes on. This seriously affects regeneration of migratory fishes and this destruction of estuaries prevents their breeding and growing environments.
- Another serious threat to traditional fishing is the bulk catching of fish stocks using large fishing vessels by exporters. Moreover they destroy the fish lings and take away the large ones for export. This leads to gross destruction of the fish stocks and affects the natural regeneration process. The traditional fishermen mostly fishing on the nearby sea limits end up their search with a little or no fish and it seriously affects their livelihood. Whatever they get is again usurped by the treatment-contractor lobby. This problem is often brought to the government for intervention. The LSGs in concerned regions have to seriously regulate their fishing activities and protect the traditional fisher folk who depend entirely on this occupation for all their needs and survival.

Focus Group discussion on fisher folk study at Thrikkunnappuzha in Alappuzha district

In this focus group discussion, participating representatives of fisher folk, social activists and LSGI regional officials, the members have raised several issues regarding employment opportunities available for the fishers, higher education facilities for their children, environmental disasters affecting their life and livelihood, and the need for timely



intervention from fisheries department and local government institutions. They urged to ensure reasonable development intervention in this marine fisher folk dominated region. The following are the problems they highlighted:

- Difficulty to share the 50% beneficiary contribution norm for getting departmental supply of fishing equipment and other assistance. They urged for some other soft provisions in this regard.
- In attaining higher education for their children they need support for getting learning equipments, laptops, etc. and assistance to build separate study room at home. Also they demanded reservation for admission to their children in higher education as given for SC/ST sections.
- Financial support is given for developing fish farms and it has made good impact, but in several situations the attempts by poor farmers have failed due to environmental factors. But they cannot revive their venture because of not getting compensation from the panchayat or department for such imminent disasters.
- The scheme to provide financial support for fish production activities has made good impact. But the poor farmers could not benefit much due to low sustaining ability compared to the rich farmers.
- The representatives have concluded their intervention by suggesting to evolve an effective support system for the vulnerable fisher folk who experience various difficulties in protecting their livelihood, resisting exploitation by influential groups, indifference from service providers, environmental disasters, educational drawbacks etc. The fisheries department and the local government authorities have to follow more lenient attitudes towards solving the difficulties of the poor traditional fisher folk in the region.



Focus group discussion at Aroor in Alappuzha district

The participant consisted of representatives from fisher folks, social activists and officials of the Gram Panchayat and other members concerned about local issues and fisher folk welfare. The major difficulties the fisher folk face in this area are briefly:

- Difficulty to contribute the 50% beneficiary share for getting ownership of fishing equipments and travel boats allotted by fishery department as part of welfare policies. The poor beneficiaries are unable to contribute this share and the banks also do not come forward to help them.
- Repair of damaged boats and nets is not getting done because the traditional skill required is fast disappearing as the new generation seek other vocations.
- Individual fish farming is lucrative but poor farmers cannot afford the heavy investment required. Some Co-operative attempts can be considered with LSGI support.
- The practice of putting fish-lings into the lake during season would yield big fish catch to the fishers effort is required to practice it systematically to make good returns.
- Use of Chinese nets seems to be indiscriminately practiced and even without license. This would affect the natural breeding at a harvesting practice followed by poor traditional fishermen.
- The fish processing plants setup on the riverside seem to dump the wastes into the river and it creates heavy pollution. It affects both fish generation and human habitation on the coastline. Safety measures are not properly under taken.
- Another problem raised for discussion was about the women empowerment component in local level plans. This aspect does not get sufficient consideration in the panchayat plan formulation.



The participants have raised several issues that adversely affect fishing activities in the region and the need for Local body intervention to improve the livelihood of these poor fishers.

Focus Group discussion at Quilandy in Kozhikode

The group consisted of social activists, largely concerned with fisher folk problems, leaders from fisher folk community and officials dealing with social welfare departments. The group discussed various issues the fisher folk encounter during the livelihood activities.

- The major problem they face was the deteriorating fish catch. Scarcity of fish is experience even during monsoon.
- High cost of engine fuel, kerosene becomes unaffordable when the fish catch becomes limited, even the distribution of subsidized kerosene from Matsyafed also cannot support them due to deteriorating fish catch.
- Leakage of fuel from old boat engines spread on the sea surface and it affects the growth of plankton the primary source of food for fishes.
- Catching fish lings for fertilizer companies is another destructive action by fishing vessels.
- Discharge of chemical pollutants, pesticides, fertilizers etc, into rivers and other water bodies eventually reaches the sea and causes extinction of shrimps and other fish lings.
- Using inappropriate nets for fishing is another reason for destroying fish lings.
- Unscientific fishing practice disturbs the whole fish habitation and leads to eventual depletion of fish Stocks.
- Higher education after secondary is seldom pursued by fisher folk boys. Many get dropped out after joining and they addicted to



alcoholism. The average life expectancy of male range between 50-60 years. This situation puts the families into severe livelihood crisis.

- The boat owners exploit the fisherman by charging high rent and middlemen traders resort to bargaining for low price for their catch. Indebtedness is quite high among the fishermen community.

The group had made a few suggestions to help the fisherman withstand the difficulties to some extent.

1. The fisherman should have the right to sell their fish.
2. Replace with modern mechanized boats using electric fuel or other renewable energy for fishing purpose. It will reduce pollution and minimize cost of fishing. Also install modern equipments to help the fisherman while fishing.
3. Entrust the task of waste management on the shores and sea with Haritha Karma Sena organised by concerned local bodies.
4. Development plans are often prepared by officials in local bodies without necessary popular support. Instead location specific innovative plans are to be evolved for execution with beneficiary involvement.
5. Active government intervention is necessary to increase the availability of fish, to ensure fair marketing practice and to improve the welfare of the traditional fisher folk.
6. The convergence of activities initiated by departments of LSGIs and fisheries and specific welfare boards, such as Matsya fed, Matsya Bhavan, etc. can help avoid duplication of schemes and excess fund allocation leading to leakage and misutilisation.
 - Create a model of convergence of activities to gain maximum returns.
 - Enable asset creation by the fishing community.



- Ensure increased availability of information.
- Balancing of technological improvements and skills is necessary.

The major problems identified through the overall discussions are as follows;

There are several problems that are affecting the fishing communities and marine resources. The over-exploitation of juveniles is a significant issue that is leading to depletion of fishing stocks and marine resources. To address this, a self-imposed ban on the regeneration period can be implemented to prevent scarcity and promote effective conservation. This approach is similar to the concept of forest rights, where natural resources are preserved for sustainable use. By allowing juveniles to regenerate and grow to maturity before being harvested, we can ensure the long-term sustainability of fish stocks and marine resources, benefiting both the fishing communities and the ecosystem.

The lack of women-friendly markets for women retailers is a pressing issue. It is crucial to ensure that assistance reaches deserving fish workers and does not result in loss of benefits due to misallocation. To address this, involving the CDS (Community Development Society) chairperson as a member in the working group of Local Self-Governments (LSGs) can help ensure the participation of self-help groups in improving the conditions of marginalized women. Women self-help groups such as Kudumbasree can play a vital role in areas such as loans utilization, interest rates, savings ratios, meetings and programs, micro-enterprises, fairs, and markets. Identifying and leveraging the role of these groups can empower women in marginalized communities and promote their economic and social well-being.



Coastal community volunteers can play an important role in coastal panchayats and wards. Co-operative societies must work under the control of actual beneficiaries to ensure effective utilization of resources. The high investment sector needs large social overhead capital to boost direct productive activities. For instance, in the case of fishing boats, high catch can be attained through large boats with 30 workers whereas boats supplied by the government are only for 3-4 persons. However, LSGs may lack the necessary knowledge of funding to the sector for productive activities.

There should be proper organizing of the fisherman community and their needs and benefits must be identified while keeping in mind human values. For instance, the Vypin project is currently under legislators' interference, which can hamper its effectiveness. Introduction of good international and national models to standardize these communities is necessary for the sphere of cooperative fisherman units, fisheries schools, fish oil extraction units, etc. Some of the other problems and suggestions discussed are as follows:

The common problems the marginalized community faces are:

- Most of the programmes are unsuitable for their development.
- Drinking water problems in Coastal areas remain unsolved.
- Funds available for livelihood improvement seem inadequate.
- Legal/ Constitutional Provision: Separate constitutional protection is not accessed to the fishing community. They are highly vulnerable to mend of their livelihood and to attain economic wellbeing. High Occupational hazards and economic backwardness compel to place them along with other subaltern sections. Legal/Constitutional Provisions ensures the geographical conditions to properly allocate the economic resources.



- **Cooperative Societies:** The major role of cooperative societies is to improve the welfare of vulnerable groups. But in-the case of Matsyafed, which is controlled by political groups remain outside the control of traditional fisher folk.
- **No suitable plan formulation:** Most of the activists participating in the policy formulation activities of LSGs do not seem to influence much. Grama Sabha participation becomes futile if it does not lead to improve their standard of living.
- **Scattering of Coastal wards:** Most of the fishing villages and coastal wards are located adjacent to general wards. So the programmes are prepared based on majority interests may not become suitable for coastal areas and the fishing communities.
- **No special consideration in LSGIs Plan:** In the allocation of Plan fund in LSGIs the fishing community is not listed as a separate group. The resources allocated may not necessarily cover funds for fisher folk programmes.
- **Skill Development & SHGs:** Kudumbasree is functioning with financial support from government. However, it does not seem to contribute much in production or value-addition and skill development in fish processing units, or other marine products, enterprises.
- **Fund Allocation:** The major share of fund allocation for fisherman development gets diverted to building Infrastructure like Sea-walls, and livelihood aspects get neglected. The centralized fund allocation method therefore seems to neglect vulnerable communities. Provide separate allocation of LSGs fund for the development of the fishing community based on their population share in the panchayats.
- **Identification of the targeted section:** It is important to identify the deserving beneficiaries among the fishing community. Generally the interests of the middlemen prevail especially in large fishing pockets.



Therefore a cleaning up necessary to segregate the real fishing community.

- **People's Attitude:** People including the young generation of the fishing community do not seem to do the fishing and allied jobs as regular earning. They consider it as low-status jobs. – Modernization of fishing activities like Norwegian fishing may be necessary for Kerala to encourage the youth among the fishing community.
- **Disaster Management:** Coastal protection and disaster reduction measures should not be widely undertaken during the acute phase of disasters like Oki, Gaja, Vayuu, etc. Climate change and seashore erosion are the major disasters facing the fisher folk. This situation needs national attention for effective prevention. Fishing should be discouraged during disasters.
- **Coverage of Information Network:** For proper coordination of activities by the fisheries department and LSGIs it needs linking and active participation of stake holders.
- **Depletion of fishing stock:** Increase in marine exports and travelling of huge vessels had to reduction in the fish stock and regeneration impossible. It will lead to eventual depletion of the fish stock from the sea.
- **Pollution:** Large layer of plastic bed is created by the dumping of plastic wastes into the ocean leading to reduction in the generation capacity of coral reefs which serve as the natural feeding grounds for fishes.
- **Modernization of coastal areas:** the establishment of major ports (Vizhinjam –Poonthura) and other tourism promotion areas(Marari Beach – Tourism site) in the coastal regions lead to eradication of the traditional fishing systems like Kattamaram, Chinese fishing nets, etc.



which support of their health and provide wealth for fishing community.

- Lastly, active lobbies of middlemen traders, officials, political and religious exploitation, living from the incomes of these marginalized communities is a major issue that needs to be addressed.

In conclusion, this chapter has delved into the complex issues and challenges faced in the fisheries sector, examining them through the lens of experts and stakeholders. Through these discussions, valuable insights have been gained to formulate effective tools for further study and development of fisherfolks through decentralization. The opinions and views of households and stakeholders engaged in the decentralization process have been carefully considered, providing comprehensive understandings of the realities on the ground are analyzed in the upcoming chapter.



4

DATA ANALYSIS OF THE REPORT

This chapter examines how local self-government institutions have contributed to the socioeconomic development of fisherfolks. Specifically, it focuses on the various fisheries projects implemented by LSGIs during the last two five-year plan periods (2012-13 to 2021-22). By analyzing household and individual surveys conducted in sample Gram Panchayats, the chapter identifies the status and empowerment of fisherfolks as a result of LSGI interventions. Stakeholder interviews with elected representatives and officials shed light on the LSGI's role in developing fisherfolks, while field investigators' observations provide insight into the perspectives of a common man in the development of these communities. The chapter includes the following sections:

Section 4.1: Analysis of the funding patterns in selected LSGIs

Section 4.2: Analysis of Fund utilization under major & sub-category in the fisheries sector

Section 4.3: Analysis of Household Survey

Section 4.4: Analysis of Individual Survey

Section 4.5: Reporting of Interviews with stakeholders

Section 4.6: Compilation of Field Observation Report



Section 4.1: Analysis of the funding patterns in selected LSGIs

This section focuses on the expenditure patterns of selected local self-government institutions on development projects over the past 10 years. It also examines the utilization of funds allocated to the development of fisheries sectors in the chosen Gram Panchayats. The figures presented under the categories of corporation, municipality, and Gram Panchayat represent the combined totals of the selected local self-government institutions

The table (4.1) shows utilization of various funds by the LSGs in the last 10 years. An average of 16.89 crores of rupees is spend by each LSGI every year for the overall development. The total expenditure incurred during 2021-22 is 2.7 times higher than the expenditure during the initial year 2012-13.

Graph.4.1. Average trend of expenditure of the total fund during the last 9 Year

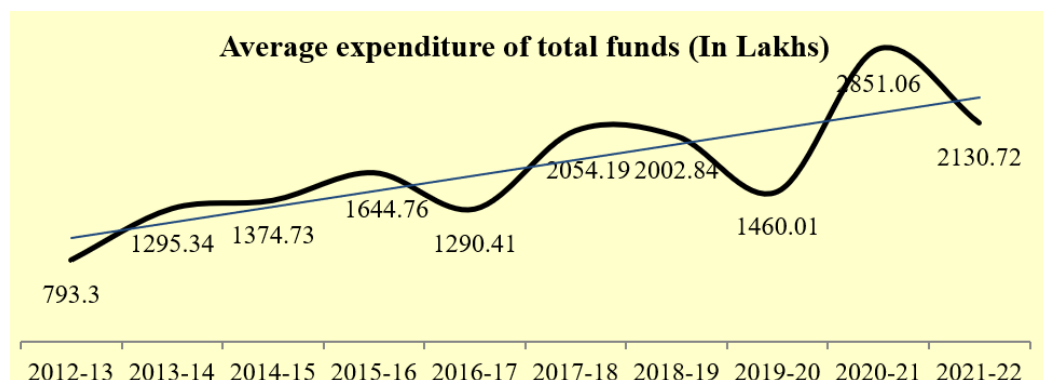


Table.4.1. Year wise amount on projects from different sources

Total amount on projects implemented during the last 10 years (In Lakhs)											
Source of fund	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
General Fund (A)	4642.6	10012.3	10065.39	11985.81	9242.88	12902.11	13744.84	11703.58	21006.15	19075.63	124381.29
SCP & TSP (B)	1481.71	2136.77	2406.85	2463.56	2087.58	2686.24	2714.5	2008.02	2782.82	2772.9	23540.95
Other Plan Fund (C)	3866.95	4931.28	5302.74	6467.23	7594.18	13986.36	10285.11	5281.97	14955.92	6019.49	78691.23
Plan Fund (D=A+B+C)	9991.26	17080.35	17774.98	20916.60	18924.64	29574.71	26744.45	18993.57	38744.89	27868.02	226613.47
Own Fund (E)	151.13	181.12	232.22	419.47	332.34	547.06	563.49	587.64	885.86	736.98	4637.31
Other funds (F)	4137.08	6054.71	6737.94	8269.69	3970.35	6853.68	8743.2	6699.04	11688.3	9748.04	72902.03
Total Fund (G=D+E+F)	14279.47	23316.18	24745.14	29605.76	23227.33	36975.45	36051.14	26280.25	51319.05	38353.04	304152.81
Average / LSGs / Year	793.30	1295.34	1374.73	1644.76	1290.41	2054.19	2002.84	1460.01	2851.06	2130.72	1689.74

(Source: Sulekha, Information Kerala Mission)

Table.4.2.LSG wise amount on projects from different sources

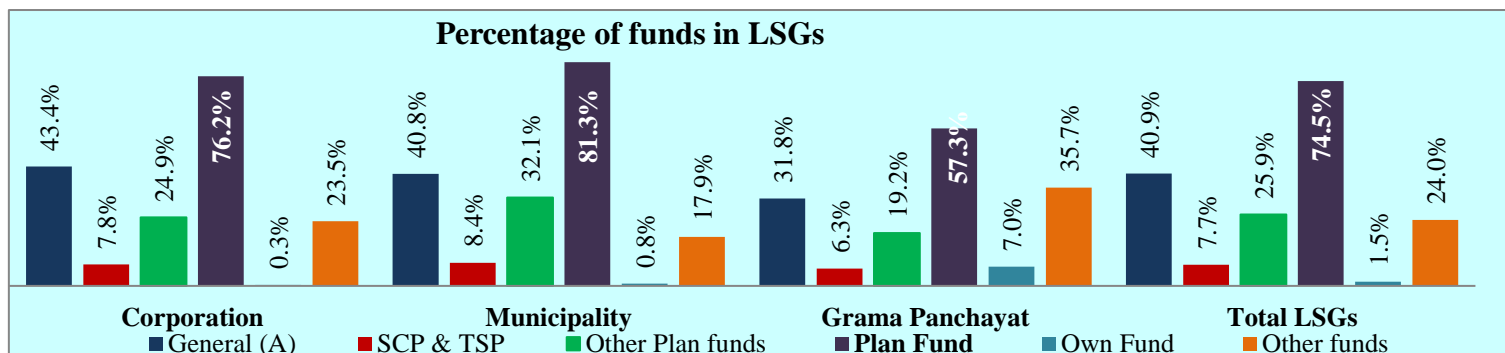
LSGI'S	General (A)	SCP & TSP (B)	Other Plan funds (C)	Plan Fund (D=A+B+C)	Own Fund (E)	Other funds (F)	Total Fund (G= D+E+F)
Kollam Corporation	35479.64	8368.85	18711.84	62560.33	543.00	13922.85	77026.27
Cochin Corporation	41239.81	5477.09	25255.52	71972.42	54.51	27594.2	99621.13
Corporation	76719.45	13845.94	43967.36	134532.75	597.51	41517.05	176647.40
Varkala Municipality	3192.76	1528.83	2167.61	6889.20	14.21	1512.43	8415.84
Paravoor Municipality	3448.93	1367.22	3077.21	7893.36	2.01	3059.18	10954.55
Alappuzha Municipality	13679.59	868.66	10371.04	24919.29	152.09	4539.88	29611.26
Ponnani Municipality	6676.98	1670.74	5485.43	13833.15	159.60	2418.31	16411.06
Quilandy Municipality	5318.16	1241.29	4373.89	10933.34	334.56	2636.58	13904.48
Municipality	32316.42	6676.74	25475.18	64468.34	662.47	14166.38	79297.19
Anjuthengu GP	1398.51	178.44	1033.96	2610.91	20.35	905.99	3537.25
Allappad GP	1327.01	79.03	825.40	2231.44	173.50	1291.4	3696.34
Mararikulam GP	1570.48	361.34	1008.86	2940.68	629.60	2356.71	5926.99
Purakkad GP	1705.98	295.66	925.32	2926.96	135.25	1650.43	4712.64
Ambalapuzha South GP	1076.36	231.85	724.90	2033.11	145.60	1403.71	3582.42
Njarackal GP	1046.99	498.59	588.88	2134.46	59.56	1096.57	3290.59
Pallipuram GP	1928.07	585.16	990.10	3503.33	919.95	2401.73	6825.01
Mangalam GP	1518.58	344.99	976.72	2840.29	427.96	2056.27	5324.52
Perumpadappu GP	1346.25	127.56	819.57	2293.38	242.95	1299.62	3835.95

Veliyancode GP	1405.68	205.56	810.86	2422.10	391.85	1897.94	4711.89
Azhiyur GP	1021.51	110.09	544.12	1675.72	230.66	858.24	2764.62
Gram Panchayat	15345.42	3018.27	9248.69	27612.38	3377.23	17218.61	48208.22
Grand Total	124381.29	23540.95	78691.23	226613.47	4637.31	72902.03	304152.81
%	40.9%	7.7%	25.9%	74.5%	1.5%	24.0%	100.0%

(Source: Sulekha, Information Kerala Mission)

The table shows the utilization of various funds by the LSGs in the last 10 years. 40.2 percent is used from general fund, 7.7 percent from TSP & SCSP Fund and 25.9 percent from other plan fund including grants from finance commission, centre and state shares, etc. constituting 74.5 percent of the total development funds. Own fund includes 1.5 percent of the total and other fund includes maintenance fund which form 24 percent of the total funds.

Graph.4.2. Percentage of amount utilized from various sources



Note: Plan Fund = General Fund + SCP & TSP + Other Plan Funds

The graph shows the composition of the expenditure from various sources of fund contributing 74.5 percent of the total development funds.

Table.4.3. Sector wise amount of projects from selected LSGs.

Sectoral classification of total amount utilized by the sample LSGs (In Lakhs)											
	*2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
Productive	NA	1285.69	1111.45	1106.37	1208.79	1768.52	1870.96	1100.49	2986.51	1980.59	14419.37
Infrastructure	NA	11428.05	12418.55	15425.94	8572.93	14557.18	14079.48	8177.42	21707.96	9911.89	116279.4
Service	NA	10602.49	11215.14	13073.44	13445.62	20649.71	20100.68	17002.31	26624.57	26460.57	159174.53
Total	NA	23316.18	24745.14	29605.76	23227.33	36975.45	36051.14	26280.25	51319.05	38353.04	289873.34

(Source: Sulekha, Information Kerala Mission)

*2012-13 – Data not available

The utilization of total fund under productive, infrastructure and service sectors for the development shows the following trends. The expenditure incurred during 2021-22 in productive sector is 1.54 times higher than the expenditure in 2013-14 and the expenditure under service also shows 2.4 times increase from 2021-22 to 2013-14. The expenditure incurred for infrastructure during 2021-22 is less by 1.1 times from the initial year 2013-14. The trend shows a shift in the development priority of the local self-

governments through government policy change of or other interventions, from infrastructure development to productive and service sectors enlargements.

Graph.4.3. Trend in the amount utilization for various sectors

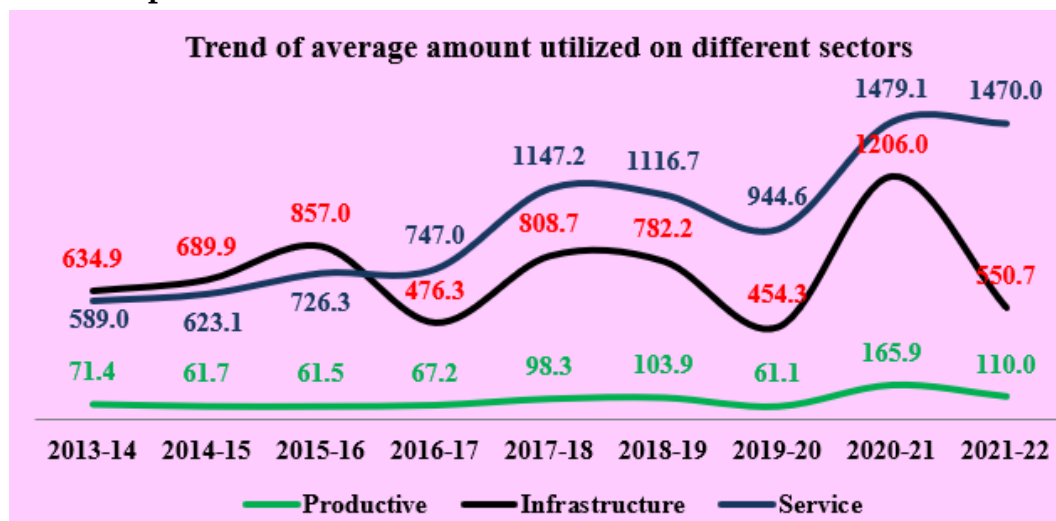


Table.4.4. LSG wise utilization of amount in different sectors

LSG's	Nos.	Productive	Infrastructure	Service	Total
Kollam Corporation	4842	3179.92	28170.14	42992.5	74342.57
Cochin Corporation	7246	2453.18	47201.88	44814.89	94469.96
Corporation	12088	5633.1	75372.02	87807.39	168812.53

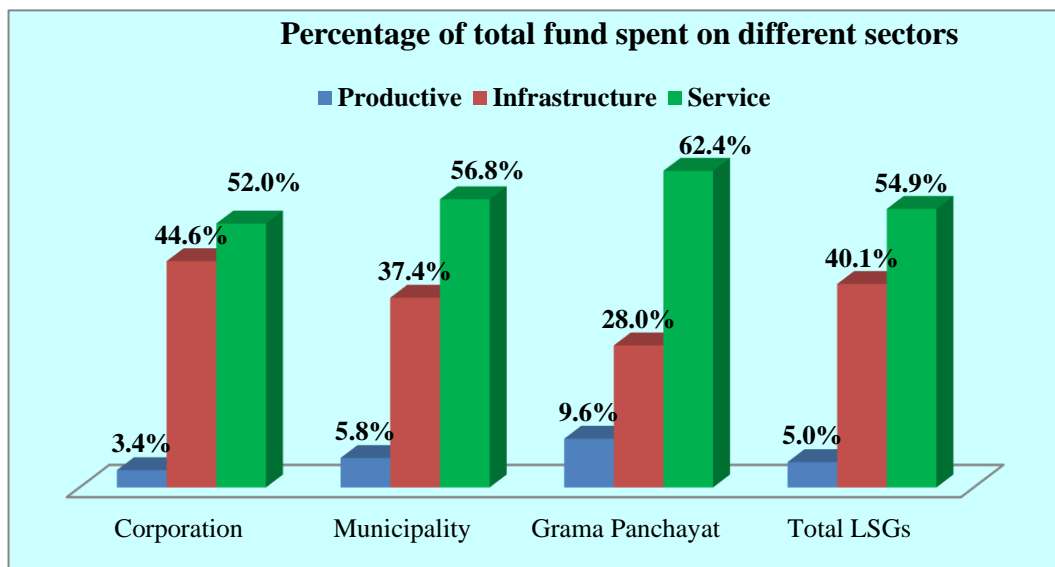
Varkala Municipality	1301	490.38	1976.92	5620.54	8087.83
Paravoor Municipality	1892	633.19	3905	5899.06	10437.24
Alappuzha Municipality	2155	1463.8	10832.65	15615.6	27912.05
Ponnani Municipality	2183	894.18	5686.26	9044.03	15624.45
Quilandy Municipality	2251	893.51	5675.75	6601.93	13171.19
Municipality	9782	4375.06	28076.58	42781.16	75232.76
Anjuthengu GP	834	380.04	833.96	2091.39	3305.4
Allappad GP	803	354.88	1265.04	1887.34	3507.28
Mararikulam GP	1067	479.85	1639.01	3553.93	5672.79
Purakkad GP	989	383.19	955.69	3151.26	4490.12
Ambalapuzha South GP	977	254.02	989.25	2170.29	3413.57
Njarackal GP	1055	326.41	1137.07	1645.27	3108.77
Pallippuram GP	1418	586.77	2162.41	3763.37	6512.55
Mangalam GP	1252	527.84	1122.2	3428.74	5078.78
Perumpadappu GP	1028	500.5	920.52	2226.4	3647.4
Veliyancode GP	1054	336.13	999.97	3141.13	4477.25
Azhiyur GP	993	281.58	805.68	1526.86	2614.14
Gram Panchayat	11470	4411.21	12830.8	28585.98	45828.05
Grand Total	33340	14419.37	116279.4	159174.53	289873.34
%	--	5.0%	40.1%	54.9%	100.0%

(Source: Sulekha, Information Kerala Mission)

The above table shows analysis of Gram Panchayat wise utilization of total amount on three different sectors such as productive, service and infrastructure. 54.9 percent of the total amount is spending on service sector, followed by 40.1 percent on infrastructure and 5.0 percent on productive sector. Corporation spends 52.0 percent on service sector followed by 44.6 percent on infrastructure and 3.3 percent on production. Municipality spends 56.8 percent on service sector, followed by 37.4 percent on infrastructure and 5.8 percent on production. While Gram Panchayats spends 62.4 percent on service sector followed by 28 percent on infrastructure and 9.6 percent on productive sector.



Graph.4.4. LSG wise percentage on different sectors



Service sector in all local bodies get the lion share of funds for development followed by infrastructure and productive sector gets the least preferences. Only in the Gram Panchayat some allocation is given to enhance a productive sector.

Section 4.2: Analysis of Fund utilization under major and sub-category in the fisheries sector

This section deals with the amount utilized in the fisheries sector during the last 9 years under different activities in LSGs. The amount spent on sub categories shows the priorities assigned for each activity in the fisheries sector

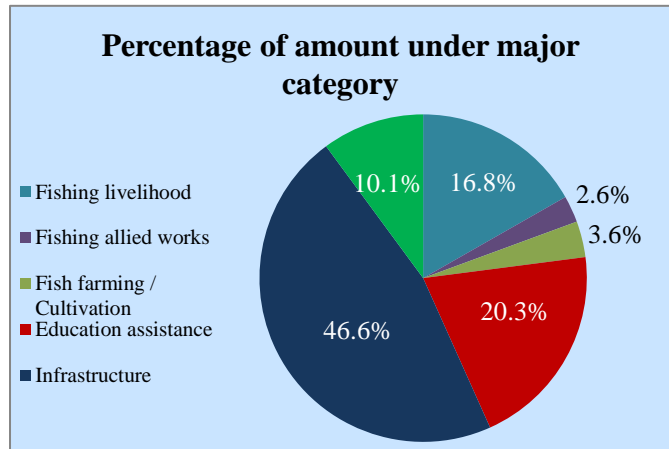
Table.4.5. Year wise amount utilized under major categories

Year wise amount utilization on major categories in fisheries sector (In Lakhs)										
Activity	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total
Fishing livelihood	106.52	32.20	12.74	23.83	25.70	36.33	25.92	30.20	39.58	333.00
Fishing allied works	10.39	0.00	0.00	0.00	14.85	9.20	3.19	0.60	14.20	52.43
Fish farming / Cultivation	8.02	2.32	2.78	5.10	0.00	0.00	0.00	36.60	15.75	70.57
Education assistance	0.00	0.00	0.00	0.00	0.00	135.28	49.72	145.61	73.79	404.40
Infrastructure	157.50	149.60	112.15	52.80	210.02	90.27	6.95	146.77	0.00	926.07
Others	96.27	26.61	2.91	75.00	0.00	0.00	0.00	0.00	0.00	200.79
Grand Total	378.70	210.74	130.58	156.73	250.56	271.08	85.77	359.77	143.32	1987.25
Average / LSGs	21.0	11.7	7.3	8.7	13.9	15.1	4.8	20.0	8.0	12.26

(Source: Sulekha, Information Kerala Mission)

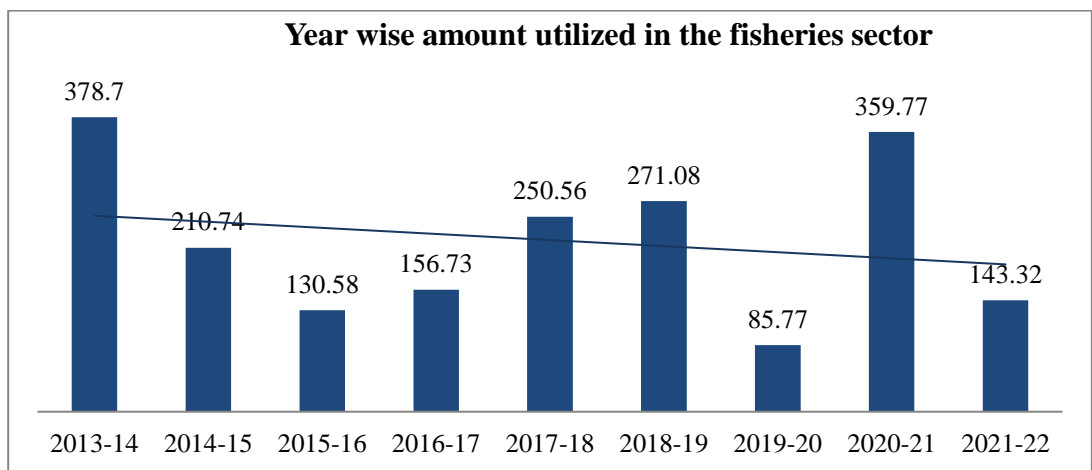
Graph.4.5. Percentage of amount utilized in fisheries sector under major category

The table shows the amount utilized in fisheries sector from the selected LSGIs in the last 9 years. It shows that the expenditure incurred during 2021-22 is 2.64 times lower than the expenditure in 2013-14 showing a negative trend



in the utilization of the amount. The amount utilized on major categories of fisheries sector is not uniform in all the years. An average of 12.26 lakhs is expended by each LSG for the last 9 years for fisheries development. It shows 2.69 times decline in the assistance given for their livelihood in 2021-22 compared to what was allocated in 2013-14.

Graph.4.6. Year wise utilization of amounts in the fisheries sector



The graph shows almost a negative trend in the utilization of amount set apart in the fisheries sector from 2013-14 to 2021-22. Highest amount 3.78 crores was spend by all the LSGs in 2013-14 only followed by 3.59 crores in 2020-21. In all other years the expenditure was much low and very low 0.857 crores in 2019-20.

Table.4.6.LSG wise utilization of amount under major category

LSG wise utilization of amount in fisheries sector based on major category							
Local Bodies	Fishing sector	Fishing allied works	Fish farming / Cultivation	Education assistance	Infrastructure	Others	Grand Total
Cochin corporation	14.16	0.22	7.32	43.76	775.42	0.00	840.88
Kollam corporation	97.16	3.81	12.97	35.05	87.20	150.00	386.20
Corporation	111.32	4.04	20.29	78.82	862.62	150.00	1227.08
Alappuzha Municipality	39.29	2.76	12.86	63.70	18.23	0.00	136.84
Paravoor Municipality	15.19	0.00	2.14	0.00	2.81	0.00	20.15
Ponnani Municipality	37.73	0.00	0.00	86.57	0.00	0.00	124.30
Quilandy Municipality	14.96	0.00	5.29	25.34	0.00	0.00	45.59
Varkala Municipality	14.53	0.00	3.06	3.97	7.93	4.29	33.77
Municipality	121.70	2.76	23.36	179.58	28.97	4.29	360.66
Allappad GP	10.32	0.00	0.33	0.00	0.00	0.00	10.65
Ambalapuzha South GP	1.80	0.00	0.60	0.00	0.00	0.00	2.40
Anjuthengu GP	26.44	37.15	3.64	48.00	1.73	42.63	159.59
Azhiyur GP	3.40	0.19	0.50	12.02	1.42	0.00	17.53
Mangalam GP	5.44	0.00	0.00	26.75	10.24	0.00	42.43

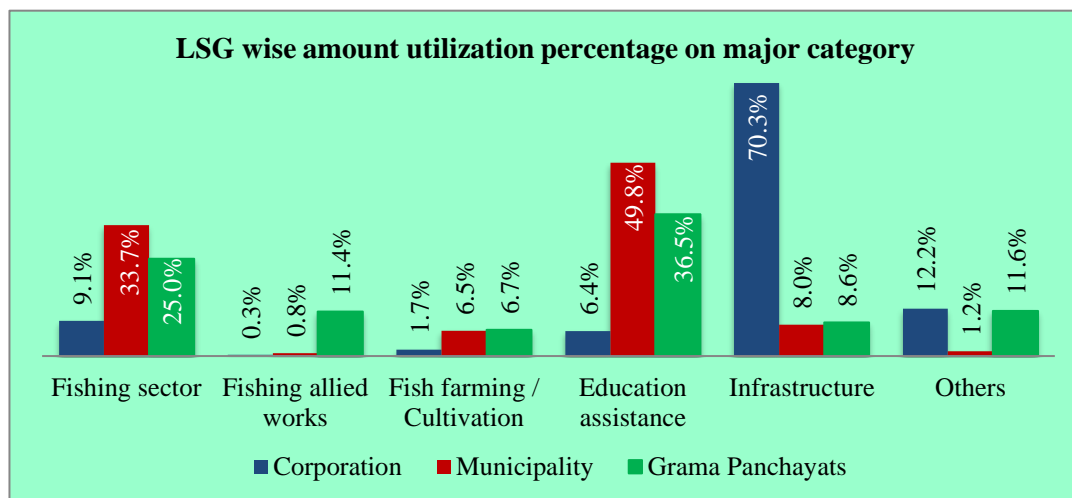
Mararikulam North GP	1.68	0.27	5.01	0.00	0.00	0.00	6.96
Njarackal GP	26.84	0.15	3.98	0.84	9.49	3.87	45.16
Pallippuram GP	9.62	0.00	10.35	27.67	0.14	0.00	47.78
Perumpadappu GP	7.10	7.88	0.00	6.08	2.64	0.00	23.70
Purakkad GP	2.28	0.00	2.09	24.65	1.40	0.00	30.42
Purakkadu GP	0.00	0.00	0.00	0.00	4.06	0.00	4.06
Veliyancode GP	5.06	0.00	0.43	0.00	3.35	0.00	8.84
Gram Panchayats	99.98	45.63	26.92	146.00	34.48	46.50	399.51
Grand Total	333.00	52.43	70.57	404.40	926.07	200.79	1987.25
%	16.8%	2.6%	3.6%	20.3%	46.6%	10.1%	100.0%

(Source: Sulekha, Information Kerala Mission)

The table gives the LSG wise amount spent for projects under fisheries sector under 6 major categories. From the total of 1987.25 lakhs of rupees utilized in fisheries sector a major component 926.07 lakhs (46.6%) is utilized for the development of infrastructure facilities. 404.40 lakhs (20.3%) is utilized as educational assistance followed by 333.0 lakhs (16.8%) amount for the development of fishing, 200.79 Lakhs (10.1%) for other activities, 70.57 lakhs (3.6%) for fish farming and 52.43 lakhs (2.6%) for allied fishing works.



Graph.4.7. LSG wise expenditure under different categories



Corporation spends mostly for infrastructure development, Municipality for education at Gram Panchayats for education and fishing and other related fishing activities are much less promoted in all three levels during the past 9 years.

Table.4.7.Comparitive analyze of fisheries sector with productive sector and total fund

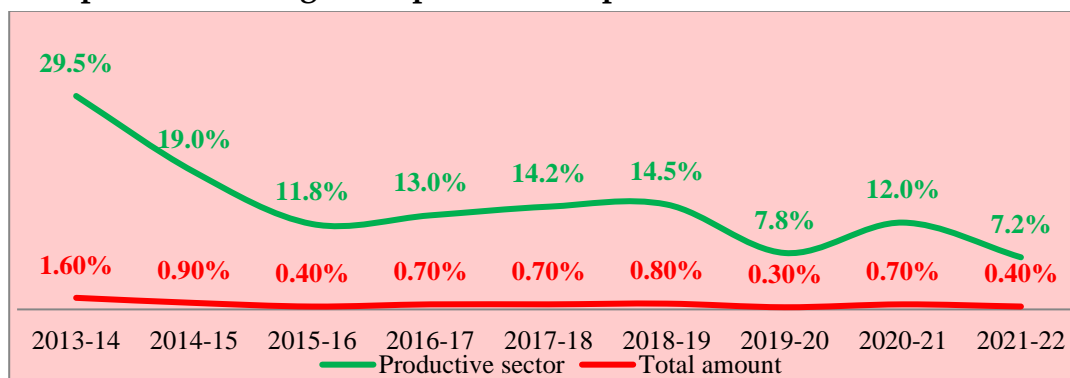
Percentage of expenditure on fisheries sector											
Projects	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	TOTAL
Nos. of fisheries projects	NA	48	42	31	23	39	54	25	69	51	382
Total Projects	NA	3599	3530	3802	2823	4000	3794	2846	5214	3732	33340
% of fisheries projects	NA	1.3%	1.2%	0.8%	0.8%	1.0%	1.4%	0.9%	1.3%	1.4%	1.1%
Amount spend on fisheries	NA	378.70	210.74	130.58	156.73	250.56	271.08	85.77	359.77	143.32	1987.25
% to total productive sector	NA	29.5%	19.0%	11.8%	13.0%	14.2%	14.5%	7.8%	12.0%	7.2%	13.8%
% to total amount	NA	1.6%	0.9%	0.4%	0.7%	0.7%	0.8%	0.3%	0.7%	0.4%	0.7%

(Source: Sulekha, Information Kerala Mission)

The table shows that only 1.1% of the total numbers of projects implemented by the LSGs during the last 9 years are fisheries related in comparison 13.8% under productive sector. Therefore only 0.7% of the total amount could be utilized for fisheries development.

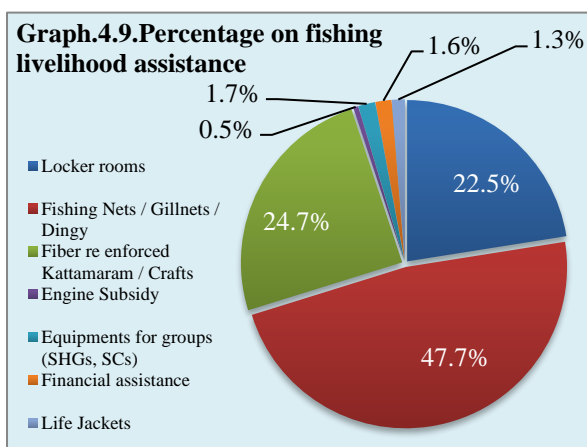


Graph.4.8. Percentage of expenditure in productive and fisheries sector



The table above shows the percentage trend of amount utilized in the fisheries sector compared to the productive sector and total amount by the sample LSGs during last 9 years.

The below table shows the distribution of the amount (in lakhs) for projects under different Local Self Governments (LSGs). Out of the total amount 333.0 lakhs spend for major fishing livelihood assistances, majority (47.7%) is utilized for the distribution of fishing nets,



gillnets, and dingy for fishermen. Distribution of Kattamaram and crafts holds the second position in the amount distributed, with 82.16 lakhs (24.7 %) followed by expenditure for locker rooms for boats and equipments 75.0 lakhs (22.5%), equipments for groups 5.57 lakhs (1.7%), financial assistance 5.40 lakhs (1.6%), distribution of life jackets 4.22 lakhs (1.3%) and engine subsidy 1.68 lakhs (0.5%).

Table.4.8. LSG wise amount expended on fisheries sector under fishing livelihood assistance

Total amount utilized for fishing livelihood assistance from the major category by the LSGs in the last 9 Years											
(In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total	%
Locker rooms	65.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	75.00	22.5%
Fishing Nets / Gillnets / Dingy	33.17	23.24	9.36	7.45	20.92	20.00	19.20	17.83	7.80	158.96	47.7%
Fiber re enforced Kattamaram / Crafts	2.24	2.42	3.38	6.38	1.00	15.89	6.72	12.37	31.78	82.16	24.7%
Engine Subsidy	0.58	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.5%
Equipments for groups (SHGs, SCs)	5.53	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	1.7%
Financial assistance	0.00	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.40	1.6%
Life Jackets	0.00	0.00	0.00	0.00	3.78	0.44	0.00	0.00	0.00	4.22	1.3%
GT	106.52	32.20	12.74	23.83	25.70	36.33	25.92	30.20	39.58	333.00	100.0%

(Source: Sulekha, Information Kerala Mission)

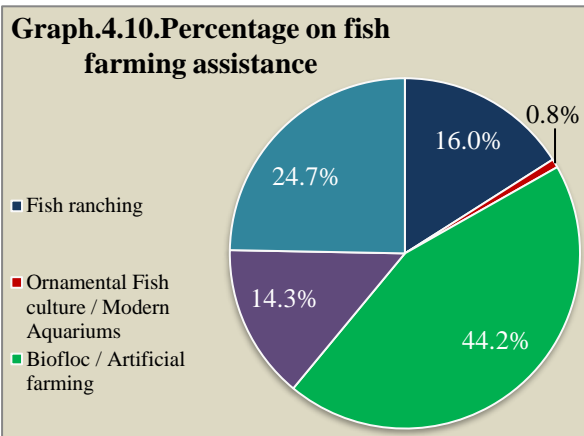
Table.4.9. LSG wise amount expended on fisheries sector under assistance for fish farming

Total amount utilized for fish farming / cultivation under major categories by LSGs during the last 9 Years (In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total	%
Fish ranching	1.48	2.02	2.78	5.00	0.00	0.00	0.00	0.00	0.00	11.29	16.0%
Ornamental Fish culture / Modern Aquariums	0.18	0.30	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.58	0.8%
Biofloc / Artificial farming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00	7.18	31.18	44.2%
Homestead or Backyard pond fish farming	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.64	4.46	10.10	14.3%
Fish cultivation (Lake fishes, prawns)	6.36	0.00	0.00	0.00	0.00	0.00	0.00	6.96	4.10	17.42	24.7%
GT	8.02	2.32	2.78	5.10	0.00	0.00	0.00	36.60	15.75	70.57	100.0%

(Source: Sulekha, Information Kerala Mission)



The Biofloc/Artificial farming has utilized the highest amount, Rs.31.18 lakhs for fish farming/cultivation, that is, 44.2% of the total amount during 9 year. In the last year, 2021-22, the amount utilized for this sub-category was 7.18 Lakhs. Fish cultivation (Lake



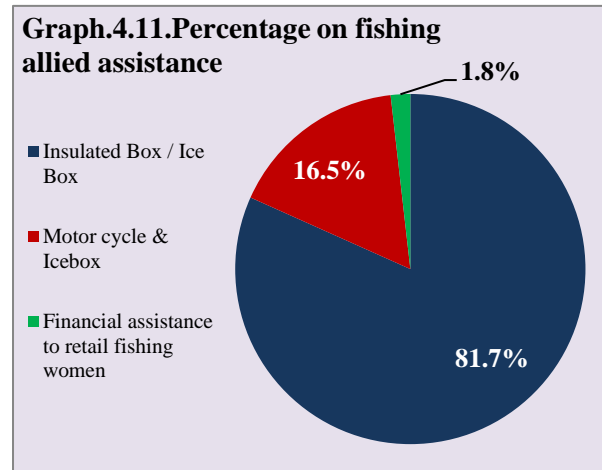
Fishes, Prawns) has the second-highest amount utilized, accounting for 24.7% of the total followed by fish ranching which accounts for 16.0%, Homestead or Backyard pond fish farming" accounts for 14.3% and Ornamental Fish culture/Modern Aquariums has the least amount utilized, only 0.8%. Overall, the total amount utilized for fish farming/cultivation by LSGs in the last 9 years is 70.57 Lakhs.

Table.4.10. LSG wise amount expended on fisheries sector for fishing allied assistance

Total amount utilized for Fishing allied works by LSGs in the last 9 Years (In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total	%
Insulated Box / Ice Box	9.43	0.00	0.00	0.00	14.85	6.44	0.02	0.00	12.10	42.84	81.7%
Motor cycle & Icebox	0.00	0.00	0.00	0.00	0.00	2.76	3.18	0.60	2.10	8.63	16.5%
Financial assistance to retail fishing women	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	1.8%
GT	10.39	0.00	0.00	0.00	14.85	9.20	3.19	0.60	14.20	52.43	100.0%

(Source: Sulekha, Information A Mission)

The IKM data shows that the total amount utilized for assistance for fishing allied activities by the LSGs during the last 9 years is 52.43 lakhs. Distribution of Insulated Box/Ice Box has the highest amount utilized, accounting for 81.7% of the total. The highest utilization for this sub-category was in 2017-18, 14.85 Lakhs, and the last year utilization was 12.10 Lakhs. Distribution of Motorcycle & Icebox accounts for 16.5% of the total. Finally, financial assistance given to retail fishing women accounts for only 1.8% of the total. Overall, the total amount utilized for fishing allied activities by LSGs add up to 52.43 Lakhs during the entire 9 year period, an insignificant amount spent especially for assisting retail fishing women.



Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks

Table.4.11. LSG wise amount expended on fisheries sector under infrastructure assistance

Total amount utilized for infrastructure development from the major category by the LSGs in the last 9 Years (In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total	%
Boat landing centers	23.28	66.75	54.23	24.34	76.47	51.43	0.00	24.88	0.00	321.39	34.7%
Fishing Markets	122.95	77.48	56.52	22.46	125.49	29.97	6.95	116.60	0.00	558.43	60.3%
Matsya Bhavan office	11.27	5.37	1.40	5.99	1.94	2.81	0.00	0.85	0.00	29.64	3.2%
Matsya Fed fish stalls	0.00	0.00	0.00	0.00	0.00	2.53	0.00	0.00	0.00	2.53	0.3%
Auction halls	0.00	0.00	0.00	0.00	6.11	3.53	0.00	4.45	0.00	14.08	1.5%
Grand Total	157.50	149.60	112.15	52.80	210.02	90.27	6.95	146.77	0.00	926.07	100.0%

(Source: Sulekha, Information Kerala Mission)

The total amount utilized for infrastructure by the LSGs in the last 9 years was 926.07 lakhs. The most of the funds spent on building infrastructure for Fishing Markets, Rs. 558.43 lakhs (60.3%), followed by Development/Renovation of Fish Landing Centers, 34.7% (Rs.321.39 lakhs). The rest of the sub-categories, include Matsya Bhavan office, Matsya fed fish stalls, and auction halls, accounting less than 5% of the total amount utilized.

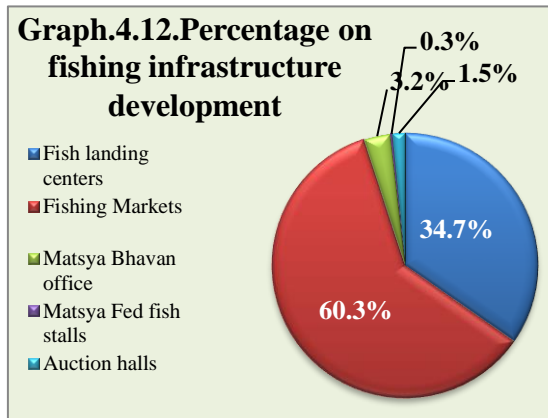
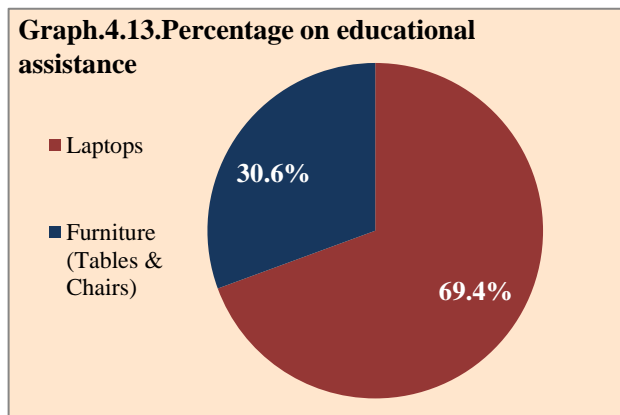


Table.4.12. LSG wise amount expended on fisheries sector for educational assistance

Total amount utilized for Education assistance by the LSGs in the last 9 Years (In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total	%
Laptops	0.00	0.00	0.00	0.00	0.00	118.76	14.09	97.99	49.89	280.72	69.4%
Furniture (Tables & Chairs)	0.00	0.00	0.00	0.00	0.00	16.52	35.63	47.62	23.90	123.67	30.6%
Grand Total	0.00	0.00	0.00	0.00	0.00	135.28	49.72	145.61	73.79	404.40	100.0%

(Source: Sulekha, Information Kerala Mission)

4.1. Local self-governments (LSG) during the last 9 years spent a total of 404.40 Lakhs, and highest utilization in 2020-21, Rs.145.61 Lakhs. In the sub-category of laptop assistance, the LSGs have utilized total of 280.72 Lakhs (69.4%) spent for buying laptops, highest utilization in 2018-19 at 118.76 Lakhs. For buying furniture the assistance, given was



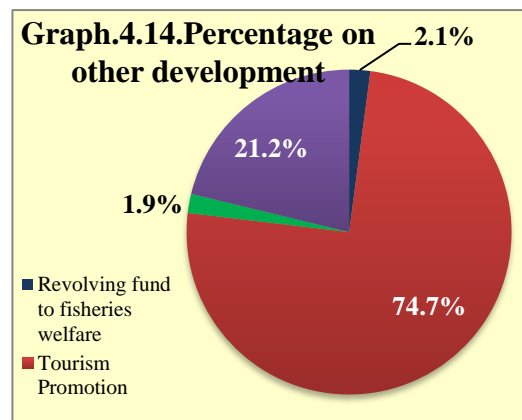
Rs.123.67 Lakhs (30.6%) and the highest utilization was in 2019-20, Rs.35.63 Lakhs.

Table.4.13. LSG wise amount expended on fisheries sector under other assistance categories

Total amount utilized for others assistance from the major category by the LSGs in the last 9 Years (In Lakhs)											
Sub category	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Grand Total	%
Revolving fund to fisheries welfare	1.38	0.00	2.91	0.00	0.00	0.00	0.00	0.00	0.00	4.29	2.1%
Tourism Promotion	75.00	0.00	0.00	75.00	0.00	0.00	0.00	0.00	0.00	150.00	74.7%
Housing extensions	3.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87	1.9%
Revolving fund for auctioneers	16.02	26.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.63	21.2%
GT	96.27	26.61	2.91	75.00	0.00	0.00	0.00	0.00	0.00	200.79	100.0%

(Source: Sulekha, Information Kerala Mission)

The total expenditure in this category was Rs. 200.79 lakhs. Only of this LSGs have utilized a total of 150.00 Lakhs (74.7%) in various years for Tourism Promotion followed by a total of 42.63 Lakhs (21.2%) as revolving fund for auctioneers. In the subcategory of Revolving fund for fisheries welfare organization, the amount utilized was 4.29 lakhs (2.1%). A total of 3.87 Lakhs 1.9% was spent



Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks

for Housing extensions. Thus, the expenditure for Tourism promotion covers a major share of assistance while the supports for basic needs and welfare of the fisher folk get only meager assistance

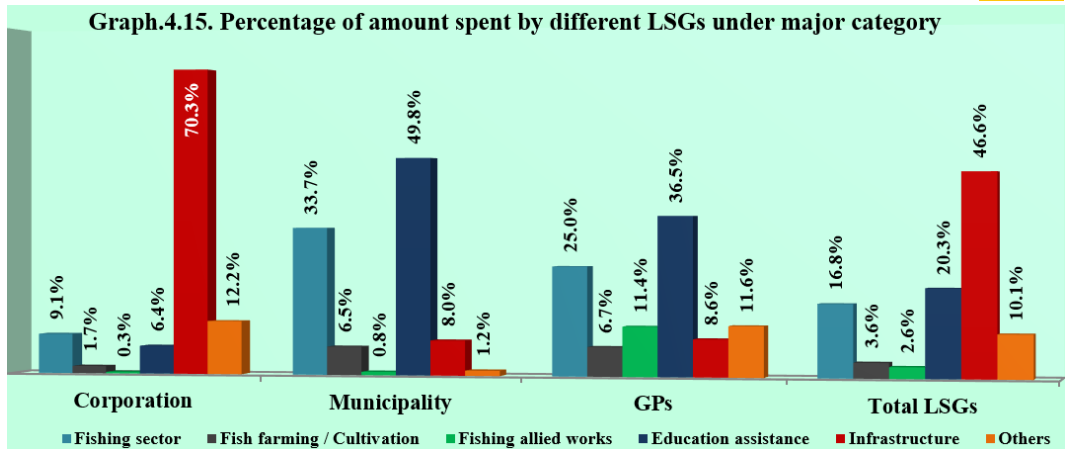
Table.4.14.Classification of utilization under sub category in different LSGs

Distribution of number and amount (In Lakhs) of projects under different LSGs. (Amt in Lakhs)								
Sub category	Corporation		Municipality		GPs		Grand Total	
	Nos.	Amt	Nos.	Amt	Nos.	Amt	Nos.	Amt
Locker rooms	2	75.00	0	0.00	0	0.00	2	75.00
Fishing Nets / Gillnets / Dingy	11	22.02	19	59.19	34	77.76	64	158.96
Fiber re enforced Kattamaram / Crafts	4	12.52	12	53.12	7	16.52	23	82.16
Engine Subsidy	2	1.68	0	0.00	0	0.00	2	1.68
Equipments for groups (SHGs, SCs)	0	0.00	1	5.53	1	0.04	2	5.57
Financial assistance	0	0.00	0	0.00	1	5.40	1	5.40
Life Jackets	1	0.09	2	3.86	2	0.27	5	4.22
Fishing sector	20	111.32	34	121.70	45	99.98	99	333.00
Fish ranching	3	9.81	0	0.00	1	1.48	4	11.29
Ornamental Fish culture / Modern Aquariums	0	0.00	2	0.40	1	0.18	3	0.58
Biofloc / Artificial farming	4	8.85	7	13.34	6	8.99	17	31.18
Homestead or Backyard pond fish farming	2	0.33	7	6.71	4	3.06	13	10.10
Fish cultivation (Lake fishes, prawns)	2	1.30	3	2.91	8	13.22	13	17.42
Fish farming / Cultivation	11	20.29	19	23.36	20	26.92	50	70.57
Insulated Box / Ice Box	3	4.04	0	0.00	8	38.80	11	42.84
Motor cycle & Icebox	0	0.00	1	2.76	4	5.88	5	8.63
Financial assistance to retail fishing women	0	0.00	0	0.00	1	0.96	1	0.96
Fishing allied works	3	4.04	1	2.76	13	45.63	17	52.43

Laptops	5	55.72	10	130.73	20	94.28	35	280.72
Furniture (Tables & Chair)	3	23.10	13	48.86	16	51.72	32	123.67
Education assistance	8	78.82	23	179.58	36	146.00	67	404.40
Development / Renovation of fish landing centers	67	321.39	0	0.00	0	0.00	67	321.39
Fishing Markets	53	535.18	4	17.71	1	5.54	58	558.43
Matsya Bhavan office	0	0.00	1	2.81	11	26.83	12	29.64
Matsya Fed fish stalls	1	2.53	0	0.00	0	0.00	1	2.53
Auction halls	1	3.53	2	8.44	1	2.11	4	14.08
Infrastructure	122	862.62	7	28.97	13	34.48	142	926.07
Revolving fund to fisheries welfare	0	0.00	2	4.29	0	0.00	2	4.29
Tourism Promotion	2	150.00	0	0.00	0	0.00	2	150.00
Housing extensions	0	0.00	0	0.00	1	3.87	1	3.87
Revolving fund for auctioneers	0	0.00	0	0.00	2	42.63	2	42.63
Others	2	150.00	2	4.29	3	46.50	7	200.79
Grand Total	166	1227.08	86	360.66	130	399.51	382	1987.25

(Source: Sulekha, Information Kerala Mission)

This table shows the distribution of the number and amount (in lakhs) set apart for projects undertaken by different Local Self Governments. The Fishing livelihood category projects comprise the majority. The highest number of projects and amount utilized are in GP (45 projects and an amount of 99.98 lakhs) followed by municipality with 34 projects (121.70 lakhs) and corporation with 20 projects (111.32 lakhs).



The graph shows the percentage utilization for funds on various categories in the fishing sector by the selected LSGs. Corporation utilizes maximum amount on infrastructure and the least on the development of fishing allied works while municipality and Gram Panchayats utilize the highest percentage of amount on educational assistance for fishermen students and the least on fishing allied works by the municipality and fish farming by Gram Panchayats.

In conclusion, this data gives details of the expenditure and the development priorities of local self-government institutions in the fisheries sector. Corporations and Municipalities spend more for infrastructure development which GPs provide assistance largely for education and livelihood supports.

Section.4.3. Household Survey analysis of Gram Panchayats

The household survey analyzes the collective responses of the respondents from the selected local self-governments. The tables provide an account of the condition of the sample households in the fishing villages. It helps to identify the social and economic situations this marginalized section destined to live with.



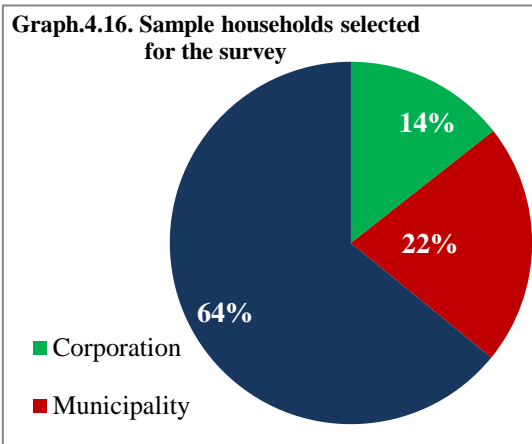
Table.4.15. - Distribution of sample households

Sample Households selected for the survey					
Type of LSGs	Name of the LSGs	Name of the Fishing Village	No. of Households	% of the HHs	% of the total
Corporation	Cochin Corporation	Fort Cochin FV	30	26.8%	3.9%
	Kollam Corporation	Shakthikulangara FV	82	73.2%	10.5%
Corporation Sub Total			112	100.0%	14.4%
Municipality	Alappuzha Municipality	Thumboli South	24	14.4%	3.1%
	Paravoor Municipality	Paravoor South FV	48	28.7%	6.2%
	Ponnani Municipality	Mukkadi FV	26	15.6%	3.3%
	Quilandy Municipality	Quilandy FV	38	22.8%	4.9%
	Varkala Municipality	Chilakkur FV	31	18.6%	4.0%
Municipality Sub Total			167	100.0%	21.5%
Gram Panchayat	Allappad GP	Sraikkadu FV	46	9.2%	5.9%
	Ambalapuzha South GP	Ambalapuzha FV	78	15.6%	10.0%
	Anjuthengu GP	Anjuthengu FV	68	13.6%	8.7%
	Azhiyoor GP	Azhiyoor FV	12	2.4%	1.5%
	Mangalam GP	Kottayi FV	75	15.0%	9.6%
	Mararikulam North GP	Chethy FV	52	10.4%	6.7%
	Njarackal GP	Njarackal FV	22	4.4%	2.8%
	Pallippuram GP	Munambam FV	20	4.0%	2.6%
	Perumpadappu GP	Palapetty FV	44	8.8%	5.7%
	Purakkad GP	Purakkad FV	49	9.8%	6.3%
Veliyamcodu GP	Veliyamcodu FV	33	6.6%	4.2%	
Gram Panchayat Sub Total			499	100.0%	64.1%
Grand Total			778	--	100.0%

(Source: Primary Data)



A total of 778 households were selected for the survey. The largest proportion of households (64.1%) was from Gram Panchayat areas, followed by Municipality areas (21.5%) and Corporation areas (14.4%). The total number include 2 Fishing villages from corporation, 5 Fishing villages from municipalities and 11 Fishing villages from Gram Panchayats.



Distribution of survey households according to its characteristics

The information collected from each household cover size, family status of ration card, religious category, income and expenditure, land holding and housing status.

Table.4.16. - Background characteristics of the selected samples

Background Characteristics of survey households			
Indicators	Categories	No. of HHs	% in each category
HH size	1	4	0.5%
	2 to 4	455	58.5%
	5 to 8	285	36.6%
	9 to 12	26	3.30%
	13 +	8	1.0%
Ration card	NIL	2	0.3%
	AAV (Yellow)	46	5.9%
	BPL (Red)	590	75.8%
	APL (Blue)	118	15.2%
	White	22	2.8%
House Number	No	44	5.7%
	Yes	702	90.2%
	Yes, unknown	25	3.2%



	Temporary ID	7	0.9%
Religious Category	Christian	243	31.2%
	Hindu	255	32.8%
	Muslim	280	36.0%
Monthly Income Category	< 5000	389	50.0%
	> 5000 - 10000	224	28.8%
	> 10000 - 25000	137	17.6%
	> 25000 - 50000	24	3.1%
	> 50000 - 1 Lakh	4	0.5%
Monthly Expenditure Category	< 5000	126	16.2%
	> 5000 - 10000	257	33.0%
	> 10000 - 25000	307	39.5%
	> 25000 - 50000	69	8.9%
	> 50000 -100000	18	2.3%
	> 1 Lakh	1	0.1%
Land	0 - 5 Cents (Marginal land 1)	348	44.7%
	> 5 - 10 cents (Marginal Land 2)	219	28.1%
	> 11 - 25 cents (Small Holdings)	108	13.9%
	> 25 - 50 cents (Medium holdings)	11	1.4%
	> 50 cents (Large Holdings)	2	0.3%
	In Flats / unknown	17	2.2%
	No Land (landless)	73	9.4%
Housing	Land Only	11	1.4%
	Having Land & House	650	83.5%
	More than 1 House	44	5.7%
Electrification	Un electrified	14	1.8%
Sanitation	No own toilet	26	3.3%
Total Households		778	100.0%

(Source: Primary Data)



The table analyzes the size of selected sample households into five categories. The largest proportion of households (58.5%) had 2 to 4 members, followed by households with 5 to 8 members (36.6%). A small proportion of households having 1 member (0.5%), 9 to 12 members (3.3%), and 13+ members (1.0%).

The ration cards of the households are in five categories - AAY (Yellow), BPL (Red), APL (Blue), White and no ration card. The largest proportion of households (75.8%) had BPL (Red) ration card, indicating that they are below the poverty line. The next largest proportion of households hold APL (Blue) ration card (15.2%), indicating that they are above the poverty line. A small proportion of households had no ration card (0.3%) and 5.9% hold yellow ration cards, indicating that they are eligible for additional government subsidies or benefits. A very small proportion of households had white ration cards (2.8%), indicating that they have a higher income level to pay higher rates for their ration quota.

Regarding the registration of houses in the panchayats, the data shows that 90.2% have got numbers allotted but others stay in temporary or informal dwellings and they wait for making proper buildings to get formal registration from panchayats. People belonging to all the three religious, Muslims, Hindu and Christian, live together and their strength is comparable, Muslims 38%, Hindus 32.8%, and Christians 31.2%.

The monthly income of the sample households is divided into five categories; less than Rs.5000, between 5000 and 10000, between 10000 and 25000, between 25000 and 50000, and between 50000 and 1 lakh. The largest proportion of households fall in the first category, less than 5000 (50.0%), followed by the second category between 5000 and 10000 (28.8%) and households with income between 10000 and 25000 are (17.6%). Only a



small proportion of households (3.1%) has income between 25000 and 50000 and (0.5%) had income between 50000 and 1 lakh.

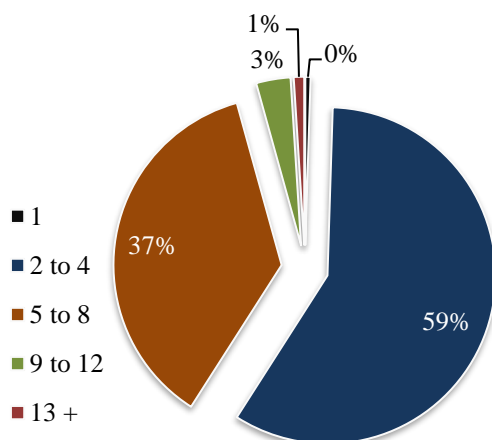
The monthly expenditure of the sample households is similarly divided into less than Rs.5000, between 5000 and 10000, between 10000 and 25000, between 25000 and 50000, between 50000 and 100000, and above 1 lakh. The largest proportion of households (39.5%) are in the expenditure category, between 10000 to 25000, followed by households spending between Rs.5000 and 10000 (33.0%), 16.2% of households come in the category less than 5000 and 8.9% of households have expenditure between 25000 and 50000 per unit. A relatively small proportion of households (2.3%) spent between 50000 and 100000 and only 0.1% household could spent above Rs.1 lakh.

The distribution of landholding in the surveyed households, shows that 44.7% of households are marginal that is 1 to 5 cents holdings, 28.1% of households have a little more are a per unit, between 5-10 cents, 13.9% of households are small holders, units range between 11-25 cents, 9.4% households are landless. Only 1.4% households have medium holdings, in the category between 25-50 cents, and still lower number 0.3% households have above 50 cents holdings. 2.2% of households either live in flats or their landholding status is not revealed. Out of the total 778 households surveyed 1.4% households have only land they stay with others. 83.5% (650) own their house, and 5.7% (44) own more than one house. 1.8% of houses remain un-electrified and 3.3% of households do not have their own toilet facility.

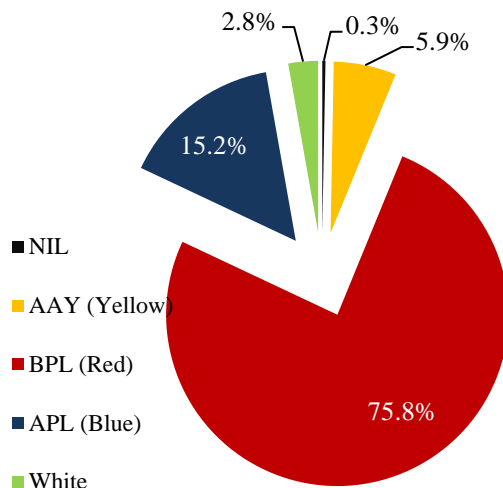


Graph.4.17. - Graphical representation of sample households

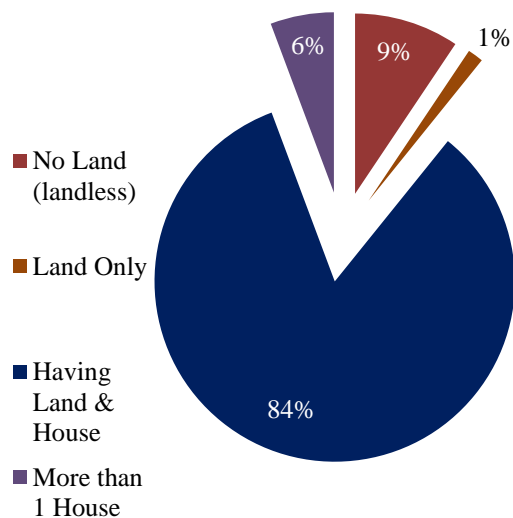
1. Size of the Households



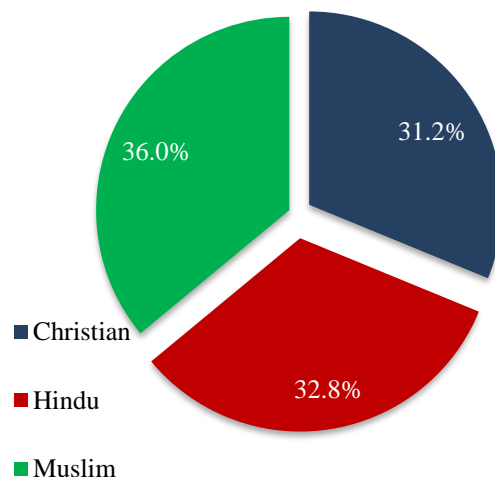
2. Type of ration card



3. Housing Status

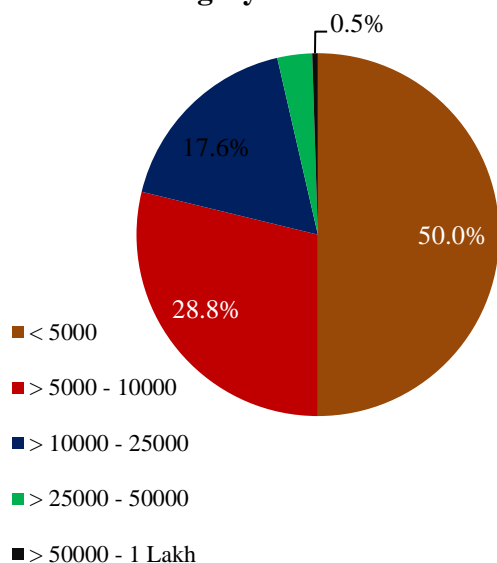


4. Religious category

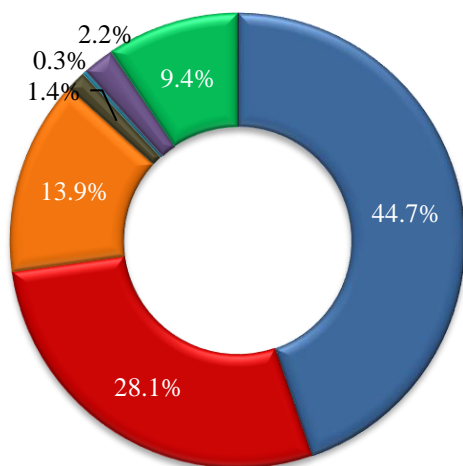
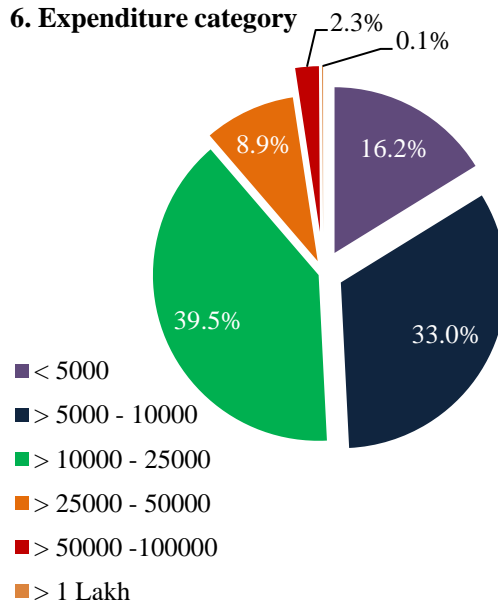




5. Income category



6. Expenditure category



7. Land Holdings

- 0 - 5 Cents (Marginal land 1)
- > 5 - 10 cents (Marginal Land 2)
- > 11 - 25 cents (Small Holdings)
- > 25 - 50 cents (Medium holdings)
- > 50 cents (Large Holdings)
- In Flats / unknown
- No Land (landless)

Table.4.17. Percentage of Land holdings (in cents)

Distribution of land holdings (in cents) among the sample households								
Land size class	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
No Land	11	9.8%	29	17.4%	33	6.6%	73	9.4%
0 - 5 Cents (Marginal land 1)	61	54.5%	76	45.5%	211	42.3%	348	44.7%
> 5 - 10 cents (Marginal Land 2)	26	23.2%	39	23.4%	154	30.9%	219	28.1%
> 11 - 25 cents (Small Holdings)	8	7.1%	17	10.2%	83	16.6%	108	13.9%
> 25 - 50 cents (Medium holdings)	0	0.0%	1	0.6%	10	2.0%	11	1.4%
> 50 cents (Large Holdings)	0	0.0%	0	0.0%	2	0.4%	2	0.3%
In Flats / unknown	6	5.4%	5	3.0%	6	1.2%	17	2.2%
Grand Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

Majority of the fisher folk households (44.7%) own land size between 0-5 cents, followed by households owning land units between 5-10 cents (28.1%). A small proportion of households (13.9%) own land units between 11 – 25 cents and only 1.7% own land units greater than 25 cents. Among the three LSGs households in the Municipalities have the highest percentage of landless units (17.4%) compared to households in Corporations (9.8 %) and in Gram Panchayats (6.6 %). On the other hand, households in Gram Panchayats have the highest percentage of land holdings greater than 11 cents units (20.2 %)

compared to households in Municipalities (13.8%) and Corporations (12.5%). Owning land by the fisher folk serves them mostly as safe dwelling places. The preponderance of small dwelling areas with storage space for keeping fishing equipments seems the natural situation all through the coastal belt in the state located in panchayats, municipalities, and corporation limits. It provides them suitable habitations to carry on with their livelihood activities.

Table.4.18. Percentage of the source of Land holdings

Distribution of source of lands held by sample households								
Row Labels	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
Encroached	0	0.0%	3	2.3%	5	1.1%	8	1.2%
Hereditary	38	40.0%	47	35.3%	190	41.3%	275	40.0%
Land assigned	1	1.1%	5	3.8%	40	8.7%	46	6.7%
LSG / Dept.	1	1.1%	3	2.3%	8	1.7%	12	1.7%
Others (Colony / Gifted)	0	0.0%	1	0.8%	3	0.7%	4	0.6%
Purchased	55	57.9%	74	55.6%	214	46.5%	343	49.9%
Grand Total	95	100.0%	133	100.0%	460	100.0%	688	100.0%

(Source: Primary Data)

On all the local body areas, Corporation, Municipality, and Gram Panchayat, the most common sources of land held by the sample households are through purchase and hereditary shares accounting for 49.9 % and 40.0% of the total households respectively. Land holding through assignment by revenue department.



accounts for 6.7% of the households Lands held by Encroachment, LSG/fisheries Department and others source are relatively small, accounting for 1.2%, 1.7%, and 0.6% of the households, respectively.

Table.4.19 - Distribution of condition on land holdings

Status of land holdings								
Row Labels	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
Agriculture	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Barren Land	0	0.0%	1	0.8%	5	1.1%	6	0.9%
Property	95	100.0%	130	97.7%	454	98.7%	679	98.7%
Under construction	0	0.0%	2	1.5%	0	0.0%	2	0.3%
Grand Total	95	100.0%	133	100.0%	460	100.0%	688	100.0%

(Source: Primary Data)

Only 0.1% of land holdings are used for agriculture. Barren land accounts for 0.9% of the total land holdings, with the majority located in Gram Panchayat (1.1%). Land used as property for dwelling purpose accounts the largest share 98.7% almost uniform in all LSGs.

Table.4.20. Distribution of type of ration cards

Type of ration card(% of households)								
Row Labels	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
AAY (Yellow)	9	8.0%	14	8.4%	23	4.6%	46	5.9%
APL (Blue)	26	23.2%	17	10.2%	75	15.0%	118	15.2%
BPL (Red)	73	65.2%	129	77.2%	388	77.8%	590	75.8%
White	4	3.6%	5	3.0%	13	2.6%	22	2.8%
No ration card	0	0.0%	2	1.2%	0	0.0%	2	0.3%
Grand Total	112	100%	167	100%	499	100%	778	100%

(Source: Primary Data)



The percentage of households with AAY ration cards is 8.4% in Municipality, 8.0% in Corporation, and 4.6% in Gram Panchayat, and a grand total of 5.9%. The APL category households constitute 23.2% in Corporation, 15.0% in Gram Panchayat, and 10.2% in Municipality, and the total 15.2%. The households under BPL category, form 65.2% in Corporation, 77.2% in Municipality, and 77.8% in Gram Panchayat, with a grand total of 75.8% forming three fourth of the total fisher folk households. The households with white ration cards are only very few, 3.6% in Corporation, 3.0% in Municipality, and 2.6% in Gram Panchayat, and the total 2.8%. The 0.3% of households remains without ration card due to household and administrative reasons.

Table.4.21 - Distribution of status of income

Percentage of income category of different sample households								
Monthly income	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
< 5000	23	20.5%	89	53.3%	277	55.5%	389	50.0%
> 5000 - 10000	51	45.5%	54	32.3%	119	23.8%	224	28.8%
> 10000 - 25000	37	33.0%	23	13.8%	77	15.4%	137	17.6%
> 25000 - 50000	1	0.9%	1	0.6%	22	4.4%	24	3.1%
> 50000 - 1 Lakh	0	0.0%	0	0.0%	4	0.8%	4	0.5%
Grand Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

The percentage of households with income less than 5000 is 20.5% in Corporation, but more than half the proportion, 53.3% in Municipality, and 55.5% in Gram Panchayat. In the next income category >5000-10000, the percentage is 45.5% in Corporation, 32.3% in Municipality, and 23.8% in Gram Panchayat, and a grand total of 28.8% in higher income categories the proportions sharply come down and very few at the top level in all three areas.

Table.4.22. Percentage of household and distance from sea

Households proximity to sea									
LSGIs	< 50 Mtr		> 50 Mtr - 100 Mtr		> 100 - 200 Mtr		> 200 Mtr		Grand Total
	Nos	%	Nos	%	Nos	%	Nos	%	
Cochin Corporation	2	6.7%	16	53.3%	8	26.7%	4	13.3%	30
Kollam Corporation	6	7.3%	13	15.9%	11	13.4%	52	63.4%	82
Corporation	8	7.1%	29	25.9%	19	17.0%	56	50.0%	112
Alappuzha Municipality	5	20.8%	1	4.2%	5	20.8%	13	54.2%	24
Paravoor Municipality	15	31.3%	29	60.4%	2	4.2%	2	4.2%	48
Ponnani Municipality	0	0.0%	0	0.0%	10	38.5%	16	61.5%	26
Quilandy Municipality	2	5.3%	22	57.9%	6	15.8%	8	21.1%	38
Varkala Municipality	1	3.2%	1	3.2%	4	12.9%	25	80.6%	31
Municipality	23	13.8%	53	31.7%	27	16.2%	64	38.3%	167
Allappad GP	13	28.3%	9	19.6%	14	30.4%	10	21.7%	46
Ambalapuzha South	21	26.9%	11	14.1%	26	33.3%	20	25.6%	78
Anjuthengu GP	39	57.4%	28	41.2%	1	1.5%	0	0.0%	68
Azhiyoor GP	6	50.0%	3	25.0%	1	8.3%	2	16.7%	12
Mangalam GP	1	1.3%	7	9.3%	17	22.7%	50	66.7%	75
Mararikulam North GP	0	0.0%	0	0.0%	15	28.8%	37	71.2%	52
Njarackal GP	0	0.0%	22	100.0%	0	0.0%	0	0.0%	22
Pallippuram GP	0	0.0%	0	0.0%	0	0.0%	20	100.0%	20
Perumpadappu GP	0	0.0%	4	9.1%	8	18.2%	32	72.7%	44
Purakkad GP	9	18.4%	28	57.1%	11	22.4%	1	2.0%	49
Veliyamcodu GP	9	27.3%	12	36.4%	8	24.2%	4	12.1%	33

Gram Panchayat	98	19.6%	124	24.8%	101	20.2%	176	35.3%	499
Grand Total	129	16.6%	206	26.5%	147	18.9%	296	38.0%	778

(Source: Primary Data)

Fisher folk habitations very close to the turbulent sea is always dangerous. Especially, during high tide seasons. But many live close to it due to occupational convenience or limitation of alternatives. Only 38% households in our survey live beyond 200mtr proximity, others remain much closer and under constant threat rough sea incursion.

The data also reveals variation across different LSGIs. For instance, among households under the Corporation, 50% were located more than 200 meters away from the sea, while only 7.1% were situated within 50 meters. In contrast, among households under the Municipality, (38.3%) households were located more than 200 meters away from the sea and 13.8 % live within less than 50 meter from sea. The Gram Panchayat (35.3%) of households located more than 200 meters from the sea and 19.6 % lives less than 50 meters from the sea. Therefore the possibility of rough sea incursion into fisher folk habitations is more in municipality and panchayat sea coast areas.

Table.4.23. Percentage of households facing sea incursion / attacks

Percentage of households affected by sea incursion							
LSGs	Severely affecting		Normally affected		Not affected		Grand Total
	Nos	%	Nos	%	Nos	%	
Cochin Corporation	0	0.0%	6	20.0%	24	80.0%	30
Kollam Corporation	0	0.0%	0	0.0%	82	100.0%	82

Corporation	0	0.0%	6	5.4%	106	94.6%	112
Alappuzha Municipality	4	16.7%	0	0.0%	20	83.3%	24
Paravoor Municipality	0	0.0%	11	22.9%	37	77.1%	48
Ponnani Municipality	0	0.0%	0	0.0%	26	100.0%	26
Quilandy Municipality	0	0.0%	7	18.4%	31	81.6%	38
Varkala Municipality	1	3.2%	1	3.2%	29	93.5%	31
Municipality	5	3.0%	19	11.4%	143	85.6%	167
Allappad GP	0	0.0%	12	26.1%	34	73.9%	46
Ambalapuzha South	1	1.3%	19	24.4%	58	74.4%	78
Anjuthengu GP	32	47.1%	25	36.8%	11	16.2%	68
Azhiyoor GP	3	25.0%	5	41.7%	4	33.3%	12
Mangalam GP	0	0.0%	2	2.7%	73	97.3%	75
Mararikulam North GP	0	0.0%	0	0.0%	52	100.0%	52
Njarackal GP	0	0.0%	22	100.0%	0	0.0%	22
Pallippuram GP	0	0.0%	1	5.0%	19	95.0%	20
Perumpadappu GP	2	4.5%	1	2.3%	41	93.2%	44
Purakkad GP	9	18.4%	9	18.4%	31	63.3%	49
Veliyamcodu GP	9	27.3%	17	51.5%	7	21.2%	33
Gram Panchayat	56	11.2%	113	22.6%	330	66.1%	499
Grand Total	61	7.8%	138	17.7%	579	74.4%	778

(Source: Primary Data)

The survey data shows that 7.8% of households are severely affected by sea incursion and the majority of them were located in Gram Panchayats areas (11.2%). 17.7% of households are normally affected, with a

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



higher proportion located in Gram Panchayats (22.6%). The remaining 74.4% of households remain unaffected and remain located in Corporation areas (94.6%). This phenomenon is more evident in relation to the proximity of sea line to fisher folk habitations.

Table.4.24. Sea Incursion V/s living distance from sea

Percentage of households affecting sea attack V/s distance from sea							
Row Labels	Severely affected		Normally affected		Not affected		Grand Total
	Nos	%	Nos	%	Nos	%	
< 50 Mtr	55	42.6%	47	36.4%	27	20.9%	129
> 50 Mtr - 100 Mtr	6	2.9%	75	36.4%	125	60.7%	206
> 100 - 200 Mtr	0	0.0%	13	8.8%	134	91.2%	147
> 200 Mtr	0	0.0%	3	1.0%	293	99.0%	296
Grand Total	61	7.8%	138	17.7%	579	74.4%	778

(Source: Primary Data)

It is observed that the households located closer to the sea (less than 50 meters) are more likely to be severely affected (42.6%) than those further away from the sea (between 50-100 meters, 2.9%). As the distance increases, the percentage of households severely affected by sea incursion decreases.

Table.4.25. Percentage of rehabilitated households

LSG wise distribution of rehabilitated households						
LSGs	Rehabilitated	Yes		No		Grand Total
		Nos	%	Nos	%	
Cochin Corporation		0	0.0%	30	100.0%	30
Kollam Corporation		0	0.0%	82	100.0%	82
Corporation		0	0.0%	112	100.0%	112
Alappuzha Municipality		3	12.5%	21	87.5%	24
Paravoor Municipality		1	2.1%	47	97.9%	48
Ponnani Municipality		0	0.0%	26	100.0%	26



Quilandy Municipality	0	0.0%	38	100.0%	38
Varkala Municipality	0	0.0%	31	100.0%	31
Municipality	4	2.4%	163	97.6%	167
Allappad GP	0	0.0%	46	100.0%	46
Ambalapuzha South	0	0.0%	78	100.0%	78
Anjuthengu GP	20	29.4%	48	70.6%	68
Azhiyoor GP	3	25.0%	9	75.0%	12
Mangalam GP	6	8.0%	69	92.0%	75
Mararikulam North GP	0	0.0%	52	100.0%	52
Njarackal GP	8	36.4%	14	63.6%	22
Pallippuram GP	0	0.0%	20	100.0%	20
Perumpadappu GP	2	4.5%	42	95.5%	44
Purakkad GP	6	12.2%	43	87.8%	49
Veliyamcodu GP	12	36.4%	21	63.6%	33
Gram Panchayat	57	11.4%	442	88.6%	499
Grand Total	61	7.8%	717	92.2%	778

(Source: Primary Data)

It is evident that all the severely affected households were rehabilitated and mostly in Gram Panchayats areas.

Table.4.26.Housing assistance for the sample households

Row Labels	Received assistance		Applied not received		Under process		Not applied		Grand Total
	Nos	%	Nos	%	Nos	%	Nos	%	
Cochin Corporation	0	0.0%	2	6.7%	0	0.0%	28	93.3%	30
Kollam Corporation	6	7.3%	30	36.6%	3	3.7%	43	52.4%	82
Corporation	6	5.4%	32	28.6%	3	2.7%	71	63.4%	112
Alappuzha Municipality	7	29.2%	2	8.3%	1	4.2%	14	58.3%	24
Paravoor Municipality	3	6.3%	15	31.3%	0	0.0%	30	62.5%	48
Ponnani Municipality	0	0.0%	1	3.8%	0	0.0%	25	96.2%	26
Quilandy Municipality	2	5.3%	2	5.3%	1	2.6%	33	86.8%	38
Varkala Municipality	8	25.8%	18	58.1%	0	0.0%	5	16.1%	31
Municipality	20	12.0%	38	22.8%	2	1.2%	107	64.1%	167
Allappad GP	16	34.8%	8	17.4%	0	0.0%	22	47.8%	46
Ambalapuzha South	24	30.8%	42	53.8%	3	3.8%	9	11.5%	78
Anjuthengu GP	21	30.9%	40	58.8%	3	4.4%	4	5.9%	68
Azhiyoor GP	3	25.0%	3	25.0%	0	0.0%	6	50.0%	12
Mangalam GP	19	25.3%	22	29.3%	9	12.0%	25	33.3%	75
Mararikulam North GP	6	11.5%	18	34.6%	1	1.9%	27	51.9%	52
Njarackal GP	1	4.5%	5	22.7%	1	4.5%	15	68.2%	22
Pallippuram GP	1	5.0%	4	20.0%	0	0.0%	15	75.0%	20
Perumpadappu GP	9	20.5%	2	4.5%	2	4.5%	31	70.5%	44
Purakkad GP	12	24.5%	15	30.6%	2	4.1%	20	40.8%	49
Veliyamcodu GP	8	24.2%	7	21.2%	3	9.1%	15	45.5%	33
Gram Panchayat	120	24.0%	166	33.3%	24	4.8%	189	37.9%	499
Grand Total	146	18.8%	236	30.3%	29	3.7%	367	47.2%	778

(Source: Primary Data)



The table presents information on the percentage of housing assistance received by households in different LSGs. Out of the total 778 households, 18.8% (146) received housing assistance, 30.3% (236) applied but did not receive assistance, 3.7% (29) have assistance under the process, and 47.2% (367) have not applied for assistance. It is observed that the Gram Panchayat has the highest percentage of households that have received housing assistance (24%) followed by the Municipality (12%) and Corporation (5.4%). The data also shows that the highest percentage of households that have applied but not received assistance is in the Gram Panchayat (33.3%) followed by the Corporation (28.6%) and Municipality (22.8%). Further, the Gram Panchayat has the highest percentage of households that have assistance under process (4.8%), followed by the Corporation (2.7%) and Municipality (1.2%). In short it is found that in Gram Panchayats 39% of those applied for assistance received funds in Municipality it is 33.3% and in corporations only 14.6%. It calls for a more pre-poor approach in providing support for housing.

Table.4.27. Percentage of source of housing assistance

Percentage and No of House Assistance in different LSGs								
LSGIs	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos	%	Nos	%	Nos	%	Nos	%
Fisheries Dept.	4	66.7%	5	25.0%	47	39.2%	56	38.4%
LIFE	1	16.7%	4	20.0%	16	13.3%	21	14.4%
LSG Plan	0	0.0%	5	25.0%	33	27.5%	38	26.0%
EMS Housing	0	0.0%	1	5.0%	3	2.5%	4	2.7%
NGOs	0	0.0%	0	0.0%	11	9.2%	11	7.5%
PMGAY	1	16.7%	1	5.0%	2	1.7%	4	2.7%
Tsunami Flat	0	0.0%	4	20.0%	8	6.7%	12	8.2%
Grand Total	6	100.0%	20	100.0%	120	100.0%	146	100.0%

(Source: Primary Data)

Fisheries Department provided assistance to 56 households (38.4%), followed by assistance through LSG Plan (26%), LIFE (14.4) and so on. 8.2 % of the households are living in tsunami flat and 7.5 percent are assisted

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



housing through NGOs such as Amritha bhavanam. The least number of households received housing assistance was from EMS Housing (4 households, 2.7%). The fisheries department seems to give assistance for more fisher folk households than other agencies, listed in the table. Given their economic deprivation and exposure to sea incursion the fisher folk households in the coastal belt need more support for survival. Therefore all agencies need to liberal support schemes to help them out.

Table.4.28.LSGI wise condition of houses

LSGIs	Kachha		Moderate		Pucca		Total
	Count	%	Count	%	Count	%	
Kollam Corporation	6	7.3%	11	13.4%	65	79.3%	82
Cochin Corporation	0	0.0%	0	0.0%	30	100.0%	30
Corporation	6	5.4%	11	9.8%	95	84.8%	112
Varkala Municipality	13	41.9%	1	3.2%	17	54.8%	31
Paravoor Municipality	6	12.5%	6	12.5%	36	75.0%	48
Alappuzha Municipality	3	12.5%	10	41.7%	11	45.8%	24
Ponnani Municipality	1	3.8%	0	0.0%	25	96.2%	26
Quilandy Municipality	0	0.0%	1	2.6%	37	97.4%	38
Municipality	23	13.8%	18	10.8%	126	75.4%	167
Allappad GP	0	0.0%	1	2.2%	45	97.8%	46
Ambalapuzha South	9	11.5%	23	29.5%	46	59.0%	78
Anjuthengu GP	2	2.9%	9	13.2%	57	83.8%	68
Azhiyoor GP	1	8.3%	0	0.0%	11	91.7%	12
Mangalam GP	7	9.3%	0	0.0%	68	90.7%	75
Mararikulam North GP	2	3.8%	2	3.8%	48	92.3%	52
Njarackal GP	0	0.0%	0	0.0%	22	100.0%	22
Pallippuram GP	0	0.0%	0	0.0%	20	100.0%	20
Perumpadappu GP	3	6.8%	0	0.0%	41	93.2%	44
Purakkad GP	2	4.1%	15	30.6%	32	65.3%	49
Veliyamcodu GP	2	6.1%	0	0.0%	31	93.9%	33
Gram Panchayat	28	5.6%	50	10.0%	421	84.4%	499
Total	57	7.3%	79	10.2%	642	82.5%	778

(Source: Primary Data)



The table above shows the condition of households in the LSGs from the selected samples. Only 7.3% of the total households living in Kachha houses, 10.2 % in Moderate and 82.5 % households live in Pucca houses. In terms of LSGIs:

- In Corporation: 5.40% of houses are Kachha, 9.80% are Moderate, and 84.80% are Pucca.
- In Municipality: 13.80% of houses are Kachha, 10.80% are Moderate, and 75.40% are Pucca.
- In Gram Panchayat: 5.60% of houses are Kachha, 10.00% are Moderate, and 84.40% are Pucca.

Therefore, the Kachha houses need complete replacement and the moderate houses would require renovation. The concerned LSGI may extend its helping hand.

Table.4.29. Percentage distribution of electrification of households

Electrification of Households with assistance from LSGs							
LSGIs	Un electrified		Electrified by self		Electrified with assistance		Grand Total
	No	%	No	%	No	%	
Cochin Corporation	0	0.0%	28	93.3%	2	6.7%	30
Kollam Corporation	1	1.2%	77	93.9%	4	4.9%	82
Corporation	1	0.9%	105	93.8%	6	5.4%	112
Varkala Municipality	0	0.0%	22	71.0%	9	29.0%	31
Alappuzha Municipality	0	0.0%	21	87.5%	3	12.5%	24
Paravoor Municipality	0	0.0%	44	91.7%	4	8.3%	48
Ponnani Municipality	1	3.8%	22	84.6%	3	11.5%	26
Quilandy Municipality	2	5.3%	34	89.5%	2	5.3%	38
Municipality	3	1.8%	143	85.6%	21	12.6%	167
Allappad GP	1	2.2%	44	95.7%	1	2.2%	46
Ambalapuzha South GP	1	1.3%	76	97.4%	1	1.3%	78
Anjuthengu GP	1	1.5%	58	85.3%	9	13.2%	68
Azhiyoor GP	0	0.0%	9	75.0%	3	25.0%	12



Mangalam GP	2	2.7%	71	94.7%	2	2.7%	75
Mararikulam North GP	1	1.9%	47	90.4%	4	7.7%	52
Njarackal GP	0	0.0%	20	90.9%	2	9.1%	22
Pallippuram GP	0	0.0%	18	90.0%	2	10.0%	20
Perumpadappu GP	3	6.8%	38	86.4%	3	6.8%	44
Purakkad GP	0	0.0%	46	93.9%	3	6.1%	49
Veliyamcodu GP	1	3.0%	27	81.8%	5	15.2%	33
Gram Panchayat	10	2.0%	454	91.0%	35	7.0%	499
Total	14	1.8%	702	90.2%	62	8.0%	778

(Source: Primary Data)

Almost all houses are electrified, only about 2 percent remain un-electrified, that too mostly in Gram Panchayat areas. The expense is mostly born by the owners themselves and only 7 percent received assistance from other sources. Attaining complete electrification is a great achievement as it enables introduction of development initiatives.

Table.4.30 - LSG wise distribution of households with sanitation facility

Percentage of households with sanitation facility											
	Own		Neighbors		Open area		Sharing Toilet		Temporary		Total
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	
Corporation	112	100%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	112
Municipality	147	88.0%	2	1.2%	1	0.6%	16	9.6%	1	0.6%	167
Gram Panchayat	493	98.8%	1	0.2%	1	0.2%	4	0.8%	0	0.0%	499
Total	752	96.7%	3	0.4%	2	0.3%	20	2.6%	1	0.1%	778

(Source: Primary Data)

Majority of households in the study areas have access to their own sanitation facilities, 96.7%. In the Municipality area however, 9.6% of households reported having sharing practice. The percentage of households reporting using an open area for sanitation was very low across all areas, at less than 1% in each case. The data suggests that access



to sanitation facilities is generally good in the study area, with the majority of households having their own facilities (96.7 %).

Table.4.31. Percentage distribution of households with sanitation assistance

LSG wise distribution of sanitation assistance							
LSG	Received assistance		No Assistance		No sanitation facility		Total
	Nos.	%	Nos.	%	Nos.	%	
Corporation	10	8.9%	102	91.1%	0	0.0%	112
Municipality	46	27.5%	101	60.5%	20	12.0%	167
Gram Panchayat	57	11.4%	436	87.4%	6	1.2%	499
Total	113	14.5%	639	82.1%	26	3.3%	778

(Source: Primary Data)

Majority of the households in all the LSG areas have sanitation facilities built by them without external assistance. Only 14.5% households received assistance, and the Municipality supported 27.5% of households in its area. However, there still remains an about 3.3% household without the facility and they need to be helped to ensure full coverage of sanitation facility for all households in the state.

Table.4.32. Distribution of households based on primary cooking fuel

Percentage of households with type of cooking fuel used.							
Type LB	Bio-gas		LPG		Wood		Total
	Nos.	%	Nos.	%	Nos.	%	
Corporation	0	0.0%	111	99.1%	1	0.9%	112
Municipality	0	0.0%	149	89.2%	18	10.8%	167
Gram Panchayat	3	0.6%	388	77.8%	108	21.6%	499
Total	3	0.4%	648	83.3%	127	16.3%	778

(Source: Primary Data)

Majority of the households in the study area use LPG (83.3%) as their primary cooking fuel, with 99.1% of households in the Corporation and 89.2% in the Municipality and 77.8 % in Gram Panchayat. 16.3%

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



households continue to use wood as their main cooking fuel mostly in Gram Panchayat and a few in Municipality areas. A very low percentage (0.4%) use bio-gas as fuel.

Table.4.33 - Source of drinking water

Drinking water source in different LSGs								
Drinking water source	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Own well	6	5.4%	104	62.3%	182	36.5%	292	37.5%
Pipeline inside HHs	82	73.2%	35	21.0%	260	52.1%	377	48.5%
Public Tap	21	18.8%	5	3.0%	24	4.8%	50	6.4%
Public well	0	0.0%	7	4.2%	0	0.0%	7	0.9%
Canal/River/stream	0	0.0%	2	1.2%	0	0.0%	2	0.3%
Neighbors	0	0.0%	0	0.0%	2	0.4%	2	0.3%
Water Authority	0	0.0%	0	0.0%	2	0.4%	2	0.3%
No Drinking water source	3	2.7%	14	8.4%	29	5.8%	46	5.9%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

In the Corporation area, the majority (73.2%) of households have a pipeline connection inside their homes, while a small percentage (5.4%) depends on their own wells. In the Municipality, the highest percentages (62.3%) of households have their own well, while 21.0% have a pipeline connection. In the Gram Panchayat, also 52.1% households have pipeline connections along with own wells (36.5%). Both the sources provide continuous supply of drinking water. Despite this secure situation for most of the households, there remain 5.9% households having no drinking water source. Though small in numbers, it is a disgrace situation under a welfare state concept. All the three local bodies should have action plan to solve their problem.



Table.4.34.Availability of drinking water

LSG wise status of drinking water availability in LSGs								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Sufficiently	107	98.2%	79	51.6%	369	78.5%	555	75.8%
Occasionally	0	0.0%	20	13.1%	32	6.8%	52	7.1%
Rarely	0	0.0%	13	8.5%	57	12.1%	70	9.6%
Shortage	2	1.8%	41	26.8%	12	2.6%	55	7.5%
Total	109	100.0%	153	100.0%	470	100.0%	732	100.0%

(Source: Primary Data)

The table shows that 76 percent of the households are having sufficient drinking water and remaining 24 percent faces some sort of availability issues.

Table.4.35.Quality of drinking water

Quality of drinking water (% of households) <i>Appendix: Index of Drinking Water</i>									
Row Labels	Excellent		Good		Fair		Poor		Grand Total
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	
Cochin Corporation	9	30.0%	18	60 %	0	0.0%	3	10 %	30
Kollam Corporation	79	96.3%	1	1.2%	0	0.0%	2	2.4%	82
Corporation	88	78.6%	19	17.0%	0	0.0%	5	4.5%	112
Alappuzha Municipality	1	4.2%	0	0.0%	11	45.8%	12	50.0%	24
Paravoor Municipality	36	75.0%	9	18.8%	0	0.0%	3	6.3%	48
Ponnani Municipality	26	100%	0	0.0%	0	0.0%	0	0.0%	26
Quilandy Municipality	0	0.0%	0	0.0%	1	2.6%	37	97.4%	38
Varkala Municipality	6	19.4%	20	64.5%	1	3.2%	4	12.9%	31
Municipality	69	41.3%	29	17.4%	13	7.8%	56	33.5%	167
Allappad GP	46	100%	0	0.0%	0	0.0%	0	0.0%	46
Ambalapuzha South	72	92.3%	3	3.8%	2	2.6%	1	1.3%	78
Anjuthengu GP	1	1.5%	6	8.8%	48	70.6%	13	19.1%	68
Azhiyoor GP	4	33.3%	0	0.0%	0	0.0%	8	66.7%	12



Mangalam GP	62	82.7%	2	2.7%	1	1.3%	10	13.3%	75
Mararikulam North GP	38	73.1%	10	19.2%	1	1.9%	3	5.8%	52
Njarackal GP	19	86.4%	3	13.6%	0	0.0%	0	0.0%	22
Pallippuram GP	12	60.0%	6	30.0%	1	5.0%	1	5.0%	20
Perumpadappu GP	44	100.0%	0	0.0%	0	0.0%	0	0.0%	44
Purakkad GP	47	95.9%	2	4.1%	0	0.0%	0	0.0%	49
Veliyamcodu GP	18	54.5%	6	18.2%	4	12.1%	5	15.2%	33
Gram Panchayat	363	72.7%	38	7.6%	57	11.4%	41	8.2%	499
Grand Total	520	66.8%	86	11.1%	70	9.0%	102	13.1%	778

(Source: Primary Data)

Most of the households get fairly good and excellent quality drinking water for drinking. Only 13% households complain about poor quality. This quality is very poor in Quality Municipality area (97.4% households), Azhiyur Gram Panchayat (66.7% holds) and Alappuzha Municipality (50% holds), get poor quality water for drinking. The concerned LSGIs have to give immediate attention to solve this drawback.

Table.4.36.Distribution of households having debt

Main source of debt by selected households								
Main Source of loan	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos	%	Nos.	%	Nos	%
No Debt	42	37.5%	76	45.5%	149	29.9%	267	34.3%
Bank	29	25.9%	46	27.5%	86	17.2%	161	20.7%
Cooperative society	8	7.1%	14	8.4%	80	16.0%	102	13.1%
Matsyafed	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Private Institutions	2	1.8%	10	6.0%	58	11.6%	70	9.0%
Private Lenders	16	14.3%	7	4.2%	51	10.2%	74	9.5%
SHGs / Kudumbasree	15	13.4%	14	8.4%	62	12.4%	91	11.7%
Others (Friends /Relatives)	0	0.0%	0	0.0%	3	0.6%	3	0.4%
Others (LIC,Development corporations)	0	0.0%	0	0.0%	9	1.8%	9	1.2%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)



One third of the total households do not have any debts. Others are indebted to banks, cooperative societies, private lender, and SHG/Kudumbasree and private institution. In the Corporation area, banks serve the most followed by private lenders and SHGs. In the Municipality the service is mostly with banks, and in Gram Panchayats all agencies have fairly good access to the households for money transaction.

The household data shows that the majority of households in all three regions (ranging from 29.9% to 45.5%) have no debt. Among those indebted, bank loans are the most common source of debt, with 17.2% to 27.5% of households in each region. Cooperative societies are also a significant source of debt, with 7.1% to 16% of households in each region borrowed from them. Private institutions and private lenders are other common sources, with 6% to 11.6% of households in each region. SHGs/Kudumbasree, a community-based women's self-help group, also provide a financial help in all three regions, 11.7% to 13.4% of households in each region having borrowed from them. Matsyafed, a cooperative federation of fishermen, is a minor source for help, with only 1 household in the Gram Panchayat region having borrowed from them. Other sources, such as friends/relatives and LIC/development corporations, are less common.

Table.4.37. Percentage of households indebted according to purpose of debt

Purpose of debt by households								
Purpose	Corporation		Gram Panchayat		Municipality		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Housing	16	24.2%	109	31.1%	34	37.4%	159	31.1%
Cattle	0	0.0%	1	0.3%	0	0.0%	1	0.2%
Borrowing for closing debt	1	1.5%	3	0.9%	4	4.4%	8	1.6%
Education	6	9.1%	24	6.9%	1	1.1%	31	6.1%



Employment	11	16.7%	26	7.4%	9	9.9%	46	9.0%
House expenses	4	6.1%	1	0.3%	1	1.1%	6	1.2%
Marriage	8	12.1%	83	23.7%	7	7.7%	98	19.2%
Possession share	0	0.0%	1	0.3%	0	0.0%	1	0.2%
Treatment	5	7.6%	34	9.7%	12	13.2%	51	10.0%
Vehicle purchase	0	0.0%	2	0.6%	1	1.1%	3	0.6%
Combination of above 2	12	18.2%	60	17.1%	20	22.0%	96	18.8%
Combination of above 3	3	4.5%	6	1.7%	2	2.2%	11	2.2%
Total	66	100.0%	350	100.0%	91	100.0%	511	100.0%

(Source: Primary Data)

Housing is the major purpose for which households get indebted, (31.1%) ranging from 24.2% in Corporation to 37.4% in municipality. The next is marriage (19.2%) households. For medical treatment (10.0%) and employment also (9.0%) households borrow. Borrowing for Education accounts for 6.1% of the total households, and for house expenses 1.2%. Only very few households get indebted for cattle and vehicle, each accounting for only 0.2% and 0.6% households respectively.

Table.4.38. Distribution of households which experienced natural disaster

Disasters	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No Disaster	112	100.0%	164	98.2%	396	79.4%	672	86.4%
Agriculture loss	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Cattle loss	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Destruction of house	0	0.0%	2	1.2%	45	9.0%	47	6.0%
Livelihood loss	0	0.0%	1	0.6%	27	5.4%	28	3.6%
Damage to house, cattle & agriculture	0	0.0%	0	0.0%	1	0.2%	1	0.1%



Damage to Wells	0	0.0%	0	0.0%	3	0.6%	3	0.4%
loss of electronic equipments	0	0.0%	0	0.0%	7	1.4%	7	0.9%
Loss of land	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Livelihood & equipments loss	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Partial damage to houses	0	0.0%	0	0.0%	6	1.2%	6	0.8%
Destruction to houses & agriculture loss / livelihood loss	0	0.0%	0	0.0%	4	0.8%	4	0.5%
No loss	0	0.0%	0	0.0%	6	1.2%	6	0.8%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

Majority of households (86.4%) did not experience any disaster during the last 3 years. Among others destruction of houses accounts for 6.0% of the total households, followed by livelihood loss (3.6%), and loss of electronic equipment (0.9%). Very few households experienced other disasters mentioned in the table. Though the affected households are few in number, the impact of each shock is quite severe and it makes serious damage to livelihood possessions. Therefore the LSGIs will have to gear up effective disaster management schemes to redeem the affected households.

Table.4.39. Percent of households faced disaster relief during last 3 years

Emergency Relief assistance for the disaster affected households							
Type of LSGs	Yes		No		Unknown		Total
	Nos.	%	Nos.	%	Nos.	%	
Gram Panchayat	56	54.4%	45	43.7%	2	1.9%	103
Municipality	2	66.7%	1	33.3%	0	0.0%	3
Total	58	54.7%	46	43.4%	2	1.9%	106

(Source: Primary Data)



But our data shows that out of the total 106 households affected by disaster, only 54.75% of households received emergency relief assistance for disasters and others had to fend for themselves.

Table.4.40.LSG wise assistance for households

Assistance for disaster to affected households by LSGs						
	Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%
No assistance	2	66.7%	70	68.0%	72	67.9%
Financial assistance	1	33.3%	17	16.5%	18	17.0%
Food kits	0	0.0%	6	5.8%	6	5.7%
Relief camps	0	0.0%	4	3.9%	4	3.8%
Relief camps & financial assistance	0	0.0%	1	1.0%	1	0.9%
Relief camps & food kits	0	0.0%	1	1.0%	1	0.9%
Financial assistance & food kits	0	0.0%	1	1.0%	1	0.9%
Financial assistance, relief camps & food kits	0	0.0%	2	1.9%	2	1.9%
Financial assistance, relief camps, cloths & food kits	0	0.0%	1	1.0%	1	0.9%
Total	3	100.0%	103	100.0%	106	100.0%

(Source: Primary Data)

The assistance included financial support, food kits, temporary rehabilitation in relief camps will necessary support facilities and relocation after the disaster. Coastal regions and inundated river beds often experience natural disasters.

Table.4.41.Percentage of households initiated for assistance by various stakeholders

Source of Initiated assistance								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Elected	0	0.0%	1	100.0%	25	75.8%	26	76.5%



representatives								
LSG officials	0	0.0%	0	0.0%	2	6.1%	2	5.9%
Self	0	0.0%	0	0.0%	3	9.1%	3	8.8%
Voluntary organizations	0	0.0%	0	0.0%	3	9.1%	3	8.8%
Total	0	100.0%	1	100.0%	33	100.0%	34	100.0%

(Source: Primary Data)

The stakeholders, especially the elected representatives involve very actively in the disaster management process to provide relief to all affected households.

Table.4.42. Health care: The role of PHC/CHC

Availability of free treatment from PHC / CHC								
PHC	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes	73	65.2%	139	83.2%	452	90.6%	664	85.3%
Partially availed	30	26.8%	4	2.4%	18	3.6%	52	6.7%
Not utilized	1	0.9%	16	9.6%	16	3.2%	33	4.2%
Not Functioning	0	0.0%	4	2.4%	0	0.0%	4	0.5%
Not availed	8	7.1%	4	2.4%	13	2.6%	25	3.2%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

The utilization of the free treatment services from Primary Health Centers (PHC) and Community Health Centers (CHC) in LSGs shows that 85.3% of the households utilize it fully and 6.7% partially. There is some variation in the corporation, municipality and Gram Panchayat regions. Strengthening of the PHC/CHC services throughout the state would enable to maintain normal health status of people. Complicated and serious cases would require specialty health care institutions



Table.4.43. Percentage of households satisfied with free treatment

Satisfaction level of treatment from PHC / CHC								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Satisfied	94	91.3%	140	97.9%	388	82.6%	622	86.9%
Partially satisfied	6	5.8%	2	1.4%	21	4.5%	29	4.1%
Not satisfied	1	1.0%	0	0.0%	56	11.9%	57	8.0%
No Answer	0	0.0%	0	0.0%	4	0.9%	4	0.6%
Unknown	2	1.9%	1	0.7%	1	0.2%	4	0.6%
Total	103	100.0%	143	100.0%	470	100.0%	716	100.0%

(Source: Primary Data)

The facilities and services now available with the PHC/CHC in the surveyed areas, the large majority of households are satisfied; 91.3% in Corporation, 97.9% in Municipality and 82.6% in Gram Panchayat areas.

Table.4.44. Percentage of household's response to need for improvement of PHC / CHC

Support of LSGs to PHC / CHC for effective working								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Basic Facilities	2	28.6%	0	0.0%	3	3.9%	5	5.6%
Lack of employees	1	14.3%	1	16.7%	7	9.1%	9	10.0%
New Infrastructure facilities	1	14.3%	3	50.0%	8	10.4%	12	13.3%
All of the above	0	0.0%	0	0.0%	22	28.6%	22	24.4%
Start Functioning	0	0.0%	1	16.7%	1	1.3%	2	2.2%
Basic & Lack of employees	0	0.0%	0	0.0%	1	1.3%	1	1.1%
Basic & New infrastructure Facilities	0	0.0%	0	0.0%	14	18.2%	14	15.6%
Basic facilities, Lack of employees & new infrastructure facilities	0	0.0%	0	0.0%	11	14.3%	11	12.2%



Others (Transportation Facilities, Long distance & 24*7 working of PHCs)	3	42.9%	1	16.7%	10	13.0%	14	15.6%
Total	7	100%	6	100%	77	100%	90	100%

(Source: Primary Data)

To make the existing system more useful and efficient, the respondents in our survey suggested increasing basic facilities, recruiting sufficient professional staff and improving infrastructure coverage.

Table.4.45. Conducting health camps by LSGs

Conducting Health camps by LSGs								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes	64	57.1%	91	54.5%	305	61.1%	460	59.1%
No	7	6.3%	63	37.7%	148	29.7%	218	28.0%
Unknown	37	33.0%	13	7.8%	44	8.8%	94	12.1%
No Answer	4	3.6%	0	0.0%	2	0.4%	6	0.8%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

Apart from the regular PHC/CHC services, majority of the respondents states that LSGs conduct separate health camps as and when the onslaughts of specific diseases occur to save the vulnerable section from its catastrophe. In such health camps, the large majority of the households participated especially from the municipality and Gram Panchayat areas. It reveals the increasing health consciousness of the people.



Table.4.46.Percentage of households participated in Health camps

Participation of households in Health camps								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes	21	32.8%	55	60.4%	192	63.0%	268	58.3%
Partially Participated	21	32.8%	32	35.2%	57	18.7%	110	23.9%
No Participation	20	31.3%	4	4.4%	53	17.4%	77	16.7%
Unknown	2	3.1%	0	0.0%	3	1.0%	5	1.1%
Total	64	100.0%	91	100.0%	305	100.0%	460	100.0%

(Source: Primary Data)

The table shows that from those households responded that PHCs are conducting health camps, 82.2 percent of households participate in it.

Table.4.47.Distribution of households utilizing Veterinary hospitals

LSG wise utilization of Veterinary Hospital								
<i>Functioning</i>	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes working	12	92.3%	4	57.1%	31	50.0%	47	57.32%
Partially working	0	0.0%	0	0.0%	5	8.1%	5	6.10%
Not working	0	0.0%	0	0.0%	7	11.3%	7	8.54%
Not Utilized	1	7.7%	0	0.0%	16	25.8%	17	20.73%
Unknown	0	0.0%	3	42.9%	3	4.8%	6	7.32%
Total	13	100.0%	7	100.0%	62	100.0%	82	100.00%

(Source: Primary Data)

Veterinary hospitals are necessary to support animal husbandry occupations. Most of the farmers utilize the facility available in the surveyed areas. However, a few of the units need renovation and more facilities added.



Table.4.48. Status of LSGs assistance to households

LSG assistance to households (% of households)								
Status	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Not applied for assistance	70	62.5%	89	53.3%	109	21.8%	268	34.4%
Applied not received	22	19.6%	38	22.8%	177	35.5%	237	30.5%
Under process / discontinued	3	2.7%	1	0.6%	3	0.6%	7	0.9%
Assistance Received	17	15.2%	39	23.4%	210	42.1%	266	34.2%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

The percentage of households receiving assistance from LSGs comes to a total of 34.2% and about one percent remains under process.

Table.4.49. Percentage of households availing assistance under various schemes from LSGs

LSG wise assistance to households								
Assistance	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Housing	6	35.3%	15	38.5%	94	44.8%	115	43.2%
House Maintenance	2	11.8%	14	35.9%	37	17.6%	53	19.9%
Agriculture assistance	0	0.0%	1	2.6%	2	1.0%	3	1.1%
Drinking water (Wells, Tanks, Pipelines)	0	0.0%	2	5.1%	2	1.0%	4	1.5%
Job equipments	0	0.0%	0	0.0%	1	0.5%	1	0.4%
Bio-bin	0	0.0%	0	0.0%	2	1.0%	2	0.8%
Land	0	0.0%	0	0.0%	4	1.9%	4	1.5%
Financial support (marriage, disability)	0	0.0%	0	0.0%	2	1.0%	2	0.8%
Financial Assistance / Loans	0	0.0%	1	2.6%	3	1.4%	4	1.5%
Laptops	1	5.9%	1	2.6%	3	1.4%	5	1.9%
Old age people	0	0.0%	0	0.0%	3	1.4%	3	1.1%



assistance (Coats, Bed)								
Poultry / Cattle	0	0.0%	0	0.0%	7	3.3%	7	2.6%
Sanitation assistance	6	35.3%	2	5.1%	19	9.0%	27	10.2%
Study rooms	0	0.0%	0	0.0%	2	1.0%	2	0.8%
Vehicles	0	0.0%	3	7.7%	2	1.0%	5	1.9%
Combination of above 2	1	5.9%	0	0.0%	14	6.7%	15	5.6%
Combination of above 3	1	5.9%	0	0.0%	13	6.2%	14	5.3%
Total	17	100.0%	39	100.0%	210	100.0%	266	100.0%

(Source: Primary Data)

The major schemes of assistance availed by households are for housing (43.2%), agriculture (19.9%) and sanitation (10.2%) in all local bodies, according to the survey data. This shows that the basic livelihood requirements remain adequate in all areas.

Table.4.50.Stakeholders support households for assistance

LSG wise source / stakeholders of assistance initiated or informed								
Stakeholders	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Elected representatives	12	70.6%	33	84.6%	131	62.4%	176	66.2%
Self	1	5.9%	2	5.1%	35	16.7%	38	14.3%
Fisheries dept.	2	11.8%	4	10.3%	28	13.3%	34	12.8%
Kudumbasree	2	11.8%	0	0.0%	0	0.0%	2	0.8%
LSG officials	0	0.0%	0	0.0%	2	1.0%	2	0.8%
Voluntary Org	0	0.0%	0	0.0%	5	2.4%	5	1.9%
Others	0	0.0%	0	0.0%	9	4.3%	9	3.4%
Total	17	100.0%	39	100.0%	210	100.0%	266	100.0%

(Source: Primary Data)

As in the case of other aspects of development the elected representatives undertake leading roles to support the households to gain LSGI assistance to build up basic facilities.

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



Table.4.51.Difficulties in availing services from LSGs

Difficulties in receiving assistance or services from LSGs(% of households)								
Difficulties	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No difficulty	1	0.9%	5	3.0%	40	8.0%	46	5.9%
Delay in services	6	5.4%	38	22.8%	100	20.0%	144	18.5%
Follow up issues	6	5.4%	23	13.8%	22	4.4%	51	6.6%
Long distance	0	0.0%	2	1.2%	8	1.6%	10	1.3%
Loss of earning time	1	0.9%	6	3.6%	86	17.2%	93	12.0%
Misconduct of officials	1	0.9%	0	0.0%	5	1.0%	6	0.8%
No Transportation	0	0.0%	0	0.0%	45	9.0%	45	5.8%
Technical Issues	12	10.7%	56	33.5%	73	14.6%	141	18.1%
Unaware of schemes	57	50.9%	33	19.8%	37	7.4%	127	16.3%
Combination of 2 difficulties	19	17.0%	4	2.4%	47	9.4%	70	9.0%
Combination of 3 difficulties	7	6.3%	0	0.0%	30	6.0%	37	4.8%
Combination of 4 difficulties	2	1.8%	0	0.0%	5	1.0%	7	0.9%
Combination of 5 difficulties	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

Only very few applicants have experienced no difficulty in getting assistance/service from LSGs. Other face various problems like delay in processing application, loss of daily wage income due to repeated job loss, technical errors in filing application, ignorance about schemes availability etc. In short, the number of beneficiaries gets limited.

Table.4.52.Information on grama sabha meetings

Information on grama sabha meeting								
Grama sabha information	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Informed	40	35.7%	91	54.5%	307	61.5%	438	56.3%



Partially informed	3	2.7%	10	6.0%	36	7.2%	49	6.3%
Not informed	18	16.1%	59	35.3%	146	29.3%	223	28.7%
No Answer	9	8.0%	0	0.0%	0	0.0%	9	1.2%
Unknown	42	37.5%	7	4.2%	10	2.0%	59	7.6%
Total	112	100.0%	167	100.0%	499	100.0%	778	100%

(Source: Primary Data)

Proper awareness regarding grama sabha meetings is important for active participation of the stakeholders. However, there is lapse in giving timely intimation which weakens the process of collective decision making. Around 40% households remain left out in this process.

Table.4.53.Grama sabha meetings in the LSGs

Holding grama sabha meetings in the LSGs								
Grama sabha	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes	55	49.1%	43	25.7%	185	37.1%	283	36.4%
Partially	2	1.8%	2	1.2%	7	1.4%	11	1.4%
No Grama sabha	18	16.1%	114	68.3%	260	52.1%	392	50.4%
No Answer	7	6.3%	0	0.0%	0	0.0%	7	0.9%
Unknown	30	26.8%	8	4.8%	47	9.4%	85	10.9%
Total	112	100.0%	167	100.0%	499	100.0%	778	100.0%

(Source: Primary Data)

Holding of regular grama sabha meetings provide opportunities for the stakeholders to discuss the development issues they face. However the information does not seem to get widely circulated. Only around 40% of the households have responded about this aspect. The initiative is quite low in Municipalities (26%) compared to corporation (49%) at Gram Panchayat (37%).



Table.4.54.Performance of LSGs by various stakeholder ratings

Overall Performance of LSGIs based on mean values					
LSGs	Excellent	Good	Average	Poor	Grand Total
Cochin Corporation	3.3%	46.7%	50.0%	0.0%	30
Kollam Corporation	2.4%	36.6%	61.0%	0.0%	82
Corporation	2.7%	39.3%	58.0%	0.0%	112
Alappuzha Municipality	4.2%	45.8%	50.0%	0.0%	24
Paravoor Municipality	2.1%	66.7%	31.3%	0.0%	48
Ponnani Municipality	0.0%	19.2%	80.8%	0.0%	26
Quilandy Municipality	0.0%	0.0%	100.0%	0.0%	38
Varkala Municipality	9.7%	90.3%	0.0%	0.0%	31
Municipality	3.0%	45.5%	51.5%	0.0%	167
Allappad GP	2.2%	71.7%	26.1%	0.0%	46
Ambalapuzha South	1.3%	89.7%	9.0%	0.0%	78
Anjuthengu GP	2.9%	16.2%	79.4%	1.5%	68
Azhiyoor GP	83.3%	8.3%	8.3%	0.0%	12
Mangalam GP	14.7%	77.3%	8.0%	0.0%	75
Mararikulam North GP	5.8%	84.6%	9.6%	0.0%	52
Njarackal GP	4.5%	45.5%	50.0%	0.0%	22
Pallippuram GP	5.0%	85.0%	10.0%	0.0%	20
Perumpadappu GP	4.5%	36.4%	59.1%	0.0%	44
Purakkad GP	0.0%	14.3%	85.7%	0.0%	49
Veliyamcodu GP	3.0%	78.8%	18.2%	0.0%	33
Gram Panchayat	6.6%	58.7%	34.5%	0.2%	499
Grand Total	5.3%	53.1%	41.5%	0.1%	778

(Source: Primary Data)

In terms of the quality of performance among the LSGIs, according to the ratings given by the respondents, the Gram Panchayats gained better ratings as excellent (6.6%), good (58.7%) and average (34.5%). The municipalities come closer with 3%, 45.5% and 51.5% respectively. However, the corporations come as the last with lower levels for excellent (2.7%), good (39.3%) and higher average (58%) ratings. Having more



deprived households in Gram Panchayat and municipal areas, the better LSGI performance provide hope for them to get more welfare schemes better government service enabling their inclusive development provided all such households are well informed and encouraged to participate in the decision making process.

Table.4.55.Priority needs of the sample households

LSGI wise classification of priority needs in different sectors							
LSGIs	Sectors	Essential Priority	High Preference	Average Preference	Some Preference	Low Preference	No Preference
Corporation	Livelihood / Employment	26.8%	8.9%	25.0%	13.4%	15.2%	10.7%
	Waste Management	26.8%	4.5%	26.8%	9.8%	23.2%	8.9%
	Health	25.0%	29.5%	33.0%	9.8%	2.7%	0.0%
	Drinking water	24.1%	33.9%	14.3%	7.1%	6.3%	14.3%
	Education	17.0%	29.5%	25.9%	13.4%	10.7%	3.6%
	Road / Transportation	7.1%	4.5%	36.6%	19.6%	23.2%	8.9%
	House / Maintenance	0.9%	0.0%	17.9%	39.3%	28.6%	13.4%
	Land/ Resettlement	0.0%	0.9%	23.2%	37.5%	20.5%	17.9%
Municipality	Drinking water	25.1%	19.8%	31.7%	14.4%	6.6%	2.4%
	Waste Management	22.8%	26.9%	22.8%	12.0%	0.6%	15.0%
	Road / Transportation	21.0%	12.6%	29.9%	23.4%	10.2%	3.0%
	Livelihood / Employment	19.8%	24.0%	37.7%	10.2%	5.4%	3.0%
	Land/ Resettlement	17.4%	15.6%	36.5%	12.6%	4.8%	13.2%
	House / Maintenance	15.0%	12.0%	32.9%	21.6%	9.6%	9.0%
	Health	11.4%	24.0%	32.3%	19.2%	11.4%	1.8%
	Education	4.2%	19.8%	35.9%	27.5%	10.2%	2.4%

Gram Panchayat	Road / Transportation	14.2%	35.9%	27.5%	10.0%	9.2%	3.2%
	Drinking water	8.8%	33.3%	31.1%	14.4%	7.6%	4.8%
	Education	7.6%	45.1%	19.0%	10.8%	15.6%	1.8%
	Health	5.8%	50.7%	24.0%	10.2%	8.0%	1.2%
	House / Maintenance	5.4%	15.6%	33.9%	17.2%	20.6%	7.2%
	Livelihood / Employment	4.6%	10.2%	45.5%	11.4%	16.8%	11.4%
	Waste Management	4.4%	33.7%	26.1%	12.8%	13.0%	10.0%
	Land/ Resettlement	3.2%	11.4%	36.1%	16.8%	20.6%	11.8%
Total	Road / Transportation	14.7%	26.3%	29.3%	14.3%	11.4%	4.0%
	Drinking water	14.5%	30.5%	28.8%	13.4%	7.2%	5.7%
	Waste Management	11.6%	28.0%	25.4%	12.2%	11.8%	10.9%
	Livelihood / Employment	11.1%	13.0%	40.9%	11.4%	14.1%	9.5%
	Health	9.8%	41.9%	27.1%	12.1%	8.0%	1.2%
	Education	8.2%	37.4%	23.7%	14.8%	13.8%	2.2%
	House / Maintenance	6.8%	12.6%	31.4%	21.3%	19.4%	8.5%
	Land/ Resettlement	5.8%	10.8%	34.3%	18.9%	17.2%	13.0%

(Source: Primary Data)



4.78. An attempt is made in survey to collect preference rating to classify the priority needs of the LSGIs in eight selected sectors. The priorities and preferences are ranked on a scale from essential to no preference. Livelihood/Employment and Waste Management followed by health, drinking water and education are the major sectors considered for essential priority in the Corporations. Drinking water and Education are given high preference. Health and Road/Transportation get average priority and House maintenance and Land / Resettlement have only less preference. Drinking water is given the essential priority in Municipality, followed by high preference to waste management and average preference to livelihood / employment, Land / Resettlement, Education, House/Maintenance, Health and Road / Transportation.

In the Gram Panchayat, Road/Transportation is the highest essential priority sector, followed by Drinking water. Education and Health get relatively high preferences. House/Maintenance and Livelihood/Employment also have some preference. The waste management and land / resettlement have least essential priority. The majority of the households have high preference to Health, followed by Education, Road / Transportation, waste management and drinking water. Needs. Livelihood/Employment, land/resettlement, and house/maintenance are given only average preferences in the Gram Panchayat.

Overall, Road/Transportation, Drinking water, and Waste Management are essential priorities across all sectors, while Livelihood/Employment and Health are also important essential needs. Education, House/Maintenance, and Land/Resettlement have lower priorities, but still have some level of preference. Health is given high preference by the



majority of the households followed by Education, Drinking water and waste management.

In short, the priorities and preferences for development in various sectors differ under local governments. But the basic needs for employment, housing, transport, health care and educational attainment of households continue to remain as major sectors deprived of sufficient support. This situation seriously affects the prospects of the traditionally excluded sections. They continue to remain disempowered and marginalized as seen among the fisher folk population.

Section.4.4. Individual Survey Analysis

The survey on fisher folks collected detailed information on their socio-economic indicators aspects and interventions made by local governments towards their development during the past 25 years. This individual survey, gathered information on their socio-economic situation, the extent of benefits they gained and their views on the development initiatives of the LSGIs for their empowerment.

Table.4.56.Percentage of individual respondents

Gender wise Percentage of Individual Respondents for survey						
Local Bodies	Male		Female		Grand Total	
	Nos.	%	Nos.	%	Nos.	%
Cochin Corporation	57	52.3%	52	47.7%	109	3.1%
Kollam Corporation	175	50.4%	172	49.6%	347	9.8%
Corporation	232	50.9%	224	49.1%	456	12.9%
Alappuzha Municipality	63	54.8%	52	45.2%	115	3.3%
Paravoor Municipality	81	44.8%	100	55.2%	181	5.1%
Ponnani Municipality	51	46.4%	59	53.6%	110	3.1%
Quilandy Municipality	82	51.9%	76	48.1%	158	4.5%
Varkala Municipality	61	48.0%	66	52.0%	127	3.6%
Municipality	338	48.9%	353	51.1%	691	19.5%



Allappad GP	104	51.5%	98	48.5%	202	5.7%
Ambalapuzha South GP	156	50.5%	153	49.5%	309	8.7%
Anjuthengu GP	137	48.6%	145	51.4%	282	8.0%
Azhiyoor GP	24	49.0%	25	51.0%	49	1.4%
Mangalam GP	252	45.7%	299	54.3%	551	15.6%
Mararikulam North GP	121	51.9%	112	48.1%	233	6.6%
Njarackal GP	44	43.6%	57	56.4%	101	2.9%
Pallippuram GP	44	54.3%	37	45.7%	81	2.3%
Perumpadappu GP	89	45.4%	107	54.6%	196	5.5%
Purakkad GP	108	53.2%	95	46.8%	203	5.7%
Veliyamcodu GP	90	49.2%	93	50.8%	183	5.2%
Gram Panchayat	1169	48.9%	1221	51.1%	2390	67.6%
Grand Total	1739	49.2%	1798	50.8%	3537	100.0%

(Source: Primary data)

The Gram Panchayats cover a larger percentage of fisher folk compared to Municipalities and Corporations with a slight edge for female population a natural distribution under normal circumstances.

Table.4.57. Gender wise individual characteristics

Background characteristics of the Individual respondents							
	Categories	Male		Female		Grand Total	
		Nos.	%	Nos.	%	Nos.	%
Age Distribution	0 - 3 Years	61	3.5%	66	3.7%	127	3.6%
	> 3 - 6 Years	63	3.6%	64	3.6%	127	3.6%
	> 6 - 18 Years	207	11.9%	273	15.2%	480	13.6%
	> 18 - 25 Years	244	14.0%	220	12.2%	464	13.1%
	> 25 - 60 Years	946	54.4%	989	55.0%	1935	54.7%
	> 60 Years	218	12.5%	186	10.3%	404	11.4%
Marital status	Married	991	57.0%	1095	60.9%	2086	59.0%
	Separated	7	0.4%	3	0.2%	10	0.3%
	Divorced	1	0.1%	7	0.4%	8	0.2%
	Unmarried	442	25.4%	211	11.7%	653	18.5%
	Widower	22	1.3%	150	8.3%	172	4.9%
	NUC < 15 Years	276	15.9%	332	18.5%	608	17.2%



Activity Status	Fishing	767	44.1%	0	0.0%	767	21.7%	
	Allied Fish worker	89	5.1%	170	9.5%	259	7.3%	
	Agro farming	0	0.0%	1	0.1%	1	0.0%	
	Business	6	0.3%	0	0.0%	6	0.2%	
	Contract Job	17	1.0%	14	0.8%	31	0.9%	
	Daily wage	96	5.5%	83	4.6%	179	5.1%	
	Govt. Job	5	0.3%	5	0.3%	10	0.3%	
	Handicrafts / Skilled	6	0.3%	6	0.3%	12	0.3%	
	House Maid / works	6	0.3%	506	28.1%	512	14.5%	
	Job Pension	31	1.8%	21	1.2%	52	1.5%	
	MGNREGS	0	0.0%	63	3.5%	63	1.8%	
	NRI	97	5.6%	6	0.3%	103	2.9%	
	Private Job	41	2.4%	35	1.9%	76	2.1%	
	Self Employed	8	0.5%	16	0.9%	24	0.7%	
	Student	298	17.1%	352	19.6%	650	18.4%	
	Unemployed (incl. dropouts)	72	4.1%	133	7.4%	205	5.8%	
	No Job > 40 Years	89	5.1%	184	10.2%	273	7.7%	
	Others	7	0.4%	1	0.1%	8	0.2%	
	House wife	0	0.0%	89	4.9%	89	2.5%	
	NUC < 6 Years	104	6.0%	113	6.3%	217	6.1%	
Educational Levels	Students	LP	70	4.0%	82	4.6%	152	4.3%
		UP	52	3.0%	74	4.1%	126	3.6%
		HS	53	3.0%	63	3.5%	116	3.3%
		HSS	62	3.6%	71	3.9%	133	3.8%
		ITI / Diploma	20	1.2%	6	0.3%	26	0.7%
		Degree Level	26	1.5%	32	1.8%	58	1.6%
		Post- Graduation	2	0.1%	2	0.1%	4	0.1%
		Above PG / Higher Degree	0	0.0%	1	0.1%	1	0.0%
		Professional Degree	10	0.6%	19	1.1%	29	0.8%
		Professional PG Degree	3	0.2%	2	0.1%	5	0.1%
		Students Education Total	298	17.1%	352	19.6%	650	18.4%
		than student	Illiterate	13	0.7%	25	1.4%	38
	Literate		758	43.6%	697	38.8%	1455	41.1%



	Matriculate / 10 th Level	250	14.4%	280	15.6%	530	15.0%
	Intermediate / +2 Level	179	10.3%	192	10.7%	371	10.5%
	ITI / Diploma	66	3.8%	24	1.3%	90	2.5%
	Degree Level	45	2.6%	55	3.1%	100	2.8%
	Post-Graduation	1	0.1%	10	0.6%	11	0.3%
	Above PG / Higher Degree	1	0.1%	6	0.3%	7	0.2%
	Professional Degree	14	0.8%	33	1.8%	47	1.3%
	Professional PG Degree	10	0.6%	10	0.6%	20	0.6%
	Professional PG Above	0	0.0%	1	0.1%	1	0.0%
	NUC < 6 Years	104	6.0%	113	6.3%	217	6.1%
	Total	1441	82.9%	1446	80.4%	2887	81.6%
Person with Disability (PWD)		35	2.0%	20	1.1%	55	1.6%
Grand Total		1798	100.0%	1739	100.0%	3537	100.0%
Other Characteristics of the Individuals							
Bank Account (>= 10 Yrs)	Yes	1489	94.8%	1496	92.9%	2985	93.9%
	No	81	5.2%	114	7.1%	195	6.1%
	Grand Total	1570	100.0%	1610	100.0%	3180	100.0%
Election ID (> 18 Years)	Yes	1357	94.8%	1352	95.4%	2709	95.1%
	No	73	5.1%	67	4.7%	140	4.9%
	Grand Total	1432	100.0%	1417	100.0%	2849	100.0%
Adhaar ID (> 3 Years)	Yes	1664	99.2%	1723	99.5%	3387	99.3%
	No	4	0.2%	5	0.3%	9	0.3%
	Not having (> 3 - 6 Years)	10	0.6%	4	0.2%	14	0.4%
	Grand Total	1678	100.0%	1732	100.0%	3410	100.0%

(Source: Primary data)

Out of a total of 3537 individuals, the highest proportion covers the age category of > 25-60 years, comprising 54.7% of the total sample. This was followed by those between > 18-25 years, 13.1%. The younger age category of > 6-18 years and elders > 60 years formed 13.6% and 11.4%, respectively.



There is almost balanced composition of both genders across all age categories. Relating to marital status, 59% are married, 18.5% remain unmarried, and 4.9% come under widower category. Among the married and the widower categories, the females outnumber males, a reflection of the common feature.

The most common occupation reported was fishing, 44.10% males and no females reporting. Females report mostly as house maid (28.1%), allied fish work (9.5%), daily wage (4.6%) as MGNREGS (3.5%). Students constitute 19.6% among females and 17.1% among males. Other categories include, NRI (Non-Resident Indian) (2.9 %), unemployed (< 40 Years) (5.6 %), and No job (> 40 Years) 7.7 %. A few others are involved in handicrafts/skilled work (0.3 %), agro farming, and business (0.2 %).

The student category constituting 18.4% of the population is distributed in LP, UP, HS and HSS sections between 3 to 4 percentages each and very small percentages at higher levels. Illiteracy is almost wiped out; only 1.1% persons still remain. Among others 41% are only literate, 15% matriculate, 10.5% +2 level, 5.3% diploma and degree and very few at higher levels.

A few persons are disabled and they require the care and support from others for survival. For the smooth conduct of livelihood activities and fulfilling social responsibilities, a few basic requirements have become compulsory. They include bank account, election ID and Adhaar ID. Our enquiry reveals that 94% of the persons have bank accounts. Election ID covers 95.1% and Adhaar 99.3%.

Table.4.58.Educational qualification of the samples (Other than students)

Educational qualification - % of persons												
LSGIs	Illiterate	Literate	Matriculate / 10 th Level	Intermediate / +2 Level	ITI / Diploma	Degree Level	Post-Graduation	Above PG / Higher Degree	Professional Degree	Professional PG Degree	Professional PG Above	Grand Total
Cochin Corporation	2.2%	50.6%	27.0%	12.4%	3.4%	2.2%	0.0%	0.0%	2.2%	0.0%	0.0%	89
Kollam Corporation	0.0%	46.5%	19.1%	14.1%	6.6%	7.4%	1.6%	0.0%	1.6%	2.7%	0.4%	256
Corporation	0.6%	47.5%	21.2%	13.6%	5.8%	6.1%	1.2%	0.0%	1.7%	2.0%	0.3%	345
Alappuzha Municipality	0.0%	61.1%	17.8%	11.1%	2.2%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	90
Paravoor Municipality	0.8%	80.5%	11.3%	5.3%	0.0%	0.0%	0.0%	0.0%	1.5%	0.8%	0.0%	133
Ponnani Municipality	0.0%	50.9%	17.0%	27.4%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	106
Quilandy Municipality	0.0%	57.4%	20.6%	13.2%	5.1%	1.5%	0.0%	0.7%	0.7%	0.7%	0.0%	136
Varkala Municipality	0.0%	59.6%	23.2%	15.2%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	99
Municipality	0.2%	62.6%	17.7%	14.0%	2.7%	1.6%	0.0%	0.2%	0.7%	0.4%	0.0%	564
Allappad GP	0.7%	65.5%	16.6%	4.8%	4.8%	6.2%	0.7%	0.0%	0.7%	0.0%	0.0%	145
Ambalapuzha South	0.0%	64.4%	17.6%	10.5%	3.8%	1.7%	0.4%	0.0%	1.7%	0.0%	0.0%	239
Anjuthengu GP	0.0%	60.5%	23.4%	9.8%	1.0%	0.5%	0.0%	1.0%	2.4%	1.5%	0.0%	205
Azhiyoor GP	0.0%	52.8%	22.2%	16.7%	2.8%	2.8%	0.0%	2.8%	0.0%	0.0%	0.0%	36
Mangalam GP	9.1%	35.2%	29.1%	19.7%	1.4%	4.4%	0.0%	0.3%	0.0%	0.8%	0.0%	361
Mararikulam North GP	0.0%	51.6%	16.7%	14.0%	7.0%	7.0%	0.0%	0.0%	3.2%	0.5%	0.0%	186
Njarackal GP	0.0%	39.2%	27.0%	18.9%	4.1%	8.1%	0.0%	0.0%	2.7%	0.0%	0.0%	74

Pallippuram GP	0.0%	57.9%	15.8%	12.3%	1.8%	5.3%	1.8%	0.0%	3.5%	1.8%	0.0%	57
Perumpadappu GP	0.0%	58.1%	13.8%	17.4%	1.8%	4.8%	2.4%	0.0%	0.6%	1.2%	0.0%	167
Purakkad GP	0.6%	60.9%	8.3%	15.4%	7.1%	5.8%	0.0%	0.0%	1.3%	0.6%	0.0%	156
Veliyamcodu GP	0.0%	51.1%	25.2%	11.9%	0.0%	0.0%	0.0%	1.5%	10.4%	0.0%	0.0%	135
Gram Panchayat	2.0%	53.3%	20.3%	13.9%	3.1%	4.0%	0.4%	0.3%	2.1%	0.6%	0.0%	1761
Grand Total	1.4%	54.5%	19.9%	13.9%	3.4%	3.7%	0.4%	0.3%	1.8%	0.7%	0.0%	2670

(Source: Primary data)

(8 drop outs are included in unemployed category)

Individual data shows that 54.5% of individuals are literate, while only 1.4% is illiterate. The majority of individuals in all the three local government bodies have completed their education up to matriculation (10th) or intermediate (+2) level, constitutions 19.9%. At the local government level, the highest percentage of illiterate individuals is in Gram Panchayat (2.0%), and the highest percentage of literate individuals is in Municipality (62.6%). In higher education, 3.7% of individuals have completed a degree-level education, while only 0.4% completed post-graduation.

A significant percentage of individuals have completed their education up to the intermediate level, and there is a need to focus on others lagging behind by increasing their access to higher education opportunities.

Table.4.59.Educational status of students

LSGs	LP	UP	HS	HSS	ITI / Diploma	Degree Level	Post-Graduation	Above PG / Higher Degree	Professional Degree	Professional PG Degree	Grand Total
Cochin Corporation	5.0%	10.0%	35.0%	35.0%	0.0%	15.0%	0.0%	0.0%	0.0%	0.0%	20
Kollam Corporation	11.3%	15.5%	15.5%	15.5%	2.8%	21.1%	4.2%	0.0%	9.9%	4.2%	71
Corporation	9.9%	14.3%	19.8%	19.8%	2.2%	19.8%	3.3%	0.0%	7.7%	3.3%	91
Alappuzha Municipality	16.7%	11.1%	0.0%	22.2%	16.7%	16.7%	0.0%	0.0%	16.7%	0.0%	18
Paravoor Municipality	26.1%	26.1%	26.1%	17.4%	0.0%	0.0%	0.0%	0.0%	2.2%	2.2%	46
Ponnani Municipality	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	2
Quilandy Municipality	27.3%	27.3%	22.7%	9.1%	0.0%	9.1%	0.0%	0.0%	4.5%	0.0%	22
Varkala Municipality	13.0%	39.1%	8.7%	39.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	23
Municipality	21.6%	26.1%	17.1%	21.6%	2.7%	5.4%	0.0%	0.0%	4.5%	0.9%	111
Allappad GP	33.3%	22.2%	8.3%	13.9%	5.6%	8.3%	2.8%	0.0%	5.6%	0.0%	36
Ambalapuzha South	7.7%	19.2%	23.1%	38.5%	7.7%	3.8%	0.0%	0.0%	0.0%	0.0%	52
Anjuthengu GP	36.7%	22.4%	16.3%	14.3%	2.0%	0.0%	0.0%	0.0%	8.2%	0.0%	49
Azhiyoor GP	0.0%	8.3%	16.7%	50.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12
Mangalam GP	33.6%	20.3%	18.8%	15.6%	1.6%	8.6%	0.0%	0.8%	0.0%	0.8%	128
Mararikulam North GP	38.5%	15.4%	10.3%	28.2%	2.6%	5.1%	0.0%	0.0%	0.0%	0.0%	39
Njarackal GP	40.0%	20.0%	15.0%	0.0%	5.0%	20.0%	0.0%	0.0%	0.0%	0.0%	20
Pallippuram GP	0.0%	13.0%	13.0%	17.4%	17.4%	13.0%	0.0%	0.0%	26.1%	0.0%	23
Perumpadappu GP	0.0%	9.1%	22.7%	36.4%	0.0%	31.8%	0.0%	0.0%	0.0%	0.0%	22

Purakkad GP	21.2%	27.3%	24.2%	9.1%	9.1%	6.1%	0.0%	0.0%	3.0%	0.0%	33
Veliyamcodu GP	35.3%	11.8%	20.6%	20.6%	0.0%	0.0%	0.0%	0.0%	11.8%	0.0%	34
Gram Panchayat	26.6%	18.8%	17.6%	20.3%	4.7%	7.6%	0.2%	0.2%	3.8%	0.2%	448
Grand Total	23.4%	19.4%	17.8%	20.5%	4.0%	8.9%	0.6%	0.2%	4.5%	0.8%	650

(Source: Primary data)

The data provides LSG wise attainment of various levels of education. In Gram Panchayats generally lower levels of attainments predomination while higher attainments in Municipality and Corporation areas. Focus is needed to reduce regional variation. Overall, the data highlights the need for a comprehensive approach for improving education facilities and making it accessible in all regions.

Table.4.60. Employment status of the selected samples

Employment of persons (Above 15 years) except students, house wife, no job above 40 years															
LSGIs	Fishing	Allied Fish worker	Business / Agro farming	Contract Job	Daily wage / Self Employed	Govt. Job	Handicrafts / Skilled	House Maid	Job Pension	MGNREGS	NRI	Private Job	Others	Unemployed (< 40 years)	Grand Total
Cochin Corporation	48.3	3.3	1.7	3.3	8.3	0.0	0.0	11.7	1.7	1.7	0.0	6.7	0.0	13.3	60
Kollam Corporation	32.4	30.5	0.5	1.4	3.8	0.0	0.5	0.5	1.4	0.0	7.0	1.9	0.0	20.2	213
Corporation	35.9	24.5	0.7	1.8	4.8	0.0	0.4	2.9	1.5	0.4	5.5	2.9	0.0	18.7	273
Alappuzha Municipality	40.0	2.9	0.0	1.4	22.9	0.0	0.0	12.9	1.4	0.0	0.0	1.4	1.4	15.7	70
Paravoor Municipality	32.3	9.7	0.0	0.8	4.0	0.0	0.0	48.4	0.0	0.0	0.0	4.0	0.0	0.8	124
Ponnani Municipality	1.1	16.1	0.0	0.0	2.2	0.0	0.0	57.0	0.0	0.0	22.6	1.1	0.0	0.0	93

Quilandy Municipality	53.4	2.9	0.0	2.9	10.7	1.0	0.0	0.0	0.0	2.9	1.0	2.9	0.0	22.3	103
Varkala Municipality	23.3	18.9	0.0	1.1	14.4	1.1	0.0	26.7	0.0	2.2	3.3	2.2	0.0	6.7	90
Municipality	30.2	10.2	0.0	1.3	9.8	0.4	0.0	30.4	0.2	1.0	5.2	2.5	0.2	8.5	480
Allappad GP	38.9	29.0	0.0	0.0	0.0	0.8	0.8	0.0	9.9	2.3	5.3	2.3	0.8	9.9	131
Ambalapuzha South	42.5	2.3	0.0	0.9	34.2	0.0	0.0	3.7	0.9	2.7	0.0	3.7	0.0	9.1	219
Anjuthengu GP	47.8	10.7	0.0	2.2	1.1	0.0	0.0	28.1	0.6	2.8	0.6	2.8	0.0	3.4	178
Azhiyoor GP	39.4	3.0	0.0	0.0	3.0	0.0	0.0	39.4	0.0	12.1	0.0	3.0	0.0	0.0	33
Mangalam GP	27.9	4.5	1.4	0.0	6.9	0.3	0.0	42.4	0.3	0.7	7.2	2.8	1.0	4.5	290
Mararikulam North GP	33.7	3.5	0.6	2.9	5.8	2.3	0.0	11.0	8.7	16.3	0.0	4.1	0.0	11.0	172
Njarackal GP	30.0	10.0	0.0	0.0	5.0	0.0	10.0	1.7	0.0	11.7	0.0	11.7	0.0	20.0	60
Pallipuram GP	42.5	17.5	0.0	2.5	5.0	0.0	10.0	10.0	0.0	0.0	0.0	10.0	0.0	2.5	40
Perumpadappu GP	2.5	6.4	0.0	4.5	10.2	0.0	0.0	52.9	0.0	0.0	19.1	4.5	0.0	0.0	157
Purakkad GP	37.9	24.8	0.0	0.0	3.9	1.3	0.0	0.7	9.8	1.3	0.0	2.6	1.3	16.3	153
Veliyamcodu GP	37.7	0.0	0.0	0.8	6.6	0.0	0.0	45.9	0.0	0.0	3.3	1.6	0.8	3.3	122
Gram Panchayat	33.7	9.2	0.3	1.3	9.2	0.5	0.7	23.0	3.0	3.7	4.1	3.6	0.5	7.3	1555
Grand Total	33.2	11.2	0.3	1.3	8.8	0.4	0.5	22.2	2.3	2.7	4.5	3.3	0.3	8.9	2308

(Source: Primary data)

Fishing and allied fish works are the main sources of employment for people in all three LSGs, with the highest percentage in the Gram Panchayat (33.7%). Self-employment, in the form of business and agro-farming, is an insignificant source of employment in all LSGs. The percentage of people employed in contract jobs, daily wage jobs, and private jobs are also relatively low in all LSGs, and comparatively more daily wage workers are engaged in the Municipality (9.8%). In the Municipality, a high percentage of



people are employed as housemaids (30.4%), and in Gram Panchayat they constitute 23%. while the percentage of people employed in government jobs is relatively low (0.4%) in all areas. The percentage of people unemployed (below 40 years) is highest in the Corporation (18.7%), followed by the Municipality (8.5%) and the Gram Panchayat (7.3%).

Overall, the results indicate that fishing and allied fish works, as well as self-employment, are the major sources of employment in all three LSGs. The percentage of people employed in government jobs is relatively low, while the percentage of people employed in contract, daily wage, and private jobs is also relatively low. The percentage of unemployed (below 40 years) is the highest in the Corporation.

Table.4.61.Method of fishing

Method of fishing								
Fishing Method	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Off shore fishing	52	53.1%	80	55.2%	226	43.1%	358	46.7%
Deep sea fishing	34	34.7%	22	15.2%	70	13.4%	126	16.4%
Both fishing methods	12	12.2%	43	29.7%	228	43.5%	283	36.9%
Total	98	100.0%	145	100.0%	524	100.0%	767	100.0%

(Source: Primary data)

The most common fishing method among the fishermen is in-offshore fishing, an average of 46.7% engaged across all local government regions. Deep sea fishing is used by a smaller percentage, on an average 16.4% across. The remaining 36.9% fishermen conveniently use methods for fishing.



Table.4.62.Fishing units

Distribution of active fishermen according to choice of fishing units.								
Fishing Unit	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Cooperative unit	0	0.0%	4	2.9%	10	2.0%	14	1.9%
Daily Wage	58	62.4%	92	66.7%	383	78.2%	533	73.9%
Joint / Group	25	26.9%	23	16.7%	40	8.2%	88	12.2%
Own Boat	10	10.8%	18	13.0%	55	11.2%	83	11.5%
Rented Boat	0	0.0%	1	0.7%	2	0.4%	3	0.4%
Total	93	100.0%	138	100.0%	490	100.0%	721	100.0%

(Source: Primary data)

The fishing units are categorized into five types: Cooperative unit, Daily Wage, Joint/Group, Own Boat, and Rented Boat. The largest percentages of active fishermen are in the Daily Wage category, 73.9% followed by the Joint/Group category, 12.2%. The Own Boat category accounts for 11.5% and in the Cooperative Unit category only 1.9% active fishermen, are involved.

Table.4.63.Duration of fishing in a year

Fishing livelihood in the year								
Duration of work	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
All the year	19	20.4%	19	13.8%	141	28.8%	179	24.8%
Nearly 9 months	69	74.2%	75	54.3%	129	26.3%	273	37.9%
Half a year	5	5.4%	40	29.0%	173	35.3%	218	30.2%
Quarterly in a year / 3 Months	0	0.0%	4	2.9%	47	9.6%	51	7.1%
Total	93	100.0%	138	100.0%	490	100.0%	721	100.0%

(Source: Primary data)



The fishing employment is categorized into four types: All the year, Nearly 9 months, Half a year, and Quarterly of a year. The most common fishing duration is nearly 9 months, 37.9% workers get this duration. The second most common category is half year duration where 30.2% workers are involved under the third category. All year round, 24.8% workers get engaged and in the quarterly year category only 7.1% workers choose to go. Overall, the nearly 9 month's fishing is most common.

Table.4.64.Monthly employment days of fishing population

Monthly fishing livelihood								
Monthly job days	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
All days	21	22.6%	16	11.6%	81	16.5%	118	16.4%
Half of a month	68	73.1%	109	79.0%	329	67.1%	506	70.2%
Occasionally	1	1.1%	9	6.5%	63	12.9%	73	10.1%
Sometimes	3	3.2%	4	2.9%	17	3.5%	24	3.3%
Total	93	100.0%	138	100.0%	490	100.0%	721	100.0%

(Source: Primary data)

Around 70% of the fish workers get only half a month work, slightly high in Municipal areas and less in Gram Panchayats. Those getting all days' work form only 16.4%, slightly more in Corporation and less in Municipality areas. Others a minority, goes to work occasionally or sometimes at their choice.

Table.4.65.Extent of unemployment

Job loss of fishermen population.								
Job Status	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Face Job Loss	88	89.8%	94	64.8%	294	56.1%	476	62.1%
No Loss	3	3.0%	7	4.9%	158	30.2%	168	21.9%



Partially losses	0	0.0%	6	4.1%	4	0.8%	10	1.3%
Allied Fishing Works	1	1.0%	0	0.0%	3	0.6%	4	0.5%
Construction works / daily wage	5	5.1%	26	17.9%	10	1.9%	41	5.3%
Traditional Fishing	1	1.0%	0	0.0%	41	7.8%	42	5.5%
Other Jobs	0	0.0%	12	8.3%	14	2.7%	26	3.4%
Total	98	100.0%	145	100.0%	524	100.0%	767	100.0%

(Source: Primary data)

Loss of job in a serious problem affecting 62.7% of the fishermen and mostly in the corporation limits and relatively low in Gram Panchayats, 56.1% workers. Those who get regular jobs are 21.9% and largely in Gram Panchayats. There also a few getting engaged in other activities for livelihood.

Table.4.66. Technical and financial supports available for fishing activities

LSGs assistance for fishing	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No Assistance	83	84.7%	87	60.0%	306	58.4%	476	62.1%
Early alert on weather	13	13.3%	57	39.3%	200	38.2%	270	35.2%
Equipments for Fishing	0	0.0%	1	0.7%	9	1.7%	10	1.3%
Financial assistance to loss	0	0.0%	0	0.0%	3	0.6%	3	0.4%
Other job training	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Early weather alert & Boat	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Early weather alert & equipments for Boats	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Early weather alert & Financial support	2	2.0%	0	0.0%	2	0.4%	4	0.5%
Technical support & equipments for fishing	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Total	98	100.0%	145	100.0%	524	100.0%	767	100.0%

(Source: Primary data)



62% of the fishermen do not avail any assistance and they try to manage themselves. 35% get early alert on weather other supports serve only a few workers. It is necessary to enhance the support schemes to protect the fishermen from risking their life during fishing due to environmental disasters.

Table.4.67. Percentage of fishing individuals' condition improved through assistance

Improvement in fishing through assistance of different types of LSGs								
	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Yes improved	0	0.0%	51	87.9%	29	13.3%	80	27.5%
Partially improved	4	26.7%	3	5.2%	119	54.6%	126	43.3%
Not improved	11	73.3%	4	6.9%	70	32.1%	85	29.2%
Total	15	100.0%	58	100.0%	218	100.0%	291	100.0%

(Source: Primary data)

However, the assistance did not seem to have helped their recipients much. Only less than one third had gained, another around one third remained without beneficiary and the rest left with partial gains.

Table.4.68. Details of Allied fishing works

Allied Jobs	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Retail sales	22	32.8%	46	93.9%	54	37.8%	122	47.1%
Processing units	38	56.7%	1	2.0%	35	24.5%	74	28.6%
Peeling worker	1	1.5%	0	0.0%	41	28.7%	42	16.2%
Auction	4	6.0%	0	0.0%	0	0.0%	4	1.5%
Farming	0	0.0%	0	0.0%	1	0.7%	1	0.4%
Fishing Net	0	0.0%	1	2.0%	5	3.5%	6	2.3%
Others(Freight)	2	3.0%	1	2.0%	7	4.9%	10	3.9%
Total	67	100.0%	49	100.0%	143	100.0%	259	100.0%

(Source: Primary data)



The allied fishing jobs include largely conducting retail sales, (47%) work in processing units (28.6%) and undertaking peeling works (16.2%).

Table.4.69. Percentage of students according to type of college

Count of School / college								
Row Labels	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Government	30	33.0%	86	77.5%	192	42.9%	308	47.4%
Aided	23	25.3%	15	13.5%	156	34.8%	194	29.8%
Kendreeya / Navodhaya	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Others	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Private	38	41.8%	10	9.0%	95	21.2%	143	22.0%
Private	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Religious educational centre	0	0.0%	0	0.0%	2	0.4%	2	0.3%
Grand Total	91	100.0%	111	100.0%	448	100.0%	650	100.0%

(Source: Primary data)

Out of 650 student's respondents, 47.4% (308) are studying in government schools/colleges, 29.8% (194) are in aided schools/colleges, and 22% (143) are in private schools/colleges. One from Kendreeya/Navodhaya school and two students are studying in religious educational centers are also present. In corporation, majority of them are studying in private institutions (41.8%) while majority in municipality and Gram Panchayat in government schools comprising 77.5% and 42.9% respectively.

Table.4.70. Percentage of students availing mid-day meal & uniforms assistance

Mid-day Meals & Books for students from 1 st to 10 th standards					
Row Labels	Mid-day meals	Uniform & Books	Both of the above	None	Grand Total
Cochin Corporation	0.0%	20.0%	60.0%	20.0%	10
Kollam Corporation	6.7%	0.0%	20.0%	73.3%	30
Corporation	5.0%	5.0%	30.0%	60.0%	40
Alappuzha	20.0%	0.0%	80.0%	0.0%	5



Municipality					
Paravoor Municipality	0.0%	2.8%	72.2%	25.0%	36
Quilandy Municipality	0.0%	0.0%	82.4%	17.6%	17
Varkala Municipality	0.0%	0.0%	85.7%	14.3%	14
Municipality	1.4%	1.4%	77.8%	19.4%	72
Allappad GP	4.3%	0.0%	65.2%	30.4%	23
Ambalapuzha South	0.0%	0.0%	95.8%	4.2%	24
Anjuthengu GP	2.7%	0.0%	70.3%	27.0%	37
Azhiyoor GP	0.0%	0.0%	100.0%	0.0%	3
Mangalam GP	5.4%	0.0%	69.9%	24.7%	93
Mararikulam North GP	0.0%	4.0%	64.0%	32.0%	25
Njarackal GP	0.0%	0.0%	80.0%	20.0%	15
Pallipuram GP	0.0%	0.0%	50.0%	50.0%	6
Perumpadappu GP	0.0%	100.0%	0.0%	0.0%	7
Purakkad GP	0.0%	0.0%	78.3%	21.7%	23
Veliyamcodu GP	4.5%	0.0%	86.4%	9.1%	22
Gram Panchayat	2.9%	2.9%	71.9%	22.3%	278
Grand Total	2.8%	2.8%	68.7%	25.6%	390

(Source: Primary data)

The provision of mid-day meal and uniforms made by local bodies help poor students a great deal to attend schools regularly. Only 25% days do not need this help and there is some local variation, in the corporation this proportion comes to 60%.

Table.4.71.Percentage of students availing high-tech classes and those having educational backwardness

Educational facilities for 1 st to 12 th class students									
LSGIs	1. Utilization of High tech classroom				2. Educational backwardness				Grand Total
	Yes, utilize	Yes, not utilize	No	Unknown	Yes	Partially	No	No answer	
Cochin Corporation	21.4%	0.0%	0.0%	78.6%	0.0%	0.0%	100.0%	0.0%	14
Kollam Corporation	70.7%	19.5%	2.4%	7.3%	0.0%	2.4%	97.6%	0.0%	41
Corporation	58.2%	14.5%	1.8%	25.5%	0.0%	1.8%	98.2%	0.0%	55
Alappuzha Municipality	77.8%	22.2%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	9
Paravoor Municipality	75.0%	13.6%	9.1%	2.3%	9.1%	38.6%	52.3%	0.0%	44
Ponnani Municipality	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	2
Quilandy Municipality	47.4%	10.5%	5.3%	36.8%	0.0%	0.0%	100.0%	0.0%	19
Varkala Municipality	100.0%	0.0%	0.0%	0.0%	0.0%	4.8%	95.2%	0.0%	21
Municipality	73.7%	10.5%	7.4%	8.4%	4.2%	21.1%	74.7%	0.0%	95
Allappad GP	17.9%	10.7%	46.4%	25.0%	3.6%	0.0%	96.4%	0.0%	28
Ambalapuzha South GP	100.0%	0.0%	0.0%	0.0%	10.5%	0.0%	89.5%	0.0%	38
Anjuthengu GP	86.4%	0.0%	2.3%	11.4%	15.9%	11.4%	72.7%	0.0%	44
Azhiyoor GP	90.0%	0.0%	0.0%	10.0%	20.0%	0.0%	80.0%	0.0%	10
Mangalam GP	50.5%	2.7%	25.2%	21.6%	10.8%	30.6%	58.6%	0.0%	111
Mararikulam North GP	56.3%	6.3%	12.5%	25.0%	9.4%	6.3%	68.8%	15.6%	32
Njarackal GP	13.3%	53.3%	0.0%	33.3%	6.7%	0.0%	93.3%	0.0%	15
Pallippuram GP	76.9%	7.7%	0.0%	15.4%	0.0%	0.0%	100.0%	0.0%	13
Perumpadappu GP	0.0%	0.0%	93.3%	6.7%	6.7%	73.3%	20.0%	0.0%	15
Purakkad GP	88.0%	0.0%	4.0%	8.0%	12.0%	0.0%	88.0%	0.0%	25
Veliyamcodu GP	100.0%	0.0%	0.0%	0.0%	11.5%	53.8%	34.6%	0.0%	26
Gram Panchayat	62.7%	4.8%	17.1%	15.4%	10.4%	18.5%	69.7%	1.4%	357
Grand Total	64.3%	6.9%	13.6%	15.2%	8.1%	17.2%	73.8%	1.0%	507

(Source: Primary data)



The large majority of students have high-tech classrooms and most of them utilise it. Educational backwardness prevails only among a small proportion of students. It can eventually be solved with greater participation from LSGIs.

Table.4.72.Extent of required knowledge attained in higher studies

Level of attainment					
Row Labels	Yes	Partially	No	No answer	Grand Total
Cochin Corporation	0.0%	0.0%	100.0%	0.0%	11
Kollam Corporation	100.0%	0.0%	0.0%	0.0%	22
Corporation	66.7%	0.0%	33.3%	0.0%	33
Alappuzha Municipality	25.0%	0.0%	75.0%	0.0%	4
Paravoor Municipality	100.0%	0.0%	0.0%	0.0%	20
Ponnani Municipality	0.0%	100.0%	0.0%	0.0%	2
Quilandy Municipality	100.0%	0.0%	0.0%	0.0%	7
Varkala Municipality	100.0%	0.0%	0.0%	0.0%	9
Municipality	88.1%	4.8%	7.1%	0.0%	42
Allappad GP	100.0%	0.0%	0.0%	0.0%	8
Ambalapuzha South	37.5%	50.0%	12.5%	0.0%	24
Anjuthengu GP	80.0%	0.0%	20.0%	0.0%	15
Azhiyoor GP	100.0%	0.0%	0.0%	0.0%	9
Mangalam GP	70.5%	2.3%	20.5%	6.8%	44
Mararikulam North GP	45.5%	27.3%	9.1%	18.2%	11
Njarackal GP	100.0%	0.0%	0.0%	0.0%	3
Pallippuram GP	70.0%	20.0%	10.0%	0.0%	10
Perumpadappu GP	15.4%	61.5%	23.1%	0.0%	13
Purakkad GP	66.7%	33.3%	0.0%	0.0%	9
Veliyamcodu GP	70.0%	0.0%	30.0%	0.0%	10
Gram Panchayat	63.5%	18.6%	14.7%	3.2%	156
Grand Total	68.4%	13.4%	16.0%	2.2%	231

(Source: Primary data)

Nearly one fifth of the students remain without attaining the required level of Higher Education competence. Closer monitoring is required to enhance their knowledge.

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



Table.4.73. Percentage of individuals faced drop out condition from education

Experience of study drop out among persons aged 6 – 25 Years								
Row Labels	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No drop out	115	94.3%	165	87.3%	566	89.7%	846	89.8%
Yes, but continued	3	2.5%	3	1.6%	7	1.1%	13	1.4%
Employment	1	0.8%	3	1.6%	2	0.3%	6	0.6%
No facilities at home	0	0.0%	5	2.6%	13	2.1%	18	1.9%
No Financial support	3	2.5%	8	4.2%	15	2.4%	26	2.8%
No interest	0	0.0%	4	2.1%	20	3.2%	24	2.5%
Others (Marriage, failed, health issues)	0	0.0%	1	0.5%	8	1.3%	9	1.0%
Grand Total	122	100.0%	189	100.0%	631	100.0%	942	100.0%

(Source: Primary data)

The large majority, nearly 90%, did not experience drop out from education. The remaining 10% were compelled by various exigencies. Timely intervention may help to regain their studies.

Table.4.74. Status of individuals in pre-schooling

Number of Pre schools					
LSGIs	ICDS Anganwadis	Private	Others	No (Enrolled in Schools)	Grand Total
Kollam Corporation	30.0%	40.0%	0.0%	30.0%	10
Corporation	30.0%	40.0%	0.0%	30.0%	10
Alappuzha Municipality	100.0%	0.0%	0.0%	0.0%	1
Paravoor Municipality	0.0%	0.0%	0.0%	100.0%	3
Quilandy Municipality	0.0%	0.0%	0.0%	100.0%	1
Varkala Municipality	0.0%	25.0%	50.0%	25.0%	4
Municipality	11.1%	11.1%	22.2%	55.6%	9
Allappad GP	53.8%	30.8%	0.0%	15.4%	13
Ambalapuzha South GP	14.3%	57.1%	0.0%	28.6%	7
Anjuthengu GP	33.3%	25.0%	8.3%	33.3%	12
Mangalam GP	46.3%	14.6%	19.5%	19.5%	41

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks

188



Mararikulam North GP	20.0%	20.0%	20.0%	40.0%	10
Njarackal GP	25.0%	0.0%	25.0%	50.0%	4
Pallippuram GP	0.0%	100.0%	0.0%	0.0%	1
Perumpadappu GP	100.0%	0.0%	0.0%	0.0%	2
Purakkad GP	0.0%	50.0%	16.7%	33.3%	6
Veliyamcodu GP	8.3%	33.3%	8.3%	50.0%	12
Gram Panchayat	34.3%	25.0%	13.0%	27.8%	108
Grand Total	32.3%	25.2%	12.6%	29.9%	127

(Source: Primary data)

Pre-schooling for children is generally available in all LSGIs and parents send the children for training. However the facilities available have to be made sufficiently available for their playful learning.

Table.4.75.Educational assistance distributed to school and college students

Assistance	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No assistance	89	97.8%	93	83.8%	374	83.5%	556	85.5%
Educational equipments	0	0.0%	11	9.9%	38	8.5%	49	7.5%
Laptops	1	1.1%	0	0.0%	4	0.9%	5	0.8%
Scholarships	0	0.0%	3	2.7%	21	4.7%	24	3.7%
Study room	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Study room & scholarships	1	1.1%	0	0.0%	0	0.0%	1	0.2%
Laptop & Scholarships	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Educational equipments & laptops	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Educational equipments & scholarships	0	0.0%	0	0.0%	1	0.2%	1	0.2%
Transportation & educational equipments	0	0.0%	1	0.9%	0	0.0%	1	0.2%
Unknown	0	0.0%	3	2.7%	7	1.6%	10	1.5%
Grand Total	91	100.0%	111	100.0%	448	100.0%	650	100.0%

(Source: Primary data)

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



Educational assistance is limited to about 15% of the students and mostly in the form of equipments. The coverage may be increased to benefit more students.

Table.4.76.Number of people having any disease

Row Labels	No		Yes		Grand Total
	Nos.	%	Nos.	%	
Cochin Corporation	107	98.2%	2	1.8%	109
Kollam Corporation	336	96.8%	11	3.2%	347
Corporation	443	97.1%	13	2.9%	456
Alappuzha Municipality	114	99.1%	1	0.9%	115
Paravoor Municipality	172	95.0%	9	5.0%	181
Ponnani Municipality	110	100.0%	0	0.0%	110
Quilandy Municipality	157	99.4%	1	0.6%	158
Varkala Municipality	123	96.9%	4	3.1%	127
Municipality	676	97.8%	15	2.2%	691
Allappad GP	201	99.5%	1	0.5%	202
Ambalapuzha South	302	97.7%	7	2.3%	309
Anjuthengu GP	272	96.5%	10	3.5%	282
Azhiyoor GP	48	98.0%	1	2.0%	49
Mangalam GP	487	88.4%	64	11.6%	551
Mararikulam North GP	229	98.3%	4	1.7%	233
Njarackal GP	99	98.0%	2	2.0%	101
Pallippuram GP	69	85.2%	12	14.8%	81
Perumpadappu GP	193	98.5%	3	1.5%	196
Purakkad GP	182	89.7%	21	10.3%	203
Veliyamcodu GP	180	98.4%	3	1.6%	183
Gram Panchayat	2262	94.6%	128	5.4%	2390
Grand Total	3381	95.6%	156	4.4%	3537

(Source: Primary data)

Most of the people remain free from disease, only 4.4% is affected.

Appropriate medical support can free them also.



Table.4.77.Percentage of respondents according to the type of disease

Row Labels	Count of Disease Type						Grand Total
	Corporation		Municipality		Gram Panchayat		
	Nos.	%	Nos.	%	Nos.	%	
Accident (PWD)	0	0.0%	0	0.0%	6	100.0%	6
BP / Diabetics / Cholesterol	0	0.0%	0	0.0%	44	100.0%	44
Asthma / Allergic Disease	0	0.0%	0	0.0%	7	100.0%	7
Bone diseases	0	0.0%	0	0.0%	2	100.0%	2
Cancer Patient	3	37.5%	1	12.5%	4	50.0%	8
Craniosynostosis	0	0.0%	0	0.0%	1	100.0%	1
Epilepsy	0	0.0%	1	25.0%	3	75.0%	4
Geriatric Diseases	1	8.3%	0	0.0%	11	91.7%	12
Hearing / Vision disorder	0	0.0%	1	33.3%	2	66.7%	3
Heart & Kidney Problem	0	0.0%	0	0.0%	1	100.0%	1
Heart Disease	7	20.6%	5	14.7%	22	64.7%	34
Hyperuricemia	0	0.0%	0	0.0%	1	100.0%	1
Kidney problem	0	0.0%	1	33.3%	2	66.7%	3
Liver Disease	0	0.0%	0	0.0%	2	100.0%	2
Lupus Disease	1	100.0%	0	0.0%	0	0.0%	1
Autism	0	0.0%	1	16.7%	5	83.3%	6
Parkinson disease	1	100.0%	0	0.0%	0	0.0%	1
Psoriasis	0	0.0%	0	0.0%	1	100.0%	1
Rheumatism	0	0.0%	0	0.0%	3	100.0%	3
Stroke	0	0.0%	3	27.3%	8	72.7%	11
Thrombocytopenia	0	0.0%	0	0.0%	1	100.0%	1
Thyroid Patient	0	0.0%	1	100.0%	0	0.0%	1
Tuberculosis	0	0.0%	1	100.0%	0	0.0%	1
Ulcer	0	0.0%	0	0.0%	1	100.0%	1
Uterine fibroids	0	0.0%	0	0.0%	1	100.0%	1
Grand Total	13	8.3%	15	9.6%	128	82.1%	156

(Source: Primary data)



Lifestyle diseases and geriatric illness predominate in the health care system. Constant medical support and lifestyle monitoring are recommended to remain healthy.

Table.4.78.Assistance to persons with Disability

Assistance from LSGs for PwD								
PWD Assistance	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No Assistance	1	50.0%	3	60.0%	43	89.6%	47	85.5%
Treatment assistance	0	0.0%	1	20.0%	0	0.0%	1	1.8%
Vehicles	1	50.0%	0	0.0%	1	2.1%	2	3.6%
Wheel chair	0	0.0%	1	20.0%	0	0.0%	1	1.8%
No Need	0	0.0%	0	0.0%	2	4.2%	2	3.6%
Unknown	0	0.0%	0	0.0%	2	4.2%	2	3.6%
Grand Total	2	100.0%	5	100.0%	48	100.0%	55	100.0%

(Source: Primary data)

85.5% of the persons with disability do get assistance. It seems a gross negligence towards this handicapped the section. Appropriate intervention may be initiated.

Table.4.79.Women Empowerment

Participation of women in empowerment program through LSGIs						
LSGIs	Yes	Partially associated	Not Participated	No Answer	Unknown	Grand Total
Cochin Corporation	4.9%	0.0%	92.7%	2.4%	0.0%	166
Kollam Corporation	4.0%	0.8%	95.2%	0.0%	0.0%	41
Corporation	4.2%	0.6%	94.6%	0.6%	0.0%	125
Alappuzha Municipality	0.0%	10.3%	89.7%	0.0%	0.0%	887
Paravoor Municipality	0.0%	0.0%	100.0%	0.0%	0.0%	70
Ponnani Municipality	0.0%	0.0%	100.0%	0.0%	0.0%	114
Quilandy	6.3%	0.0%	92.2%	0.0%	1.6%	102



Municipality						
Varkala Municipality	2.2%	0.0%	95.6%	0.0%	2.2%	20
Municipality	1.8%	1.4%	96.0%	0.0%	0.7%	196
Allappad GP	0.0%	0.0%	100.0%	0.0%	0.0%	89
Ambalapuzha South	0.0%	0.0%	100.0%	0.0%	0.0%	36
Anjuthengu GP	25.5%	1.0%	71.6%	0.0%	2.0%	29
Azhiyoor GP	0.0%	0.0%	95.0%	0.0%	5.0%	91
Mangalam GP	2.6%	1.5%	91.8%	0.0%	4.1%	71
Mararikulam North GP	13.5%	6.7%	71.9%	3.4%	4.5%	69
Njarackal GP	0.0%	0.0%	100.0%	0.0%	0.0%	277
Pallippuram GP	0.0%	0.0%	96.6%	0.0%	3.4%	39
Perumpadappu GP	1.1%	2.2%	96.7%	0.0%	0.0%	73
Purakkad GP	2.8%	0.0%	97.2%	0.0%	0.0%	56
Veliyamcodu GP	0.0%	0.0%	100.0%	0.0%	0.0%	64
Gram Panchayat	5.2%	1.4%	91.3%	0.3%	1.8%	45
Grand Total	4.4%	1.3%	92.7%	0.3%	1.4%	1330

(Source: Primary data)

Participation of women in empowerment program is quite low, 5.7%. It seems wider propaganda is required to increase their awareness and participation. Active and empowered women build up the society to its full potential. LSGIs can motivate them through specific programs.

Table.4.80.Program for women empowerment

Percent of program for women empowerment								
Assistance	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Financial support to ventures	1	12.5%	1	11.1%	2	3.4%	4	5.3%
SHGs	1	12.5%	0	0.0%	17	29.3%	18	24.0%
Skill development	3	37.5%	3	33.3%	3	5.2%	9	12.0%
Small Enterprise	1	12.5%	1	11.1%	2	3.4%	4	5.3%
Women empowerment	1	12.5%	0	0.0%	14	24.1%	15	20.0%



centre								
Legal / Health awareness	0	0.0%	3	33.3%	19	32.8%	22	29.3%
Legal / Health awareness & SHGs	0	0.0%	1	11.1%	1	1.7%	2	2.7%
Legal / Health awareness, skill development & women empowerment centre	1	12.5%	0	0.0%	0	0.0%	1	1.3%
Grand Total	8	100.0%	9	100.0%	58	100.0%	75	100.0%

(Source: Primary data)

In such programs (29.3 %) attended legal and health awareness classes for women's empowerment followed by SHGs (24.0 %), and women empowerment centre with 20.0%. In the Corporation more people attended for skill development programs, which in Municipality skill development and Legal/ Health programmes. In Gram Panchayats Legal/Health, SHG and women empowerment schemes were preferred more.

Table.4.81.Percent of Kudumbasree members

Count of Kudumbasree	Having Membership			Official responsibility		Total (Having Membership)
	% of No	% of Yes	Total	No	Yes	
Cochin Corporation	29.3%	70.7%	41	75.9%	24.1%	29
Kollam Corporation	62.4%	37.6%	125	85.1%	14.9%	47
Corporation	54.2%	45.8%	166	81.6%	18.4%	76
Alappuzha Municipality	38.5%	61.5%	39	91.7%	8.3%	24
Paravoor Municipality	76.7%	23.3%	73	88.2%	11.8%	17
Ponnani Municipality	48.2%	51.8%	56	100.0%	0.0%	29
Quilandy Municipality	45.3%	54.7%	64	85.7%	14.3%	35
Varkala Municipality	66.7%	33.3%	45	86.7%	13.3%	15



Municipality	56.7%	43.3%	277	90.8%	9.2%	120
Allappad GP	57.1%	42.9%	70	83.3%	16.7%	30
Ambalapuzha South	36.0%	64.0%	114	71.2%	28.8%	73
Anjuthengu GP	53.9%	46.1%	102	91.5%	8.5%	47
Azhiyoor GP	50.0%	50.0%	20	70.0%	30.0%	10
Mangalam GP	75.5%	24.5%	196	85.4%	14.6%	48
Mararikulam North GP	48.3%	51.7%	89	78.3%	21.7%	46
Njarackal GP	58.3%	41.7%	36	80.0%	20.0%	15
Pallipuram GP	37.9%	62.1%	29	61.1%	38.9%	18
Perumpadappu GP	52.7%	47.3%	91	97.7%	2.3%	43
Purakkad GP	25.4%	74.6%	71	71.7%	28.3%	53
Veliyamcodu GP	68.1%	31.9%	69	81.8%	18.2%	22
Gram Panchayat	54.3%	45.7%	887	80.2%	19.8%	405
Grand Total	54.8%	45.2%	1330	82.5%	17.5%	601

(Source: Primary data)

Kudumbasree is a women's empowerment initiative. 45.2% of the persons surveyed were members of this organisation and among them 17.5% undertake official responsibility to run their schemes. So far the initiatives have gained wide support and helped many to rise to completing levels. Continuous support for LSGIs can strengthen them further to take up higher responsibilities.

Table.4.82. Social Security – Pensions

Percentage distribution of different categories of pension													
LSGs	8		Disability Pension		Fishermen Pension		Old age Pension		No Pension		Other welfare Fund Board / Other Pensions		Grand Total
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%	
Cochin	2	14.3%	0	0.0%	0	0.0%	7	50.0%	2	14.3%	3	21.4%	14
Kollam	11	20.8%	2	3.8%	10	18.9%	13	24.5%	10	18.9%	7	13.2%	53
Corporation	13	19.4%	2	3.0%	10	14.9%	20	29.9%	12	17.9%	10	14.9%	67
Alappuzha	1	5.6%	0	0.0%	4	22.2%	5	27.8%	1	5.6%	7	38.9%	18
Paravoor	2	10.0%	0	0.0%	0	0.0%	14	70.0%	2	10.0%	2	10.0%	20
Ponnani	0	0.0%	0	0.0%	0	0.0%	15	93.8%	1	6.3%	0	0.0%	16
Quilandy	5	16.7%	1	3.3%	0	0.0%	19	63.3%	2	6.7%	3	10.0%	30
Varkala	9	56.3%	1	6.3%	0	0.0%	4	25.0%	2	12.5%	0	0.0%	16
Municipality	17	17.0%	2	2.0%	4	4.0%	57	57.0%	8	8.0%	12	12.0%	100
Allappad	4	12.1%	0	0.0%	23	69.7%	3	9.1%	0	0.0%	3	9.1%	33
Ambalapuzha South	3	9.7%	2	6.5%	1	3.2%	8	25.8%	10	32.3%	7	22.6%	31
Anjuthengu	9	20.9%	1	2.3%	0	0.0%	16	37.2%	11	25.6%	6	14.0%	43
Azhiyoor	1	16.7%	1	16.7%	0	0.0%	2	33.3%	1	16.7%	1	16.7%	6
Mangalam	20	31.7%	6	9.5%	1	1.6%	19	30.2%	5	7.9%	12	19.0%	63
Mararikulam North	1	2.1%	8	16.7%	16	33.3%	2	4.2%	4	8.3%	17	35.4%	48
Njarackal	2	20.0%	0	0.0%	0	0.0%	4	40.0%	3	30.0%	1	10.0%	10
Pallippuram	1	9.1%	0	0.0%	0	0.0%	6	54.5%	1	9.1%	3	27.3%	11

Perumpadappu	0	0.0%	0	0.0%	0	0.0%	21	87.5%	1	4.2%	2	8.3%	24
Purakkad	3	9.4%	4	12.5%	1	3.1%	12	37.5%	10	31.3%	2	6.3%	32
Veliyamcodu	10	41.7%	1	4.2%	1	4.2%	6	25.0%	2	8.3%	4	16.7%	24
Gram Panchayat	54	16.6%	23	7.1%	43	13.2%	99	30.5%	48	14.8%	58	17.8%	325
Grand Total	84	17.1%	27	5.5%	57	11.6%	176	35.8%	68	13.8%	80	16.3%	492

(Source: Primary data)

Among the surveyed population (3410 people), 14.4 percent (492) were reported as eligible for receiving pensions under any of the welfare schemes. Among them 35.8% receive old age pension, 17.1% get widow / unmarried pension, 11.6% get fishermen pension and 5.5% get disability pension. 16.3% are given pension under other schemes. However, 13.8% are yet to be considered for pension though many have applied for. Their condition needs to be assessed and necessary support extended under local government initiatives.



Social Empowerment

Table.4.83.Membership in Social empowerment organizations

LSGI	No		Yes		Grand Total
	Nos.	%	Nos.	%	
Corporation	345	98.6%	5	1.4%	350
Municipality	551	97.7%	13	2.3%	564
Gram Panchayat	1673	95.6%	77	4.4%	1750
Grand Total	2569	96.4%	95	3.6%	2664

(Source: Primary data)

Only a small percentage (3.6%) is having membership in social organizations from all LSGs.

Table.4.84.Type of organization

Details of membership in various socio cultural organizations								
Organisations	Corporation		Municipality		Gram Panchayat		Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Cooperative societies	0	0.0%	3	23.1%	4	5.2%	7	7.4%
Arts & Sports clubs	0	0.0%	0	0.0%	9	11.7%	9	9.5%
Welfare Org	5	100.0%	10	76.9%	53	68.8%	68	71.6%
Employees Org	0	0.0%	0	0.0%	2	2.6%	2	2.1%
Alcoholic free society	0	0.0%	0	0.0%	1	1.3%	1	1.1%
Welfare org & Cooperative societies	0	0.0%	0	0.0%	1	1.3%	1	1.1%
Others (Political & religious)	0	0.0%	0	0.0%	7	9.1%	7	7.4%
Grand Total	5	100.0%	13	100.0%	77	100.0%	95	100.0%

(Source: Primary data)

Association with social empowerment organisations is rather meager among the fisher folk. Only 3.6% people get involved and they mostly associate with welfare organisation.



Table.4.85.Membership of respondents in SAF initiative (Society for Assistance to fisher women)

Percentage of SAF membership					
Row Labels	No Membership		SAF Member		Grand Total
	Nos.	%	%	Nos.	
Corporation	167	92.8%	13	7.2%	180
Municipality	273	95.1%	14	4.9%	287
Gram Panchayat	884	95.6%	41	4.4%	925
Grand Total	1324	95.1%	68	4.9%	1392

(Source: Primary data)

Membership in society is also very low 4.9%. Given the very poor livelihood condition of the fisher women, this society can play an active role to enhance their welfare. Local bodies may extent them supportive schemes.

Table.4.86.Percent of assistance received by respondents from SAF

Assistance from SAF								
Assistance	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
No assistance	8	61.5%	3	21.4%	17	41.5%	28	41.2%
Financial assistance	0	0.0%	2	14.3%	3	7.3%	5	7.4%
Joint Liability group	3	23.1%	1	7.1%	0	0.0%	4	5.9%
Joint Liability group & enterprises	0	0.0%	0	0.0%	1	2.4%	1	1.5%
Loan support	0	0.0%	8	57.1%	14	34.1%	22	32.4%
Self-employment	0	0.0%	0	0.0%	1	2.4%	1	1.5%
Small scale enterprises	1	7.7%	0	0.0%	5	12.2%	6	8.8%
Training	1	7.7%	0	0.0%	0	0.0%	1	1.5%
Grand Total	13	100.0%	14	100.0%	41	100.0%	68	100.0%

(Source: Primary data)

The extent of support now given through this society is quite meager and mostly as support for availing loan. Other supports also to be given



priority and resource set apart adequately under local government initiative.

Table.4.87.Membership of respondents in Matsya fed

Percentage of membership in Matsya fed					
LSGI	No		Yes		Grand Total
	Nos.	%	Nos.	%	
Corporation	39	23.6%	126	76.4%	165
Municipality	54	27.8%	140	72.2%	194
Gram Panchayat	132	19.8%	536	80.2%	668
Grand Total	225	21.9%	802	78.1%	1027

(Source: Primary data)

78% of respondents have membership in Matsya fed across LSGIs and 80% in Gram Panchayats.

Table.4.88.Percentage of assistance from Matsya Fed

Assistance	Corporation		Municipality		Gram Panchayat		Grand Total	
	Nos.	%	Nos.	%	Nos.	%	Nos.	%
Welfare assistance	109	86.5%	107	76.4%	270	50.4%	486	60.6%
Bonus	0	0.0%	1	0.7%	34	6.3%	35	4.4%
Educational assistance	1	0.8%	0	0.0%	4	0.7%	5	0.6%
Fishing equipments	0	0.0%	0	0.0%	4	0.7%	4	0.5%
Insurance assistance	0	0.0%	0	0.0%	28	5.2%	28	3.5%
Loan assistance	1	0.8%	0	0.0%	66	12.3%	67	8.4%
Women Bus	1	0.8%	0	0.0%	0	0.0%	1	0.1%
Small Enterprise	0	0.0%	1	0.7%	3	0.6%	4	0.5%
Training assistance	1	0.8%	1	0.7%	0	0.0%	2	0.2%
Loan assistance & Fuel subsidy	0	0.0%	0	0.0%	1	0.2%	1	0.1%
Loan assistance for enterprise	1	0.8%	0	0.0%	0	0.0%	1	0.1%
Welfare & loan assistance	1	0.8%	1	0.7%	0	0.0%	2	0.2%
Welfare assistance &	0	0.0%	0	0.0%	2	0.4%	2	0.2%



educational support								
Welfare assistance & Insurance	0	0.0%	0	0.0%	24	4.5%	24	3.0%
Welfare assistance & Training	0	0.0%	1	0.7%	0	0.0%	1	0.1%
Others	11	8.7%	28	20.0%	100	18.7%	139	17.3%
Grand Total	126	100.0%	140	100.0%	536	100.0%	802	100.0%

(Source: Primary data)

The support given by Matsyafed constitute mostly welfare assistance, 60.6% though there are many other support schemes, the coverage of beneficiaries is quite small and pro-active approach is required to extend more vital supports to gain tangible benefits from Matsya fed the support schemes.

Section.4.5. Observations from Stakeholders Interview

4.5.1. Elected representatives of the selected Gram Panchayats

32 elected representatives of the selected fishing villages have made assessment about the role of local self-government institutions in the development of fisher folk population. These institutions, namely municipalities, panchayats, and corporations do play a significant role in their development. The elected representatives involve in making policies and evolving suitable programs addressing their specific needs and ensuring effective implementation. They also act as a bridge between the community and the government advocating protecting their rights and safeguarding their interests.

The major disadvantage, minority of the fisher folk community face is poverty. The representatives strongly advocate for creating sustainable livelihood opportunities through developing fisheries and related industries and ensuring fair prices for the fish they catch and helping them get access to markets. Access to education and healthcare are critical

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



problems the community faces. Elected representatives work towards improving the quality of education and healthcare facilities in the area ensuring accessibility to all. They advocate for allocation of resources to provide specialized training programs and vocational education for eligible candidates to develop skills and access better job opportunities.

Regarding the impact of decentralized planning adopted through the three tier system of governance, majority of the elected representatives agree with its positive effects on development in the state. However, there are a few sharing skepticism and allowing only partially its positive impact. Similarly, holding Matsya sabha meetings in fishing villages is endorsed by quite many, but some members do not support this attempt.

Participation of fisher folk in Matsya Sabha meetings was very high according to majority of representatives at all levels but a little low at grama sabha level. Similarly the performance of fisher folk towards Matsya Sabha meetings was assessed as "good" or "excellent" showing their deep concern for the issues discussed. In proposing their needs in Matsya Sabha meetings, a majority of the fisher folk showed great enthusiasm and special consideration was given to their grievances.

Despite making increased intervention by LSGs in many areas to address their pressing needs its impact was only partial according to many stakeholders. Evaluation of schemes undertaken by local bodies vary, incorporations social audit covers all schemes, only half in municipality and even less in gram panchayats. Social audit method is generally used for the evaluation of fisher folk-related projects in the surveyed LSGs. However, there are still a significant proportion of projects not evaluated. The intervention of fisheries promoters for bring up grievances for solution, does not attempt full coverage.



In providing priority to schemes for the fisher folk, the local bodies seem to vary in their approach, while municipalities and Gram Panchayats provide reasonable support; corporations fail to extent special considerations. In order to get reliable information about the socio economic conditions of the people in their constituencies, the elected representatives constantly interact with dependable sources, such as Kudumbasree units, Asha workers, social activists, volunteers and experts in the area. They also initiate ward Sabha meetings to discuss various development needs of the wards and to present them in Panchayat meetings for evolving appropriate actions. Moreover the information available from Sansad Adarsh Gramin Yojana (SAGY) provides insights into the infrastructure coverage in the panchayat. It helps to identify the shortage and to demand for corrective actions. In short, active representative have multiple sources of information available for effective intervention so as to improve the social-economic condition of the fisher folk in the concerned panchayat.

Suggestions made by elected representative for improving the fisheries sector and promoting the livelihood of the fisher folk

- Undertake seawall construction to prevent sea erosion.
- Relaxation of coastal Regulations zone regulations for vulnerable fisher folks, rehabilitation of displaced households and house numbers allotted for their houses.
- Basic deficiencies such as water shortage, poor road connectivity, inadequate street lights etc rectified.
- Distribute lifesaving equipment's, like jackets, Kattamaram, air tubes, nets, gillnets etc.
- Ensure employment and sustainable livelihood income assistance during travelling of a period.



- Maintain quality in education, distribute learning devices, laptop etc.
- Insurance facilities for employment and loss of equipment's.
- Special grand provision for vulnerable fisherman situations.
- Financial assistance to cover losses.
- Early alert system and legal support to avail compensation in coastal regulation zones.
- Timely completion of projects.
- Women empowerment through provision of employment opportunities support and facilities provided for fisheries related activities.
- Organizing co-operative societies and ward level outlets for avoiding middleman exploitation.
- Support coastal sustainable tourism to generate employment and income for native talents.
- Public-private partnership in various projects to bring in comprehensive development.
- Floods in coastal areas bring in disastrous impacts. Permanent preventive methods undertaken.
- Awareness created for taking safety precautions and fighting disasters.
- Shelter homes made available as part of disaster management.
- Encourage loan assistance through nationalized banks, cooperative banks, etc and protect the needy from exploitative dealers.
- Installation of wind power devices (as cheap sources) as energy source for disaster management equipment's.
- Group farming and cooperative societies to promote fisheries activities.
- Provide technical efficiency for developmental efforts.
- Social auditing system adopted to evaluate projects.

In short, the elected representatives in the panchayats do seem to have fairly good insights into the various depressing socio-economic and



environmental problems the fisher folk experience in the selected Panchayats. They very forcefully argue for strong and viable solutions for sustainable development focusing mainly the vulnerable fisher folk section.

4.5.2 Analysis of interview from officials of LSGIs.

As part of collecting data on administrative aspects of fisheries development in the state, the study team had interacted with 17 officials from the selected LSGs. Their views and experience provide valuable insights into the schemes adopted for the fisher folks the benefits received by them, approach towards Gram Sabha meetings, problems of project implementation etc.

Majority of the officials (88.2%) hold the view that project formulations should be based on the needs of the beneficiaries. In many panchayats Matsya Sabha meetings were not held to discuss such issues. The benefits generated for the fisher folk in several Panchayats vary greatly from zero to full level depending on the availability of funds, efficiency of implementation, active role of participants and the extent of beneficiary contribution. The officials observe that in all aspects of plant formulation, stakeholder participation, beneficiary contribution, evaluating the project implemented, etc the impacts vary in each Panchayat depending on the level of involvement of each category of stakeholder. The officials also suggested that apart from the regular fund sources, special grant is necessary to attain comprehensive development for the Fisher folks.

To attain reasonable level of development among the fishing community, the officials put forward viable work plans such as the efforts of the LSGIs should give timely official service to those in need so as to enable them avail all governmental assistance declared, give priority to schemes



enhancing production and catchment of more fish, support extended through welfare measures, encouragement for education, livelihood supports ensured, assistance provided to improve housing, sanitary, drinking water and health needs, improvement in infrastructure coverage for easy mobility and timely intervention to help vulnerable sections during natural disaster. Livelihood supports should include provisions for supply of Kattamaram, fishing nets and ice boxes. Assistance for educational supports may cover distribution of furniture; laptops etc for deserving candidates to enable them acquire modern skills of learning techniques. However, housing disaster management activities seem to get low priorities due to shortage of resources with the local bodies. The officials have serious concern over the phenomenon of sea erosion causing great damages to coastal protection settings, leading to loss of land, destruction of habitats and properties and deterioration in the coastal ecosystem. Changes in marine ecosystem often result in loss of fish catch and income for livelihood. In addition, exploitation by middlemen who resort to unfair pricing and debt bondedness make the fisher folk subservient to them. The traditional fishermen are generally unskilled in using modern fishing equipment's and using safety measures for their protection during emergency. This situation often leads to accidents and loss of life. These fishermen generally do not acquire alternative livelihood knowledge and it makes them vulnerable due to low level of fish catch and low income. The tendency of throwing plastic wastes into the sea leads to ecological damage causing reduction in fish generation. The practice of trolling ban for longer periods significantly impact upon their income source. They need essential livelihood support. Apart from these livelihood disadvantages, they are further immiserised by the tendency of their youth getting addicted to intoxicants, a serious drain on subsistence income.



The officials have made suggestions for improving the livelihood scenario of the traditional fisher folk.

1. Distribution of user friendly equipments for livelihood activities.
2. Adequate support for gaining educational skills for students.
3. Provisions for Clean drinking water, street lights, better road facilities, modernisation of markets, storage, etc.
4. Appropriate housing and sanitary schemes to suit coastal eco-conditions.
5. Easily accessible medical facilities, insurance supports for treatment and protection to livelihood equipments.
6. Stakeholder working groups on LSGIs activity involve in plan formulation for fisher folk development and with special focus on women empowerment activities.
7. Promote tourism activities in coastal regions and extent support for new ventures in fishing and allied activities.

The official envisages a comprehensive development approach through LSGI initiatives for the fisher folks in the state. However, they also point out disadvantages and limitations that adversely affect their development prospects. Most of the fisher folk are unable to give beneficiary contribution required for scheme implementation. LSGIs often face shortage of funds for planned development activities. Restrictions in Coastal Regulation Zones make them explore alternative schemes. Low subsidy rates limit development coverage. Despite these inconveniences, the officials suggest to evolve need based plan formulations, timely completion of projects through effective monitoring and proper evaluation methods, allocation of special funds for developing fishing villages, convergence of fisheries and agriculture schemes and rehabilitation of deprived the households ensuring them socio-economic upliftment. They



suggest to provide adequate assistance for training and skill upgradation for students to enable them get wider job preference. Protection of coastal areas from sea erosion is a frequent disaster and it requires scientific study to evolve effective devices to prevent this onslaught. For all these issues to be properly managed, competent and committed advisory bodies representing all stakeholders in each LSGI is required. Similarly, convening Matsya Sabha meetings provide effective platforms for the fisher folk to air out their grievances and form consequences for effective solutions. In short these critical view expressed by the LSGI officials contribute much scope to enhance the socio-economic condition of the fisher folk section in the state.

Section.4.6. Analysis of the Observations from Field Investigators

Investigator observation is a qualitative research method in which the researcher observes and records the views of individuals or groups in their natural settings. It can provide valuable insights into the social and economic conditions they experience. The data provides rich information on their lived experiences and perspectives they hold. This nuanced understanding of the challenges and opportunities the community face can help in designing and implementing appropriate development programs and policies for the upliftment of this subaltern section.

The investigator observes the daily activities of families, and the functioning of local institutions and organizations. Along with this enquiry the study also conducted focus groups discussions with concerned stakeholders in several areas to supplement the data collected through observation. Analysis of these observations help to identify the exact development interventions required for the particular region.



The observations of the field investigators include proximity to various offices and services service centers like Coastal wards, Family Health Centers, Government Hospitals, Educational centers, Roads and Transport in good condition, GP Offices and Fisheries Department/Welfare offices.

The number of coastal wards varies in Gram Panchayats from (5 to 7), in Municipality (5 to 7), and Corporation (7 to 9) respectively. The average distance to family health centers ranges in Gram Panchayat from 2 to 4 km, 3 to 4 km municipality, and corporation 2 to 3 km respectively, and the average distance to government hospitals ranges also almost similarly in coastal wards. The average distance to educational centers ranges from 2 to 3 km in all the local self-government institutions.. The condition of road and transportation in the selected coastal wards show better situation in all Gram Panchayats, municipalities and corporations. 7 out of 10 in Gram Panchayats, 3 out of 4 in municipalities and the 2 corporations. The observations made by field investigators give valuable insights into the deprivations the fisher folk experience in the panchayats.

A. Basic Facilities & Infrastructure

- Deficiency in Housing and sanitation facility is a major problem faced by the coastal households. Proper maintenance for their housing is a challenge for them.
- There are several inconveniences in getting house numbers due to CRZ Regulations. Obtaining engineering drawings is costly, undue delay in getting approval for the drawings from town planning office, unable to obtain house numbers, disables getting various government services.
- The roads are in poor condition, particularly those in the Coastal areas. This creates significant inconvenience for their mobility and it adversely impact upon local businesses also.



- Difficulties in implementing rehabilitation schemes such as Punargeham Project by fisheries department need to be solved.
- In coastal areas, majority of households rely on tube wells to draw water for drinking and other domestic needs. However, in recent years, there have been reports about the bad quality of water obtained from bore wells being discolored and stained, and unfit for consumption.
- In most places people depend on public taps for collecting drinking water: Street lights are not functioning in many places.

B. Employment & Livelihood

- Uncertainty in the availability of fish from catches affects their income. Shortages limit the fishermen families to spend for essential needs such as medical care, education, and housing. It leads to indebtedness to mainly private money lenders.
- Fishing industry face a number of problems like decline in fish populations due to climate change over fishing by trawlers, etc. These situations adversely affect the livelihoods of local fishermen and their families a great deal.
- Sustainable tourism improves beach development and raises funds for its promotion.
- Old age people of the community are also going for fishing in traditional boats as their subsistence means.
- Women are mostly engaged in unskilled jobs like fish sale, prawn peeling, fish drying etc.
- Increase in the fees for license and registration for fiber boats by more than 5 times cause difficulties for the fishermen in the Panchayat as it is beyond their means. Additionally, not getting permits for their boats multiplies the crisis in the fisheries sector.



- Distribution of tools / equipment's etc for their employment purpose is conditioned upon beneficiary contribution. It becomes a burden for poor fisherman families.

C. LSGs Interventions

- There seems to be lack of effective interaction by fisheries promoters and elected representatives with fishermen families resulting in neglect of their specific problems.
- Many traditional fisher folk are unaware of the existence of Matsya sabha and grama sabha meetings and do not benefit much from the assistance given by government agencies such as fisheries offices, panchayats or municipalities. This situation makes them deprived of the chances of upliftment.

D. Climate change & disaster

- Sea erosion and the potential threat of storm affect life in coastal area directly and the poor fisher folk families become easy victims.

E. Education

- Educational facilities in coastal schools are limited and the students are in dire need of various learning equipment's particularly laptops, reference materials etc other than text books.

F. Health

- The primary healthcare centers (PHC) do not have inpatient treatment facility and the Outpatient (OP) services are available only till noon and not on holidays. This denies the fisher folk getting adequate healthcare support close to their habitation.



- Residents in coastal regions often face difficulties in accessing essential healthcare services, such as Primary health clinics, homeopathy dispensaries, Ayurveda dispensaries, and veterinary hospitals, primarily due to limited public transportation so they have to depend on auto-rickshaws for travel at high cost.
- Stagnant water pools in the low sea level areas in coastal wards serve as breeding grounds for micro-organisms which spread many water-borne diseases.

G. Veterinary

- Not all Gram Panchayats have Veterinary hospitals so many animal husbandry farmers are denied of this facility.

H. Social Organizations

- A significant proportion of fisher folk women are engaged in domestic duties. The number of women who become members of Kudumbasree units is low. It reduces their chances of participating in community activities and improving social awareness.

The suggestions for improving the quality of life in Gram Panchayats the views of the field investigators:

- Greater participation in gramsabha's, forming Kudumbasree units and introducing Theera-Maithri schemes for women empowerment can help to improve their economic and social status.
- Fisheries grama sabha should be conduct twice a year for formulation and monitoring of projects. .
- Increase in transportation services can make easier for people to access employment, education, and other opportunities.



- Increased Job opportunities for women could increase their economic empowerment and the overall prosperity of the fisher folk.
- Promote sustainable fishing activity practices for preserving the catch with adequate storage facilities; export oriented processing units, etc.
- Panchayat interventions to create employment opportunities for youth can help to reduce their unemployment and to improve the overall economic situation of the community.
- Piped water supply, despite laying the lines, does not reach the households, it is important to investigate the reasons for the default and find solution for it.
- To solve the problem of getting impure water from tube wells, regular water quality testing and water purification methods are necessary.
- Drinking water shortage and street light failures are frequent disadvantages faced by most households in coastal areas, affecting the overall well-being of the residents.
- To provide better health care Outpatient services in the hospital, to be extended till and service available on Saturdays as well at the fisheries CHC. Inpatient treatment and doctor services should also be made available at night to improve access to healthcare for those who are engaged in fishing during daytime.
- Improve the veterinary care, facilities to all cattle farmers and extend services of the veterinary hospital in the neighboring panchayat to the coastal area as well. To provide separate services of veterinarian, homeo and Ayurveda dispensaries, government may allocate funds and resources to establish them in the coastal region.
- Convergence of activities from various agencies the protection of coasts from sea erosion, flooding, potential storms and heavy rains, undertaken under LSGI initiative.



- Registration of households living in coastal areas for more than 3 years can help them to access essential services and that they can be located at times of emergencies.
- Insurance coverage for fish workers can help to provide financial supports for accidents or other unforeseen events.
- Preference should be given to housing and its renovation, along with other regular services from Haritha Karma Sena
- Local road network and maintenance of these infrastructures for its durability and sustainability are to be ensured.
- The government and other agencies are to review the fees structure and permit policies and find ways to make them affordable to the fishermen.
- Debt Burden of the fishing community reasonably solved and releases them from the clutches of private money lenders.
- Policies and programmes evolved based on the needs of fisherman population in coastal areas. The elected representatives should have major roles in its implementation.
- Proper drainage facilities provided in dense populated and flood affected areas.
- Awareness about all development schemes and services available in Local Bodies, created development projects to be completed within stipulated time frame.
- Fisheries promoters take active role in the development of the fishing activities and the social economic development of the fishermen population.

These are general observation made by field investigators during this house hold survey and while collecting panchayat level information. Availability of funds is a major factor, budgetary provision as well as own fund. To evolve appropriate and comprehensive development plans, the



LSGIs involve the services of concerned government departments, agencies and experts. Their priorities should always be Antyodaya, the development of the poor and neglected sections, most of the fisher folk come under these categories.



5

CONCLUSION

Kerala has made progress in education, health, food distribution, and local government. The decentralization of power has allowed for infrastructure improvement and poverty reduction. However, marginalized communities, such as tribes and fisher folk, still face deprivations. Programs are in place for tribes through special provisions, but fisher folk receive little specific support. While some local governments try to effectively plan for marginalized groups, the inclusion of these groups effectively in the planning process can lead to better outcomes. To achieve inclusive development for the fisher folk, the stakeholders must involve from the beginning and a decentralized planning strategy followed.

This study brings out the socio-economic condition of the fisher-folk living in coastal region and near water bodies in Kerala. They remain as a marginalized group exposed to natural catastrophes and bearing historical deprivation caused by social, political, and economic disempowerment. Despite government support through departmental schemes and development programs, their welfare remains poor, with poverty perpetuated by underemployment, low education levels, and physical and material deprivation. Climate change and environmental disasters exacerbate their already precarious conditions. More than half of the fisher-folk live below the poverty line, and the low female-to-male ratio is also a negative demographic feature. Policymakers and development practitioners need to prioritize their needs and promote socio-economic empowerment through higher education training, affordable housing, and



sustainable fishing practices. Local governments have a crucial role in promoting development and addressing their needs.

The 73rd and 74th Constitutional Amendments in India led to decentralization in the government; Kerala's initiatives played a significant role in this process. The Peoples Plan Campaign (PPC) launched by the government in 1996 devolved 35-40% of plan funds to local governments, leading to participatory planning from below. The Sen Committee proposed necessary changes in institutional reforms and legislative frameworks for functional, financial, and administrative autonomy. Kerala's decentralization experience has been commendable, with the PPC empowering people at the grassroots level in decision-making and development initiatives. A committee was appointed to review the performance of the decentralization process since the enactment of conformity legislations, which was around 25 years ago. The government made significant amendments to the process in 2001 and changed the name of the campaign to Kerala Development Plan.

A study in Kerala has found that the fisher-folk population is impoverished, with 75% remain landless or having very little land, and 70% having an annual income below Rs.5000. Traditional fisher-folk, who make up 90% of the population, are excluded from development and left in poverty and exploitation while seafood exporters and traders dominate the sector. Poverty, chronic illness, and alcoholism are prevalent, with women forced to work in tough conditions to support their families. Despite government schemes to support them, their situation remains poor due to exclusion, lack of investment capital and environmental disasters. From 2010-2016, the fisherman population decreased by 7.6%, and the majority (60%) living below the poverty line. The traditional fisher-folk suffer in terms of education, income, health, and land holdings.



The literacy rate is reasonable, but their higher education levels are unfavorable. Fishermen tend to spend money on non-saving activities but have close social and economic relationships while utilizing marine resources coherently.

Kerala has made progress in social and service sectors but the traditional fishing activities lag behind. They have poor housing conditions, inadequate healthcare facilities and drinking water shortage. The incidence of communicable diseases is also high in fishing villages, and safety at sea is seldom protected. The fishing sector remains at the periphery of Kerala's development paradigm due to low economic attainment, poor livelihood amenities and low employment levels, all leading to extreme marginalization.

The Panchayat Raj Institutions (PRI) administers developments in rural areas and the Urban Local Bodies (ULB) takes care of urban areas. They have autonomy in their functional domain with guidelines from the government. The LG's six main functions include mandatory and general functions, sectoral responsibilities, coordinating with transferred institutions, maintaining assets, annual plan formulation and implementation, and collecting taxes and non-tax revenue. The LSGs have sector-wise responsibilities and handle various areas such as agriculture, animal husbandry, minor irrigation development, and fisheries. They also take care of social forestry, small-scale industries, water supply, education, village roads, and public health. They receive some control over certain government posts and departments transferred to them, but their role is limited due to dual control. They have a maintenance fund for the proper upkeep of assets.

The goal of the five-year plans for local development in Kerala's fisheries sector was export-oriented growth, not providing cheap fish for domestic



consumption. This has led to a scarcity of fish for local people and benefited only a minority who engaged in exports. Despite public investment in the sector, it has not kept pace with other areas of the economy, and the fishermen's per capita income remains far below the state's average.

The decentralization of planning in Kerala has been strengthened over the past 25 years through the Plan grants-in-aid devolved from the State government. The first year of people's Plan campaign improved democratic decentralization in the State, but not integrate local plans with the overall Five-Year Plan perspective to make significant impact in production. The second year of People's Plan campaign had emphasized integration of local plans with the overall Five-Year Plan perspective of the State. It is intended to be implemented during the 13th Five-Year Plan period and prioritize environment protection, conservation of natural resources, agricultural production, waste management, water management attending to difficulties of the differently abled persons, children, women, and marginalized sections. Kerala's 1200 local governments will receive financial allocation from the state plan as recommended by the State Finance Commission.

Findings from the Focus Group Discussions

Experts and activists have expressed concern about the marginalization, exploitation, and helplessness experienced by fisher folk in the southern region of the state. While some welfare policies have had positive effects, neglect of crucial livelihood requirements has remained a negative consequence. Fishers face problems such as drinking water shortage and infrastructure limitations that severely constrain their mobility and livelihood operations while their living areas get destroyed due to environmental hazards and neglect of public intervention. Much of the



amount allocated for fisher folk development remains unspent, while bureaucrats from the fisheries department remain unconcerned about timely completion of projects for the poor. Co-operative initiatives provide limited attention in empowering the poor. Corruption is rampant in the distribution of new motor boats and distribution of fuel for fishing boats, leaving traditional fisher folk disadvantaged in all their livelihood activities and living facilities. The experts and activists call for a detailed Investigation on all aspects of development disadvantages experienced by the traditional fisher folk and demand the Local Self Government Institutions to provide priorities to all development needs of this subaltern section.

The focus group discussion in Trivandrum addressed various issues faced by fisher folk in the state, including exploitation by middleman traders, traditional fishing techniques that pose risks during catastrophic weather, disrupted education, inadequate healthcare systems, shortage of basic infrastructure on the shore, and pollution and overfishing that reduce natural fish habitats and stocks. Fisher folk often have limited earnings opportunities due to bulk catching by exporters that destroys fish stocks and limits their own catch, and tradesmen-contractor lobbies who take away their fish. The government and local authorities are requested to intervene to protect the traditional fisher folk who rely on fishing for their livelihood.

Representatives of fisher folk, social activists, and officials participated in a focus group discussion in Thrikkunnappuzha to discuss problems facing by the fishing community. They highlighted difficulties in obtaining fishing equipment and assistance, obtaining higher education for their children, in dealing with environmental disasters, and the need for timely intervention by the fisheries department and local government



institutions. The group urged for more lenient approach towards solving the difficulties of the poor traditional fisher folk in the region.

The focus group discussion was held in Aroor, Alappuzha district with representatives from fisher folks, social activists, and officials of the Gram Panchayat to discuss problems faced by fisher folks in the region. The main issue discussed was the difficulties faced by the fisher folks engaged in fishing, their inability to contribute the 50% beneficiary share for fishing equipments and travel boats, the disappearing traditional skills for boat and net repairs, the high investment required for individual fish farming, the indiscriminate use of Chinese nets without licenses, the pollution caused by fish processing plants by dumping waste into the river, and the lack of importance for women's empowerment in local level plans. The participants emphasized the need for local body intervention to improve the livelihood of fisher folks in the region.

Another focus group discussion held in Quilandy, Kozhikode involved social activists, fisher folk leaders, and social welfare officials. The group discussed various problems faced by the fisher folk during their livelihood activities, including the deteriorating fish catch, high fuel costs, leakage of fuel from old boat engines, destructive actions by fishing vessels, pollution of water bodies, and inappropriate fishing practices. Another serious issue they highlighted was that many fisher folk boys dropped out of school after secondary education and became addicted to alcohol, leading to severe livelihood crises for their families. Fishermen are also exploited by the high rent charges of boat owners and the low prices fixed for their catch by middlemen traders.



Findings from the Analysis of fund utilization

The spending patterns of local self-government institutions on development projects and the utilization of funds allocated to fisheries sectors in chosen Gram Panchayats over the past 10 years. The table and graph present data on the utilization of various funds, showing an average of 16.89 crores of rupees spent by each LSGI every year. The expenditure under productive and service sectors has increased since 2013-14, while infrastructure expenditure has decreased. This shows a shift in development priorities of local self-government institutions from infrastructure to productive and service sector enlargements, due to government policy changes or interventions.

The data provide the percentage of funds spent on productive, service, and infrastructure sectors in various local bodies. Overall, the service sector receives major funding with 54.9%, followed by infrastructure with 40.1%, and productive sector with 5%. The corporation and municipality also prioritize service and infrastructure, while gram panchayats allocate more towards the productive sector at 9.6%.

The amount of fund spent on activities in the fisheries sector by selected local governments over the past nine years. There is a negative trend in expenditure; the amount spent in 2021-22 is 2.64 times lower than in 2013-14. The graph also shows a decline in spending over the years, with the highest amount spent in 2013-14 and 2020-21. On average, each local government body spent 12.26 lakhs over the last nine years, and there was a 2.69 times decline in assistance for livelihoods in 2021-22 compared to the allocation provided in 2013-14.

Another notable aspect is the amount spent on fisheries projects by local self-government (LSG) is apportioned for six categories of activities shown



in the table.5.1. It shows that the LSGs prioritize infrastructure development; corporations spend the most on this category, while municipalities focus more on education. Fishing and related activities have not been promoted much by all the three levels of LSGs during the past nine years. Only 1.1% of projects implemented by Local Self Governments in the last 9 years are related to fisheries, with 0.7% of the total amount allocated going towards fisheries development.

Table.5.1.Amount & Highest percentage of utilization of projects under fisheries sector

Total amount under fisheries sector and utilization in category						
Sl. no.	Major category	Amount (In Lakhs)	% of the Total	Sub Category (Highest Share)	Amount (In Lakhs)	% of the major category
1	Infrastructure	926.07	46.6%	<i>Fish markets</i>	558.43	60.3%
2	Educational Assistance	404.40	20.3%	<i>Distribution of laptops</i>	280.72	69.4%
3	Fishing Development	333.00	16.8%	<i>Fishing gear and boats</i>	158.96	47.7%
4	Others (Welfare & Tourism)	200.79	10.1%	<i>Tourism promotion</i>	150.00	74.7%
5	Fish Farming	70.57	3.6%	<i>Biofloc/Artificial farming</i>	31.18	44.2%
6	Fishing Allied works	52.46	2.6%	<i>Insulated Ice Box</i>	42.84	81.7%
Total		1987.27	100%	Total	1222.13	61.5%

(Reference: Section.4.3 of Chapter 4)

Fishing livelihood projects were the majority of projects undertaken by different local self-governments after infrastructure development projects, with GP having the highest number of projects (45) and amount utilized (99.98 lakhs). Municipalities and GPs spent more on education and livelihood support, while corporations invested more in infrastructure development.



Findings of the household analysis

The survey collected responses from 778 households in the fishing villages, with larger proportion (64.1%) from Gram Panchayat areas. The information gathered covers size, family status of ration card, religious category, income and expenditure, land holding, and housing status. Most households (58.5%) had 2 to 4 members, 75.8% having BPL (Red) ration cards indicating their very poor economic condition. 90.2% of households have formal registration numbers for their homes, while the remaining live in temporary or informal dwellings. Muslims, Hindus, and Christians all live together in comparable numbers.

The income and expenditure pattern of the sample households shows that the majority of households have income less than 5000 rupees per month, while the largest proportion of households spent between 10000 and 25000 rupees per month. Only a small percentage of households have high incomes or expenditures above 50000 rupees per month.

The majority of surveyed households in coastal areas own small plots of land for dwelling and as a storage for fishing equipments 44.7% households own 1-5 cents plots, 28.1% own 5-10 cents, and only 1.7% own more than 25 cents areas. Landless households account for 9.4%. Most households own their homes (83.5%), and only 1.8% houses are remain un-electrified and 3.3% lack toilet facilities. 49.9% have purchased land for dwelling and those having hereditary shares are 40.0% and others live in joint properties. Only 0.1% households use their land for agriculture and 0.9% remains as barren land. Nearly all land (98.7%) is used as property for dwelling. The highest percentage of landless households are in the Municipalities (17.4%), while the highest percentage of land holdings greater than 11 cents units are in Gram Panchayats (20.2%).



The proximity of habitations to the sea is critical, the closer it being more susceptible during high tide seasons. But many households suffer due to occupational convenience and lack of alternatives. Only 38% of households surveyed live beyond 200 meters from the sea, others live closer and under constant threat of sea incursion and more likely to be severely affected, the impact is higher in Gram Panchayats areas. The affected households were rehabilitated mostly in Gram Panchayats areas. The possibility of sea incursion into fisher folk habitations is more in the coastal areas of municipality and Gram Panchayats when the density of population remains high and the tidal waves lashes vigorously.

The fisher folk need financial support for house construction. Among them 18.8% have received assistance, 30.3% applied but did not receive it, 3.7% have assistance under process, and 47.2% have not applied. The Fisheries Department has provided assistance to 38.4% of households, and assistance through other agencies very low.

In General, majority of households in the selected areas live in Pucca houses, only a small percentage live in Kachha or Moderate houses. Almost all houses are electrified, and the majority has access to their own sanitation facilities. Most households use LPG as their primary cooking fuel, and have access to drinking water through pipeline connections or wells. However, there are still some households without access to sanitation facilities or drinking water, and the local authorities should have action plans to address these basic needs.

Around one third of households have no debts, while the remainder owe money to banks, cooperative societies, private lenders, SHGs/Kudumbasree, and private institutions for various purposes such as housing, marriage, medical treatment, employment, and education. Bank loans are the most common source of debt, followed by cooperative



societies, private institutions, private lenders, and SHGs/Kudumbasree. Majority of households did not experience any disaster during the last 3 years, but those affected have mainly experienced destruction of houses and livelihood loss. Only 54.75% of households affected by disaster received emergency relief assistance, and stakeholders such as elected representatives have actively participated in disaster management.

Majority of households (85.3%) utilize Primary Health Centers and Community Health Centers for treatment. Strengthening these services is necessary to maintain the general health of the people and specialty healthcare is necessary only in complicated cases. Through households are generally satisfied with the facilities available, they suggest to increase basic facilities recruit more staff, and improve infrastructure. Health camps are also suggested for specific diseases, and there is high participation (82.2%) of households. Veterinary hospitals are also necessary for animal husbandry, most farmers utilize this facility but renovation and additional facilities are needed.

Around 34.2% of households receive assistance from Local Self Government (LSG) schemes, with housing being more sought after (14.7%). Some households face difficulties in accessing schemes due to delays or lack of information, and only around 40% fisher folk members participate in grama sabha meetings. Gram Panchayats perform better than municipalities and corporations in terms of popular participation, but all LSGIs need more stakeholder participation and awareness creation for inclusive development.

An attempt is made in the survey to collect preference ratings on priority needs addressed through local government interventions. Livelihood/employment and waste management were listed as essential priorities across corporations, municipalities, and gram panchayats.



Drinking water is an essential need in all areas followed by health and road/transportation. House maintenance, land/resettlement, and education were important requirements. The majority of households had high preference for health, education, drinking water, and waste management. The priorities and preferences of local governments varied, basic needs such as employment, housing, transport, healthcare, and education remained major areas but lack official support, and this deficiency marginalizes traditionally excluded groups such as fisher folk communities.

Findings of analysis of Individual Survey

The survey has collected detailed information on the socio-economic situation and interventions made by local governments for the development of fisher folks during the past 25 years. There is a slight edge for female population. Out of 3537 individuals surveyed, the working age group population in the category of >25-60 years constitute the largest. Fishing is the most common occupation reported by males and working as housemaid by females. There are a few involved in handicrafts/skilled work, agro farming, or in some petty business.

The students study at different levels of education, but very small percentage at higher levels. Only 1.1% of the population is illiterate, majority have completed education up to matriculation or intermediate level. Most people have bank accounts, election ID and Adhaar ID. There is a need to focus on increasing access to higher education opportunities. Lower levels of education predominate in Gram Panchayats, while higher attainments are seen in Municipality and Corporation areas.

Fishing and related work provide the main source of income in all three local government regions. Self-employment, contract jobs, daily wage jobs, and private jobs are relatively low among them. Housemaids constitute a



significant percentage of employment in the Municipality and Gram Panchayat. Government jobs have a low coverage in all areas, and the highest percentage of unemployed (below 40 years) is in the Corporation. Most fishermen go for offshore fishing, followed by deep-sea fishing, and some do both. The Daily Wage and Joint/Group activities are more common than cooperative ventures.

The fishing duration of activity can be categorized into four types the most common is that extending up to 9 months sharing 37.9% of workers. Around 30.2% of all fish workers get only around six months, however, they get only intermittent jobs and this affects 62.7% of fishermen. 62% of fishermen do not receive any assistance to cover up their needs and only less than one third have gained some support. Allied fishing jobs include retail sales, work in processing units, and undertaking peeling works. It is necessary to enhance support schemes to protect fishermen from risking their lives during environmental disasters.

The survey found that 47.4% of the 650 student respondents were studying in government schools/colleges, 29.8% were in aided schools/colleges, and 22% were in private schools/colleges. Provision of mid-day meals and uniforms helps poor students attend schools regularly. High-tech classrooms are available to the majority of students, but a small proportion face educational backwardness. Nearly one fifth of students do not attain the required level of higher education competence, and closer monitoring is necessary. Pre-schooling is generally available in all LSGIs but needs to be made more accessible. Only 15% of students receive educational assistance, mostly in the form of equipment, and coverage could be increased to benefit more students. The majority of students did not experience drop-out mostly due to the policy of the government at



school level, and those who did drop out were compelled by various exigencies and timely intervention is required to regain their studies.

Only 4.4% of people are affected by chronic disease, and appropriate medical support is necessary for them. Lifestyle diseases and geriatric illnesses are common, so constant support and monitoring is recommended for good health. Although 85.5% of people with disabilities not receive assistance, its adequacy and timely interventions have to be monitored. Women's participation in empowerment programs is low, only 5.7% and wider propaganda is needed to increase their awareness and participation. Legal and health awareness classes are popular empowerment programs, and Kudumbasree is a successful women's empowerment initiative, 45.2% of the female respondents are members. Adequate support from local governments can strengthen their ability to take on higher responsibilities.

The distribution of different types of pensions among eligible individuals in sample LSGs. 13.8% of them are not availed any social security pensions and out of them 57.4% is not applied for it.

Membership in social organizations is low among fisherfolks, with only 3.6% involved. Membership in Society for Assistance to Fisherwomen (SAF) is also low at 4.9%. Matsyafed provides mostly welfare assistance, but the coverage of beneficiaries is small in all these organizations, and a proactive approach is needed to extend more support schemes. Local bodies should provide supportive schemes to enhance the welfare of fisherwomen.

Findings from the Interview of stakeholders

Elected representatives from fishing villages have assessed the role of local self-government institutions, such as municipalities, panchayats, and



corporations, in the development of fisher folk populations. These institutions play a significant role in making policies and implementing programs to address the specific needs of the community and the representatives' advocate for their rights and interests. Poverty, access to education and healthcare, and sustainable livelihood opportunities are major problems faced by the community, and the representative's work towards improving these areas. The majority of representatives endorses decentralized planning system and motivates the fisher folk to participate in Matsya Sabha meetings actively.

The impact of intervention by local self-governing bodies (LSGs) addressing the needs of fisher folk has only been partially successful, according to the stakeholders. While evaluation methods for schemes undertaken by LSGs vary, the social audit method is generally useful for evaluating welfare projects, but there are still more projects that are to be evaluated. Local bodies have different approaches to provide priority to schemes for the fisher folk. The elected representatives have multiple sources of information enabling their effective intervention.

A study team interacted with 17 officials from selected local self-government bodies to collect data on administrative aspects of fisheries development. The officials' views and experiences provided insights into schemes adopted for fisher folk, benefits received by them, approaches towards Gram Sabha meetings, and problems of project implementation. Majority of the officials believed that project formulations should be based on the needs of the beneficiaries. Matsya Sabha meetings were not held in many panchayats to discuss issues. Benefits generated for fisher folk varied greatly depending on funds availability, implementation efficiency, stakeholder participation, and beneficiary contribution. Officials suggested that a special grant is necessary for comprehensive



development. To achieve reasonable development, officials recommended providing timely official services, prioritizing schemes enhancing production, welfare measures, education, livelihood support, housing improvement, infrastructure coverage, and timely intervention during natural disasters.

Officials have identified challenges facing traditional fishermen, including sea erosion, unfair pricing, lack of modern fishing equipment and safety measures, and dumping of plastic waste in the sea. They have suggested improving livelihoods by providing user-friendly equipment, educational support, basic infrastructure, housing and sanitation, and medical and insurance services. They also propose involving stakeholders in promoting tourism and supporting new ventures in fishing and allied activities. These measures are intended to address the immiserisation of traditional fishermen and to empower women in these communities.

LSGI officials suggest a comprehensive approach to develop the fishing industry while acknowledging challenges such as insufficient beneficiary contributions, limited funds, coastal regulations, and low subsidy rates. They recommend evolving need-based plans, timely completion of projects, special funds for fishing villages, convergence of fisheries and agriculture schemes, and rehabilitation of deprived households. They also suggest providing training and skill upgrades to students and protecting coastal areas from sea erosion. To manage all of these efforts, competent advisory bodies and Matsya Sabha meetings are necessary. Overall, these suggestions have the potential to improve the socio-economic condition of the fisher folk section in the state.

Findings from the observations

The study attempted to identify development interventions required for the selected region. This involved observing daily activities of families and

Lives on the Edges

25 years of Decentralization: Impact on Fisherfolks



local institutions and conducting focus group discussions with concerned stakeholders. Field investigators noted the proximity of the area to various services such as Coastal wards, Family Health Centers, Government Hospitals, Educational centers, and the condition of roads and transportation. The study found that the number of coastal wards varied in different regions and sparsely covered by family health centers, government hospitals and educational institutions. The observations made by field investigators provided valuable insights into the deprivations experienced by the fisher folk in the selected coastal wards.

Coastal households face major problems like deficient housing, poor sanitation and difficulty in obtaining house numbers and engineering drawings for new construction due to CRZ Regulations. Poor road conditions create inconvenience for mobility and poor chances for local businesses. Difficulties in implementing rehabilitation schemes and poor quality of water received from tube wells and public taps are also serious issues. In many places street lights do not function.

Fishermen's income depends on the availability of fish and shortages limit their ability to spend on necessities like healthcare and housing, leading to indebtedness. The fishing industry faces problems of declining fish populations due to climate change and overfishing by trawlers, which negatively impacts upon the livelihoods of fishermen and their families. Sustainable tourism can improve beach development and raise funds for promotion. Many older people in the community continue to rely on traditional fishing as their main income. Women tend to work in unskilled jobs like fish sales and prawn peeling. The increase in fees for boat licenses and registration and not getting permits for boats cause difficulties for fishermen in the Panchayat. Beneficiary contribution is insisted for receiving tools and equipments for fishing, it is a burden for poor



fishermen families. Appropriate support system has to be evolved to help the vulnerable.

Fisheries promoters and elected representatives are not effectively interacting with fishermen families, resulting in neglect of their specific problems. Many traditional fisher folk are unaware of government assistance and are deprived of the chances for upliftment. Climate change and disasters like sea erosion and storms disproportionately affect poor fisher families. Educational facilities in coastal schools are limited and students need additional learning equipments besides textbooks.

Coastal residents, including fisher folk, have limited access to healthcare services and transportation, which can lead to difficulty in accessing essential treatment in clinics and hospitals. Stagnant water in low sea level areas causes the spread of water-borne diseases. Not all areas have veterinary hospitals, leaving animal husbandry farmers without access to this service. Women in the fisher folk community have low participation in community activities and are less likely to champion social responsibilities. Social awareness programs at LSG levels however, can improve women's empowerment and promote women's initiatives in economic development.



The Way Forward and Policy Suggestions

Basic & Infrastructure Facilities

The housing projects for fishermen earlier undertaken through Fisheries Department, is now included in the LIFE scheme. It causes difficulties to the fishermen in accessing benefits. The Panchayat need to work with the Fisheries Department and the LIFE Mission to ensure that the housing projects and repair schemes are properly implemented and the fisherman get associated with it. The Panchayat could also consider setting up a helpline or website for the fisherman to access information on projects, and to report their problems and complaints. Another option could be to organize meetings or workshops for the fisherman to get informed about the services available to them and the ways to access them, especially in the context of the LIFE scheme.

To undertake home renovation activities, the Panchayat could help the owners by obtaining grants or low-interest loans. This would require the support of state and central governments to secure funding for these programs, as well as developing easy procedures for approval processes so as to ensure that assistance is provided to those who need it most.

It is important to have proper house numbers, as it helps to get easy identification and service delivery. The Panchayat should monitor the repair and maintenance of roads, including patching potholes, repaving damaged sections, and drainage lines to prevent water logging. The Panchayat should consider implementing a regular maintenance schedule to ensure that the roads drainage and electricity lines are kept in good condition, through regular inspection, routine cleaning, and repairs as needed.



The Panchayat may also explore alternative ways to use durable materials for road construction, making permeable pavements, to sustain the impact of heavy rainfall on the roads. Involve the local community in the decision-making process, as they can provide valuable suggestions to the specific problems of the coastal area. Making the existing coastal roads (Coastal Road Network Plan) by providing maintenance and repair works, and ensuring the availability of street lights etc will make the area safer for the fishermen and the local community.

Developing the local road network in the coastal areas will improve the infrastructure and accessibility of the community. Identify the most efficient and effective routes, taking into consideration population density, land use, and transportation demand. The Panchayat can develop a connectivity plan for the coastal area, which outlines the road network modes of transportation, by buses, trains, and boats. This integrated transportation system, make it easy for people to move around and access employment, education, and other opportunities.

To ensure the availability of drinking water, the Panchayat can initiate a number of activities:

1. Regular water quality testing to ensure the water obtained from public taps safe for drinking.
2. Installing water purification systems to improve the quality of the water.
3. Providing piped water supply to ensure water reach each household.
4. Involve NGOs who can provide financial assistance and support for installing water purification systems and provide piped water supply.



5. Involve eligible community members in the maintenance of street lights, this will increase the accountability and provide a sense of ownership.
6. Collaborate with electricity department to ensure proper functioning of the system and to get necessary support.

The Coastal Regulation Zone (CRZ) norms are put in place by the Indian government to protect the coastal environment and to ensure sustainable development in coastal areas. However, these regulations sometimes become restrictive and limit the Panchayat in undertaking up development projects in the area. In this situation, the Panchayat could take necessary steps to relax the CRZ norms under certain circumstances. This could include working with local support and liaison with national government the panchayat may review the regulations and identify the areas where they could relax the norms allow and necessary development projects. In this process the Ministry of Environment and Forest, State Coastal zone Management Authority and other related departments are involved to relax the CRZ norms in specific areas, for the construction of sea walls, other coastal protection measures, construction of housing projects for the fishermen etc. Involving experts in coastal zone management and sustainable development may help to identify alternatives to the CRZ norms that protect the coastal environment while allowing for necessary development projects. It's important to involve the local community, especially the fishermen, in the decision-making process, as their participation will increase their awareness and the responsibility they have to share for their sustainable development.

Livelihood & Employment

The fishermen have to keep their catch fresh for longer hours to sell or even wait for prices to be favorable. Development of fish processing units



for value-added products such as canned fish, fish cakes, and fish oils is another activity. This provides additional income opportunities for fishermen by increasing the shelf life of the fish, and making it more easily transportable.

Panchayat initiatives to promote education and vocational training programs, for the children of fisher folk will help to develop skills and enable them to find employment in industries, and get more stable income. The local government and other departments have to review the fees and permit policies, to make it affordable to the fishermen, and help them by providing subsidies or other financial assistance. The local bodies may initiate more supportive schemes, like

- Community-based lending programs where the community members themselves provide loans to the fisherman families for the purchase of equipment.
- Tool-sharing program where the community members share the tools and equipment among themselves, reducing the need for each individual to purchase their own tools.
- Other Government schemes that provides financial assistance for the purchase of tools and equipment for the fishermen.
- Involvement of NGOs who provide financial assistance and support for the purchase of tools and equipments.

It's important for the Panchayat to support the economic empowerment of coastal women, who are often disproportionately affected by poverty and lack of opportunities. Support is required to start self-employment ventures for coastal women. This could include providing training and resources to start their own businesses, such as small-scale fisheries, fish processing, handicrafts production etc. Another support could be to strengthen cooperatives working in coastal areas. They can provide a



range of services to support the economic empowerment of coastal women, such as access to credit, training and education, and market linkages. The Panchayat could work with existing cooperatives to provide those resources and support, and encourage the formation of new cooperatives in the area, with more women participation and control.

1. Providing training and skill development for women in the coastal areas, can help them to start and run their own businesses.
2. Providing financial assistance to women cooperative societies, in the form of low-interest loans or subsidies enable them to sustain their ventures.
3. Creating awareness among the women in the coastal areas about the benefits and opportunities of starting their own businesses and being a part of a cooperative society creates empowerment among them.
4. Involving NGOs who can provide technical assistance, training, and financial support to women cooperatives and ventures is an additional support.
5. Networking and partnership with other businesses, organizations, and government agencies enable to expand their market opportunities, access resources, and create a supportive ecosystem for the development of their ventures.
6. Encourage participation in government schemes: By women cooperatives and ventures for promotion of women-led businesses.

These efforts to promote women cooperative societies and ventures in the coastal areas are an important step in empowering women and increasing their participation in the economy. This can lead to increased income generation, improved livelihoods, and greater economic stability for the community.



Unemployment and low income among the youth in fisherman community is a serious matter that affects their overall well-being. The major reasons for this are the decline of fish stock due to overfishing, climate change, and increased competition from larger fishing operations. To address these issues, the Panchayat can take a number of steps, such as:

- Developing alternative livelihood opportunities the Panchayat associating with concerned government departments and agencies should develop programs and projects to provide alternative livelihood for the youth through training and education programs in areas such as aquaculture, coastal farming, and tourism.
- Encourage responsible fishing practices such as implementing regulations and management plans to protect fish stocks and promoting sustainable fishing methods.
- Support fishermen cooperatives which can help to improve the bargaining power of small-scale fishermen and increase their income.
- Encourage skills development schemes in association with concerned government departments, agencies, and local organizations and provide training and education in areas such as business management, marketing, and digital literacy to help young people to develop their skills to start their own businesses and thereby increase their income.
- Encourage tourism activities in the coastal area and beaches in such a way, to create new economic opportunities for the community as well as preserve the local culture and the symbiotic way of life which are fast disappearing.

Involve the local community, especially the young generation of fisherman, in the decision-making process, as their participation will increase awareness of the problems facing them and generate practical solutions.



Promoting tourism through homestead farming and responsible tourism in coastal areas and beaches can be an effective way for the Panchayat to diversify its economy and create new opportunities for income generation. The coastal areas and beaches are likely to have unique and diverse ecosystems, traditional fishing practices and way of life which can be an attraction for tourists. This can include activities such as visiting local coastal farms, participating in coastal farming and fishing activities, and attending workshops or classes on sustainable coastal farming practices.

Responsible tourism in coastal areas and beaches refers to tourism that is designed to minimize negative social, economic, and environmental damages and maximize positive benefits for local communities. This is possible through activities such as staying in locally-managed accommodations, supporting local businesses, and participating in community-based tourism activities, such as beach cleanups, eco-tours, and coastal conservation projects. Promoting tourism through homestead farming and responsible tourism in coastal areas and beaches can help to create new economic opportunities for the community, while preserving the local culture and way of life, and also the unique coastal ecosystem. The Panchayat can work with concerned government departments, agencies, and local organizations to develop a comprehensive plan that addresses the specific needs of the community by involving them in the decision-making process.

The Panchayat should have schemes to provide financial assistance to fishermen and their families, such as interest-free loans, to help them meet essential expenses and initiate a microfinance programs specifically tailored to the needs of the fishing community.

1. Providing access to credit through cooperatives helps to free the coastal residents from the predatory practices of private money



lenders. Cooperatives are member-owned and controlled organizations providing a range of financial services to their members. They offer loans at lower interest rates than private money lenders, and reduce the financial burden on the borrowers.

2. It should also work with local and national government and nationalized financial institutions to create a credit guarantee scheme, where the government or financial institutions act as a guarantee for the loan of the fisherman, making it easier for them to access credit from banks or other formal financial institutions.
3. It is also important to be aware of the trap of private money lenders, who often extort money from vulnerable communities. The local government institution should raise awareness about the dangers of these lenders and to provide alternative sources of credit to the fishing community.
4. The local government should also work with other organizations to regulate and monitor private money lending practices to ensure that they are fair and transparent. This could include setting caps on interest rates and penalties, as well as requiring private money lenders to register with the government and abide by certain regulations.
5. To establish a cooperative, the local government, financial institutions and NGOs may provide technical and financial assistance. The Panchayat should promote awareness about the benefits of cooperatives and encourage coastal residents to become members. Cooperatives can also provide other financial services such as savings accounts, insurance, and money transfers, to improve the overall financial well-being of coastal residents.

LSGIs Intervention

Effective communication and outreach activities can help the traditional fishermen in several ways. Conducting at least two fisheries grama sabha



meetings per year is desirable to ensure that the community's needs are heard and their concerns are addressed. The Fisheries Grama Sabha is a platform where the fishing community can raise their problems, discuss the consequences they face, and decide the initiatives taken by Panchayat and other government departments. To ensure that the Fisheries Grama Sabha is held at least two times a year, the Panchayat can take a number of steps, such as:

1. Setting a schedule for the Fisheries Grama Sabha meetings at the beginning of the year, and ensure that the meetings are held as per the schedule.
2. Involving fishing community in the planning and preparation to ensure that their concerns are addressed.
3. Providing advance notice on the Fisheries Grama Sabha meeting to the community members, so that they can prepare and participate in the meeting.
4. Creating awareness about the Fisheries Grama Sabha among the members, especially the young generation, so that they also participate in the meeting.
5. Recording the procedures can ensure the decisions made in the meeting are followed up.

Ensuring that benefits are received by those who are deserving is an important aspect of any development policy or program. This is especially true in the coastal areas, where the fishing community often faces deprivations. To address this issue, the Panchayat and elected representatives should take the following steps:

1. Conducting a needs assessment of the fishing community in the coastal areas, to identify their specific needs and the problems they face.



2. Drafting policies according to the needs
3. Involving the community in the decision-making process to ensure that their perspectives and needs are taken into account.
4. Monitoring and evaluation of the schemes to ensure that they reach the intended beneficiaries and achieve the desired results.
5. Transparency and accountability should be maintained in the implementation of policies and programs, and regularly reported to the community about their progress.
6. Participatory approach is adopted in the implementation of policies and programs, and the community members are involved in the design, implementation, monitoring, and evaluation processes of the schemes.

It's important to note that the challenges the fishing community in the coastal areas face are basic and dynamic, and the policies and programs should be regularly reviewed and updated to address changes. The elected representatives, have a greater role in the implementation of these policies and programs and in their successful execution.

Focusing solely on the development of fishing and its technical aspect without considering the social and economic impact on the fishermen population can lead to imbalanced and unsustainable development. To address this issue, the Panchayat and fisheries department can consider taking up the following steps:

1. Holistic approach: The Panchayat and fisheries department adopt a holistic approach to the development of the fishing industry that takes into account the social and economic well-being of the fishermen population.
2. Involving the community in the decision-making process to ensure that their perspectives and needs are taken into account.



3. Promoting alternative livelihoods for the fishermen population, such as aquaculture, fish processing, and tourism, to diversify their income sources and reduce dependence on fishing only.
4. Providing financial and technical assistance to the fishermen population, to help them improve their livelihoods and increase their income.
5. Promoting education and training for the fishermen population, to help them acquire new skills and knowledge that can be applied to their livelihoods.
6. Providing social security and welfare services such as health care and pension schemes, to the fishermen population to improve their overall well-being.
7. Monitoring the fishing industry development and the social and economic well-being of the fishermen population, and reporting the findings to the community.

Creating awareness about the benefits and programs available to the coastal population is important to ensure that they are able to access and utilize these resources effectively. To address this issue, the Panchayat and affiliated departments can take the following steps:

1. Developing a communication strategy that outlines how they will communicate information about benefits and programs to the coastal population.
2. Utilizing multiple channels of communication such as print, electronic, and social media, to reach the coastal population.
3. Involving the community in the communication process especially the coastal population, to ensure that the information is communicated effectively and that reaches the intended audience.



4. Providing clear and concise information about the benefits and programs, including eligibility criteria, application process, and contact information.
5. Holding regular meetings with the community, especially the coastal population, to provide updates on the benefits and programs and to address any concerns they may have.
6. Reducing time lag in project processing by streamlining the application and approval procedures, and ensuring necessary resources to implement the projects in a timely manner.
7. Monitoring the implementation of the programme, and report about the progress to the community.

Creating awareness about the programs its benefits is an ongoing process. New programs may be introduced, and the needs of the community may change over time. It's important that the activities of the departments are transparent and accountable in their communication and implementation processes involving the community and in providing them a platform to express their concerns and ideas for sustainable development.

Climate and Disaster

A comprehensive approach to address the issue of sea erosion in these areas should involve the participation of local self-government and other agencies. The plans to repair and strengthen existing sea walls and piers, as well as to plant mangroves for bio cover, are effective strategies for reducing the impact of sea erosion. Building tetrapod can also be a viable method to mitigate the threat of sea erosion. Tetra pods are large concrete structures that are used to armor shorelines against wave action. They are typically pyramid-shaped and have multiple points on their surface that help to dissipate wave energy. They can be used in combination with other coastal protection measures such as seawalls or breakwaters.



Regarding the sea walls, the Panchayat could work with engineers and coastal experts to assess the current sea walls and to plan for building them a little higher to protect the fishermen community from dangerous sea eruptions. It could also consider other coastal protection measures such as building breakwaters or incorporating vegetation to reduce the effects of waves.

It is important to monitor the high tides and low tides, as well as to keep an eye on the weather forecast so that the Panchayat can be prepared in advance for any potential storm surges. It is also necessary to involve the local community in the implementation of these measures, as their participation will increase awareness about the deleterious impacts on the coastal area. It may require more sustainable measures to contain the impact.

It is also important to take steps to mitigate the effects of climate change on the fishing industry. This requires working with local and national government to fund for research and development of new fishing technologies that can be used in the face of changing weather patterns and sea changing levels.

Provide safety measures to fishermen, who are at risk of accidents and injuries while working on the sea. The lack of safety boats can put the lives of fishermen in danger when accidents occur in the sea. One solution could be to provide safety boats for the fishermen, which can be used to rescue them in case of an accident. The Panchayat could work with local and national government and other organizations to provide funding and other support to purchase and maintain the safety boats. Another solution could be to provide first aid and emergency medical services to the fishermen, in case of accidents or injuries while working on the sea. The



Panchayat could work with local hospitals and clinics to provide medical services and treatment for the fishermen.

The Panchayat could also consider providing safety training and education to fishermen about the risks of working on the sea, and enable them to prevent accidents and injuries. Involve the local community, especially the fishermen, in the decision-making process, and increase their awareness about sea faring skills. It is important for the Panchayat to ensure the safety of the coastal areas and the houses of the fishermen, including the repair and maintenance of the sea wall which is damaged. To address this issue, the Panchayat could work with concerned government departments and agencies to repair and restore the damaged sea wall and to ensure the safety of the coastal areas and the houses of the fishermen.

Proper drainage facilities are crucial for areas that are highly dense and prone to flooding due to low mean sea levels. Without proper drainage, heavy rain and high tides can cause severe flooding and damage to homes and infrastructure. To address this issue, the Panchayat can take the following steps:

1. Conducting a drainage study to identify the areas that are most vulnerable to flooding and to determine the best course of action for improving drainage in these areas.
2. Improving the existing drainage system by cleaning and maintaining the existing drainage channels, building new drainage channels, and constructing retention ponds to hold excess water.
3. Constructing sea walls to protect the coast from the waves, which can help reduce the risk of flooding.
4. Building rainwater harvesting systems reduce the amount of water that enters the drainage system during heavy rain.



5. Providing education and awareness to the community about the importance of proper drainage and how to reduce the risk of flooding.
6. Involving the community in the planning and execution of the drainage improvement projects, to ensure that the projects are community-driven and sustainable.
7. Monitoring and maintenance of the projects to ensure that it is functioning properly and to make any necessary repairs or improvements.

The development of the fishing industry should be undertaken in a sustainable manner that takes into account the ecological and environmental impact, and it should be inclusive and equitable, taking into account the needs and perspectives of all stakeholders. The solutions should be tailored to the specific needs of the community, and should be inclusive, taking into account the financial ability of the community. Additionally, it should be implemented in a transparent and accountable manner, involving the community members in the decision-making process.

Overall, it sounds like the Panchayat is taking a proactive approach addressing the various dimensions of sea erosion and considering both short-term and long-term solutions to protect coastal area and to provide safe habitation for fishermen, including safety boats, first aid and emergency medical services, and training and awareness programs.

Education

A STEM (science, technology, engineering, and mathematics) laboratory attached to a coastal school would provide students with hands-on learning opportunities in a variety of scientific fields, with focus on coastal environment. These labs could include equipment and resources for



conducting experiments, analyzing data, and developing solutions to problems related to the coastal ecosystem. Some examples of activities that could be carried out in such a lab would be:

- Studying the impacts of sea level rising on coastal communities and ecosystems
- Investigating the effects of pollution on marine life
- Examining the impacts on different coastal habitats, such as salt marshes and mangroves, in protecting shorelines and marine fish regeneration process.
- Developing solutions to problems of coastal erosion and beach nourishment
- Exploring the use of renewable energy sources such as solar and tidal power

Such a lab would provide students an opportunity to learn about STEM subjects in the context of their local environment, and help to foster appreciation for protecting coastal ecosystems. It is also called a Thinking Lab, helping students to develop problem-solving and critical thinking skills, as well as their ability to work in teams and to communicate their ideas effectively.

Providing more educational materials, such as books and computers, and making sure that they are easily accessible to the community, will also help to bridge the learning gap. The Panchayat could also establish a library or resource center for coastal residents to access information and educational materials. Providing access to education and learning resources is essential for keeping the coastal area healthy and productive. By ensuring children access to study rooms, learning equipment and personalized support, will help bridge the learning gap and give them opportunity to succeed.



Apart from personalized support mentoring for children is important. This could include hiring additional teachers or service of educational specialists to work with children and providing them with extra-curricular activities along with homework would improve their overall skills and social responsibility attitudes.

The Panchayat could also consider career guidance programs to help children understand the opportunities available and the skills and qualifications they need to pursue their chosen career. This could include providing information on college and vocational training programs, and mentoring and internships to give children hands-on experience in different fields. The Panchayat may also increase the education assistance now available minimally to the children of fishermen, to improve their prospects in career development; the Panchayat could associate with government departments and NGOs to increase the education assistance available for the children of fishermen. Establishing scholarship programs for the children would help to cover the costs of their education. The following actions are suggested:

1. Conducting a needs assessment to identify the specific educational needs of fishermen students. This could include the students' age, grade level, and specific learning needs.
2. Providing educational equipment based on needs such as textbooks, stationery, calculators, and computers.
3. Providing training on the use of equipment to ensure that it is being used effectively and efficiently.
4. Providing need-based financial assistance to purchase the necessary equipment if they are not able to afford.

The provision of education equipment should be an ongoing process, as the needs of students and the community may change over time due to



technological change. The Panchayat could also consider providing career guidance and counseling services to the children to help them informed about educational career prospects. In short, the Panchayats have to take a comprehensive approach addressing the vulnerability of the coastal area by providing access to education, learning resources, increasing education assistance to the children, establishing scholarship programs, providing personalized support, career guidance and counseling services.

Health

Providing Primary Health Centers (PHCs) or Family Health Centers in coastal panchayats can improve access to healthcare for the local population. Allocating additional funds for development in these areas can support beach-oriented development and improve the overall health and well-being of the community. However, this has to done in consultation with the local participation to ensure that the specific needs and priorities of the area are properly addressed.

Social Security

The economically disadvantaged fishermen continue to fish using traditional devices, such as by Kattamaram. They do not receive the support they need to improve their economic situation, despite their contributions to the local fishing industry. To provide financial assistance to such older fishermen as interest-free loans or grants, can help them to purchase new equipment or upgrade their boats. This will help them to increase their catch and improve their income. Pension scheme for the older fishermen provides them a stable source of income in their retirement. The local and national government should advocate for policies and programs to support them by providing subsidies for new fishing equipment, tax breaks for fishing businesses, and framing regulations to protect the rights of older workers.



The panchayat should organize meetings or workshops for the fisherman to inform about the services available and the procedures for accessing it. The Panchayat facilitates the implementation of the policies and programs of the local and national government for the welfare of the fisherman, such as subsidies for housing projects and scheme for repair tax reduction for fishing businesses, etc and other regulations to protect the rights of fisherman. Setting up a helpline or website for the fisherman to access would help them to affirm their demands various official information required to report their problems and complaints, and to track the status of the application they made to get services from LSGIs. As in other matters, the involvement of the local community, especially the fisherman, in the decision-making process, need to be ensured as their participation will increase their awareness about the problems they face. The Panchayat therefore has to take a proactive role to ensure that the genuine needs of the fishermen community are adequately addressed.

Despite some improvements from their previous levels, fishermen in Kerala still lag behind the general population in terms of socio-economic development. Although several schemes have been implemented to address their backwardness the achievements have not been as promising as expected. This could be due to lack of proper planning, incorrect selection of beneficiaries, non-participation of the community, and deviations from implementation guidelines.

In many coastal villages, information about welfare programs is not reaching the intended beneficiaries. Comprehensive extension support and awareness campaigns are required to ensure success of community development programs. Such efforts can motivate children for higher studies and reduce their dropouts from schools and colleges and help to promote symbiotic livelihood activities. Educated youth from fishing



villages can be engaged to provide continuous extension support to those lagging behind after gaining intensive training.

Marine fisheries management is a complex and constantly evolving field, often shaped by crisis and emergencies. Given their intimate relationship with the sea, fishermen play a crucial role as the primary observers and reporters of changes in the marine environment. Thus, incorporating their knowledge and experiences into the management process through participatory governance can help improve the effectiveness and sustainability of fisheries management systems.

It is widely recognized today that the decline of fish stocks can be attributed to a combination of factors, including the proliferation of technology and bureaucracy. Technological advancements in fishing gear and vessels have enabled fishermen to catch more fish than ever before, putting increased pressure on already depleted fish stocks. Additionally, bureaucratic inefficiencies in the management of fisheries, such as slow decision-making processes and ineffective regulations, have contributed to the overexploitation of codfish and other marine species. As a result, it is crucial to implement more sustainable and participatory fisheries management systems that take into account the complex social, economic, and ecological factors at play.

The participation of fishermen is essential for the comprehensive and sustainable management of marine resources. When fishermen are involved in the decision-making processes and are informed about the real condition of their workplace, they are more likely to take ownership of the maintenance and protection of those resources. As a result, their sense of responsibility increases and they become more willing to collaborate with management authorities to ensure the sustainability of fisheries. However, it is also important to recognize that the government has a crucial role to



play in ensuring the sustainability of fisheries. Strong and effective government policies and regulations are necessary to prevent overexploitation of fish stocks and ensure that fishermen adhere to sustainable practices. Ultimately, it is the responsibility of both fishermen and the government to work together towards the common goal of sustainable fisheries management.

It is recommended that the power to administer fishery rights be granted to Gram Panchayats in accordance with established customs and practices that benefit the inhabitants. This can be achieved by declaring any property or income associated with fishery rights as belonging to the Gram Panchayat, which should administer it for the common benefit of the aforementioned stakeholders. Furthermore, if the maintenance of irrigation works is transferred to Gram Panchayats, they should also be vested with the fishery rights of the government, subject to terms and conditions specified by the government regarding the utilization of income. The fisheries sector in Kerala faces several problems due to lack of attention to local needs and circumstances. To overcome this difficulty, it is essential to adopt a decentralized planning approach that involves developing regional-level plans to cater to the specific requirements of each area. By doing so, decisions will be made for local development without bias, while state-level decisions will primarily focus on marine fish production, export, and management of marine resources.

Conservation of resources, aquaculture, processing, marketing, and welfare are all matters that can be better understood at the local level, where unique problems and opportunities are prevalent. Thus, regional planning is critical in resolving the difficulties faced by the fisheries sector efficiently. With a decentralized planning system, the local needs and



particularities of each region can be adequately considered, leading to more effective and efficient development activities in the fisheries sector.

A holistic and integrated approach is necessary for the development of the fisheries sector in Kerala. Currently, separate agencies work in parallel for production, conservation, marketing and welfare without coordination or complementary relationship between them. This has led to inability in ensuring the overall development of the fisheries sector. To address these issues, a comprehensive vision for fisheries development should be developed, which takes into account the interdependent nature of fisheries management, conservation, fish marketing, and welfare activities.

Localization is possible through a decentralized planning system that takes into account the specific needs and characteristics of the local fisheries resources, the fishermen's technical know-how and the requirements of domestic markets. Such a system will allow for coordinated and complementary relationships between the different agencies and activities at the local level, such as resource conservation, aquaculture, processing, marketing, and welfare. At the operational level, this can be achieved through regional planning, which is essential for an integrated development approach in the fisheries sector.

The current governance system for development is largely disconnected from the people it is meant to serve. The prevailing attitude is that development is a way to receive handouts from the government and distribute them among the people. This perspective fails to recognize development as a collective effort that involves the government's support to address the people's life problems. To improve this situation, it is essential to involve people in the decision-making process related to development consciously. This is the only way to ensure public participation in the implementation of development initiatives. Thus



creating a sense of ownership and empowerment among the people can make them active participants in the development process, thereby fostering their involvement in the overall progress.

To promote socio-economic development among fishermen in Kerala, grass-root level programs are needed. These programs should focus on enabling a decent standard of living and raising awareness about the importance of saving money, alcohol de-addiction, parenting, and family bonds. Such programs should emphasize the importance of self-actualization and self-earnings for fisherwomen, while children should be encouraged to pursue education, focus on life goals, and embrace human values.

Social mobilization efforts should be conducted using fishing village-level community motivators, similar to what has been done with scheduled tribes. The mobilization program should include initiatives such as medical camps, prevention of drop-outs from higher education, awareness creation, and campaigns against alcohol and drug abuse. Such programs can help to address the social and economic challenges faced by the fishing community, while also fostering a sense of empowerment and self-determination. By providing access to healthcare, education, and other essential services, these mobilization efforts can help to improve the quality of life for fishermen and their families, ultimately promoting a more prosperous and get empowered to achieve greater social and economic prosperity, leading to a better quality of life for themselves and sustainable future for the community as a whole.

In conclusion, the development of the fisheries sector requires a collaborative effort that involves local planning and people's participation. The current economic crisis limits the state government's ability to increase investments, making it crucial to explore additional resources



from local government institutions, financial institutions, and local people through voluntary activities. Although the fishing sector lags behind in terms of education and health, other sections have progressed through government support and donations from the local community. Volunteering can play a significant role in empowering people and creating a sense of ownership, leading to active participation in the development process.



BIBLIOGRAPHY

- Aerthayil.M (2000). Chapter II: The background of Kerala: Fisherfolks Movement in Kerala (1977-1994) - The Role of Non-Party Political organisations in Social Transformation in India. New Delhi, Indian Social Institute.
- Aunan K, Romstad B (2008) Strong coasts and vulnerable communities: potential implications of accelerated sea-level rise for Norway. *J Coastal Res* 24:403–409.
- Bijyalakshmi.D.N. and Ajitkumar, N. (2014). Socio-Economic Conditions and Cultural Profile of the Fishers in India - A Review. *IOSR Journal of Agriculture and Veterinary Science*. 7, (9), 42-48
- D Sarada & Arunachalam, Pitchan & A.P.Sachin. (2018). Vulnerability Assessment of Fishing Communities in Kerala, Towards the Impact of Climate Change-With Special Reference to Cherai
- DCLG (2010) Planning Policy Statement 25 Supplement: Development and Coastal Change. Department for Community and Local Government.
- Govt of India, Handbook on fisheries Statistics 2020, Dept. of fisheries, Ministry of fisheries, Animal Husbandry and Dairying, Nov 2020
- Govt. of India, Marine Fisheries Statistics 2016, Dept. of fisheries, Published by CMFRI, ISBN 978-93-82263-41-8,
- Govt. of Kerala, Social Protection for Fish workers: An Assessment and Suggestions for Reform - Report of the Working Group, 14th Five Year Plan Kerala State Planning Board.
- Govt. of Kerala, Administration Manual for Transferred Functions: Matsya Bhavan, Published by KILA, July 2017



- Government of Kerala: Asoothranna Sahayi (4) Fisheries Sector, People's Plan Campaign, State Planning Board, 1998
- Govt. of Kerala, 13th Five Year Plan Working Group Report on Fisheries, Agriculture division, Kerala State Planning Board,
- Isaac Thomas TM Richard Franke (2000), Local Democracy and development: People's campaign for decentralized planning in Kerala, Left word publications
- Johnson, B and Ramachandran, C (2017) Multidimensional poverty index (MPI) – a tool for estimating poverty. In: CMFRI Special Publication No.127 Methodological Tools for Socioeconomic and Policy Analysis in Marine Fisheries. ICAR- Central Marine Fisheries Research Institute, pp. 53-57.
- Martí X, Lescrauwaet A-K, Borg M, Valls M (2007) Indicators guidelines: To adopt an indicators-based approach to evaluate coastal sustainable development Report EU project.
- Oommen M A (2004): India: Fiscal Decentralization to Rural Governments Vol. IV Kerala, Rural development Division, Washington.
- Pavithran.A.P, Sachin, Menon.N.R, Sankaranarayanan.K.C. (2014). An Analysis of Various Coastal Issues in Kerala. International Journal of Scientific Research and Education, 2, (10), 1993-2001.
- Pavithran.A.P, Sachin, Singh, Tanya; Moors, Eddy and Menon. N. R. (2015). Vulnerability of the fishery dependent communities to climate change in Kerala. Indian Journal of Economics and Business, 14(3), 423-425, ISBN: 0972-5784.
- Report of the committee for evaluation of decentralized planning and development in Kerala KILA March 2009



- Sathiadhas, R (2006) Socio Economic Scenario of Marine Fisheries in Kerala - Status and Scope for Improvement. Sasthrapadham National Seminar working paper December 2006, Kochi.
- UNDP (1997) Governance for Sustainable Human Development: A UNDP Policy Document. United Nations Development Programme (UNDP).
- Vivekanandan, E (2011). Marine Fisheries Policy Brief-3; Climate change and Indian Marine Fisheries. CMFRI Special Publication,



APPENDICES

Appendix.1.1.

Household Survey Questionnaire

Sl.No	Question	Options	
1	Name of the Investigator		
1(a)	Investigator ID		
1(b)	Schedule Number		
2	District		
3	Type of LSGs	<i>Corporation / Municipality / Gram Panchayat</i>	
4	Name of the LSG		
5	Ward Number / House number		
6	Total number of family members:		
8	Type of ration card	<i>Yellow</i> <i>Pink</i> <i>Blue</i> <i>White</i> <i>No card</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i>
9	Monthly Income of Family:	<i>0 – 5000</i> <i>>5000 – 10000</i> <i>>10000 – 25000</i> <i>>25000 – 50000</i> <i>>50000 – 100000</i> <i>> 100000</i>	<i>1</i> <i>2</i> <i>3</i> <i>4</i> <i>5</i> <i>6</i>
10	Monthly household expenditure (in Rs.)	<i>Food consumables</i> <i>Housing</i> <i>Education</i> <i>Health (Treatment / Medicine)</i> <i>Transportation</i> <i>Savings</i>	



		<i>Intoxicants</i> <i>Others (loan repayment)</i>	
11	Do individuals in your household 15 to 21 years of age or above 60 years of age go for earning?	<i>15 – 21 years</i> <i>> 60 years</i> <i>Both include</i> <i>Neither</i>	<i>1</i> <i>2</i> <i>3</i> <i>0</i>
Asset Details			
14	Do you possess own land?	<i>Yes</i> <i>If yes, _____ cent</i> <i>No</i>	<i>a</i> <i>b</i>
15	Source of Land	<i>Purchased</i> <i>Land deed</i> <i>Inherited property</i> <i>Encroached</i> <i>LSGI/Dept.</i> <i>Others</i>	<i>1</i> <i>2</i> <i>3</i> <i>4</i> <i>5</i> <i>99</i>
16	Condition of Land	<i>Barren land</i> <i>House / Property site</i> <i>Cultivated</i> <i>Lease/Rent</i> <i>Others</i>	<i>1</i> <i>2</i> <i>3</i> <i>4</i> <i>99</i>
17(a)	Living in own house	<i>Own</i> <i>Rented</i> <i>Joint Family</i> <i>Others (Relatives/Friends)</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i>
17(b)	If not living in own house, do you have own house?	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
17(c)	No. of houses, if having more than 1 house: (0 for NIL)		
	Is Household displaced or rehabilitated due to sea attack?	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
	Distance from Sea to House?	<i>< 50 Mtr</i> <i>– 100 Mtr</i> <i>100 – 200 Mtr</i> <i>>200</i>	<i>1</i> <i>2</i> <i>3</i> <i>4</i>
	How is sea attack affected?	<i>Severely affected</i> <i>Normally affected</i> <i>Not affected</i>	<i>1</i> <i>2</i> <i>0</i>



18	Have you received assistance for housing or land from GPs for the last 10 years?	Yes No	a b
18(a)	If not received, have you applied for assistance?	Applied not received Application under process Not applied	1 2 0
19	Who initiated or informed to apply for assistance?	Self People's Representative Local Government Officials Fisheries Department Kudumbasree Fisheries Promoter NGOs /Activists Others	1 2 3 4 5 6 7 99
20	Under which scheme the assistance is given?	LIFE PMGAY Plan of Panchayat EMS House Million House Fisheries Department Others	1 2 3 4 5 6 99
Condition of hous			
21	Material for roofing	Palm leaf/ traditional Tarpaulin Asbestos Aluminum Sheet Clay Tiles Concrete	a b c d e f
22	Material for wall construction	Palm leaf /traditional Mud/Wooden Tarpaulin Bricks Others	a b c d e
23	Material for flooring	Tiles/Mosaic Cement Mud/Dung Others	a b c d
24	Electrified or not?	Yes No	a b
24(a)	Have you received assistance for	Yes	a



	electrification?	No	b
Sanitation			
25	Have Latrine / Toilet Facility with house?	Yes No	a b
25(a)	If yes, Have you received assistance for sanitation from GPs?	Yes No	a b
25(b)	Who initiated to apply for assistance?	Self People's Representative Local Government Officials Fisheries Department Kudumbasree Fisheries Promoter NGOs / Activists Others	1 2 3 4 5 6 7 99
25 (c)	If No, sanitation facility, other options?	Open facility Common Latrine Neighbors Others	a b c d
Cooking fuel & drinking water			
26	Major source of cooking fuel	Wood Kerosene Induction Bio gas LPG	1 2 3 4 5
27	Do you have any source of drinking water	Yes No	a b
28	Major source of drinking water (Scale on water quality attached) Good-----a Average-----b Moderate-----c Poor-----d	Pipeline inside HHs Common Pipeline Public well Own well /Bore well Canal/Rivers/ponds Neighbors / Tankers No Source	a b c d e f h
29	Major source of water for other purposes	Pipeline inside HHs Common Pipeline Public well Own well /Bore well Canal/Rivers/ponds Neighbors / Tankers	a b c d e f



		<i>No Source</i>	<i>h</i>
30	Availability of drinking water	<i>Sufficient</i> <i>Occasional</i> <i>Rarely</i> <i>Shortage</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i>
31	Who initiated or informed to apply assistance for drinking water from GPs?	<i>Self</i> <i>People's Representative</i> <i>Local Government Officials</i> <i>Fisheries Department</i> <i>Kudumbasree</i> <i>Fisheries Promoter</i> <i>NGOs /Activists</i> <i>Others</i>	<i>1</i> <i>2</i> <i>3</i> <i>4</i> <i>5</i> <i>6</i> <i>7</i> <i>99</i>
Indebtedness			
32	Do you have debt?	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
33	Source of debt?	<i>Bank</i> <i>Cooperative society</i> <i>Private lenders</i> <i>Nieghbourhood groups</i> <i>Private institutions</i> <i>Others (_____)</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i> <i>f</i>
34	Purpose of the loan	<i>House/ Maintenance/ Purchase</i> <i>Agricultural purposes</i> <i>Marriage</i> <i>Health Emergency</i> <i>Education</i> <i>Household Expenses</i> <i>Others (_____)</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i> <i>f</i> <i>g</i>
Disaster & relief			
35	Did you experience any disasters during the last 3 years? (Multiple options)	<i>Flood</i> <i>Landslide</i> <i>Earth quake</i> <i>Tsunami</i> <i>Sea Erosion</i> <i>Others (_____)</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i> <i>f</i>
36	How it affected?	<i>Loss or damage to house</i> <i>Loss of life</i> <i>Cultivation destroyed</i> <i>Livestock Loss</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i>



		<i>Livelihood Loss</i>	<i>e</i>
		<i>Loss of Work Equipments</i>	<i>f</i>
		<i>Others</i>	<i>g</i>
37	Emergency relief or assistance received from GPs?	Yes	1
		No	0
		Partly	2
		Don't know	88
		No answer.....98	98
38	Nature of assistance received from GPs for loss due to disaster?	<i>Financial assistance</i>	1
		<i>Treatment assistance</i>	2
		<i>Food Kits</i>	3
		<i>Relief Camps</i>	4
		<i>No assistance</i>	0
		<i>Others</i>	99
39	If applied for, its present status?	<i>Applied not received</i>	1
		<i>Application under process</i>	2
		<i>Not applied</i>	0
	Is anyone in the households have participated in the rescue mission of Kerala Floods ?	Yes	<i>a</i>
		No	<i>b</i>
Health Care			
43	Did you experience any difficulty in availing free treatment from PHC or any govt hospital?	Yes	1
		Partially	2
		Not utilized	3
		No	0
44	Is the PHC / CHC in the area properly functioning?	Yes	1
		No	0
45	Are you satisfied with the current facilities?	Partly	2
		Don't Know	88
46	Is there health camp conducted in your locality?	No Answer	98
47	If Yes, Do you participate in health camps?		
48	Is veterinary hospital functional in the GP?	Yes	1
		Partially	2
		Not Utilized	3
		No	0
		No answer	98
		No pets /Cattle	98



49	If it is not functional, Panchayat intervention needed for?	<i>Resumption of Operations</i> <i>Basic facilities</i> <i>New Infrastructure</i> <i>Others</i>	1 3 4 99
LSGs Assistance			
50	Assistance provided by local self-government institutions (Multiple options)	<i>House</i> <i>House Maintenance</i> <i>Land</i> <i>Employment</i> <i>Cattle / Livestock</i> <i>Vehicles</i> <i>Loan/ Financial Assistance</i> <i>Latrine</i> <i>Farming Assistance</i> <i>Study room / equipments</i> <i>Computer</i> <i>Cot & Bed</i> <i>Others</i>	1 2 3 4 5 6 7 8 9 10 11 12 99
50 (a)	If availed assistance, who initiated or informed to apply for assistance?	<i>Self</i> <i>People's Representative</i> <i>Local Government Officials</i> <i>Kudumbasree</i> <i>Fisheries Promoter</i> <i>NGOs / Activists</i> <i>Others</i>	1 2 3 4 5 6 99
50 (b)	If not availed, status of the application?	<i>Applied not received</i> <i>Under process</i> <i>Availed currently not received</i> <i>Not applied</i>	1 2 3 0
51	Did you experience any difficulty in availing services from Gram Panchayat? (Multiple options) (Hint - Technical barriers: incomplete application, lack of documents, lack of information availability, etc.)	<i>No difficulty</i> <i>Distance/Lack of access</i> <i>Job loss</i> <i>Misconduct of officials</i> <i>Technical Barriers</i> <i>Delay in services</i> <i>Unaware of schemes</i> <i>Others</i>	1 2 3 4 5 6 7 99
Grama Sabha & Performance of GPs			
52	Do you attend special gramasabha for SCs in GP?	<i>Yes</i> <i>Partly</i>	1 2



		<i>No</i>	0
		<i>Don't Know</i>	88
		<i>No Answer</i>	98
53	Performance rating of the following categories: 1. People's representatives 2. LSG Officials 3. LSGs Services 4. Projects & Plans 5. Fisheries promoter 6. Asha Workers	<i>Very Good</i> <i>Excellent</i> <i>Average</i> <i>Poor</i>	1 2 3 0
54	Prioritize the area of immediate attention required from LSGs? (Options – based on priority) Land/Rehabilitation Home/Renovation Road/Transportation Education Health Employment/Livelihood Drinking Water Waste Management Others	<i>No Priority</i> <i>Essential Priority</i> <i>High Priority</i> <i>Average preference</i> <i>Some preference</i> <i>Low preference</i>	0 1 2 3 4 5



Appendix.1.2

Individual Survey Questionnaire

Sl. no	Question	Options	
1	Name of the respondent:		
2	Sex	<i>Male</i> <i>Female</i> <i>Transgender</i>	1 2 3
3	Age		
4	Marital Status	<i>Currently married</i> <i>Widow/widower</i> <i>Divorced</i> <i>Separated</i> <i>Never Married</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i>
5	Do you hold Adhaar card or voters ID? <i>Adhaar card > 6 years</i>	<i>Yes</i> <i>No</i>	1 0
6	Do you hold Adhaar card or voters ID? <i>Voters ID > 18 years</i>	<i>Yes</i> <i>No</i>	1 0
7	Main Occupation (Above 15 years & exception to students)	<i>Fishermen</i> <i>Fishing allied works</i> <i>Other daily wage earners</i> <i>Business</i> <i>Contract Job</i> <i>Daily wage on govt. / private</i> <i>Govt. Salaried</i> <i>Pensioner</i> <i>Handicrafts</i> <i>MGNREGS</i> <i>Unemployed</i> <i>Others (House wife, unable to do work)_____</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i> <i>e</i> <i>f</i> <i>g</i> <i>h</i> <i>i</i> <i>j</i> <i>k</i> <i>l</i>
8	Are you physical/mentally disabled?	<i>Yes</i> <i>No</i>	1 0
9	Educational Qualification (not for students) <i>*Graduate/ Post Graduate =</i>	<i>Illiterate</i> <i>Literate</i> <i>Matriculate</i>	0 1 2



	<i>Professional (1) or Non Professional (0)</i>	<i>Secondary ITI / Diploma Degree Post-Graduation Higher Graduation Don't Know</i>	<i>3 4 5 6 7 88</i>
10	Educational status of students	<i>1 to 12th class Graduate Post graduate Diploma/ITI Higher than PG Professional courses</i>	<i>1 2 3 4 5 6</i>
11	School going or not?	<i>School going Not going</i>	<i>1 0</i>
12	Have a bank account?	<i>Yes No</i>	<i>1 0</i>
<i>Employment / Livelihood(based on the number of workers in the family) Member 1 and add+</i>			
13	Is the family has an active fisherman:	<i>Yes No</i>	<i>1 0</i>
	Own Boat :	<i>Yes No</i>	<i>1 0</i>
14	If not:	<i>Rent Collectively Worker</i>	<i>1 2 3</i>
	18.4. How many days in a year do you go to work:	<i>3 Months 6 Months 9 Months All of the month</i>	<i>1 2 3 4</i>
15	How many days in a month you go to work/ get a job:	<i>Every day About half Sometimes Rarely</i>	<i>1 2 3 4</i>
	If Joint, Is it Cooperative organization:	<i>Yes No</i>	<i>1 2</i>
	Do you lose jobs during trolling bans?	<i>Yes No Partly Don't Know No Answer</i>	<i>1 0 3 98 99</i>



	If No, Mention Or other occupation	<i>Construction works</i> <i>Fishing allied works</i> <i>Others</i>	1 2 99
	If yes, have you received any assistance from the local government to meet the loss?	<i>Yes</i> <i>No</i>	1 0
	If yes in what manner	<i>Boat Equipment</i> <i>Weather forecast</i> <i>Others</i> <i>Financial Assistance for Disaster Losses</i> <i>Loan facility</i>	1 2 99 3 4
	Is the assistance, improved your livelihood?	<i>Yes</i> <i>No</i> <i>Partly</i> <i>Don't Know</i> <i>No Answer</i>	1 0 3 98 99
	If Fishing allied works, Please mention:	<i>Net making</i> <i>Small vendors</i> <i>Value adding units</i> <i>Peeling works</i> <i>Auction works</i> <i>Logistics (Loading / Unloading)</i> <i>Others</i>	1 2 3 4 5 6 99
	Is working as unit	<i>Self</i> <i>Joint</i> <i>Others</i>	1 2 3
	Has panchayat assisted for fishing allied works?	<i>Mobile Collection Units</i> <i>Financial Assistance</i> <i>Vehicles</i> <i>Fisheries Market</i> <i>Others</i>	1 2 3 4 99
16	What kind of venture do you have? (Note: Question is particularly for those self-employed, handicrafts and business people.)	<i>Self-Enterprise</i> <i>Joint Enterprise</i> <i>None of the above</i>	1 2 0
17	Do you attend any job training program? (For those qualified unemployed individual respondents)	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>



17 (a)	If yes, please mention:	<i>Vocational Training</i>	1
		<i>Entrepreneurship Assistance</i>	2
		<i>Financial Assistance</i>	3
		<i>Skill Development</i>	4
		<i>Credit Facility</i>	5
		<i>Self-Employment</i>	6
		<i>Assistance in getting employment abroad</i>	7
		<i>Competitive Examination Training</i>	8
		<i>Others</i>	99
17 (b)	Organizer of the program	<i>Gram Panchayat</i>	1
		<i>Block Panchayat</i>	2
		<i>District Panchayat</i>	3
		<i>Fisheries Department</i>	4
		<i>Employability Centre</i>	5
		<i>NGO</i>	6
		<i>Other Government Department</i>	7
		<i>Others</i>	99
17 (c)	Did the training helpful for getting a job?	<i>Yes</i>	1
		<i>Not utilized</i>	0
		<i>No opportunity for utilization</i>	2
18	Have you been in the job for less than 10 years? (For government employee)	<i>Yes</i>	a
		<i>No</i>	b
19	Have you received any assistance from the local government for getting employment?	<i>Yes</i>	1
		<i>Partly</i>	2
		<i>No</i>	0
		<i>Don't Know</i>	88
		<i>No Answer</i>	89
19 (a)	If yes, please mention the assistance received?	<i>Vocational Training</i>	1
		<i>Entrepreneurial Assistance</i>	2
		<i>Financial Assistance</i>	3
		<i>Skill Development</i>	4
		<i>Credit Facility</i>	5
		<i>Finding Self-Employment</i>	6
		<i>Assistance to find employment abroad</i>	7
		<i>Employment tools</i>	8
		<i>Others</i>	99
Education (Question to Students)			



20	Education level	<i>Primary Education</i> <i>Intermediate Level</i> <i>Higher Level</i>	1 2 3
21	School/ College attended	<i>Govt</i> <i>Aided</i> <i>Private</i> <i>Kendreeyal Navodhaya Vidyalaya</i> <i>MGLC (Multi Grade Learning Centre)</i> <i>Sports School</i> <i>Others</i>	1 2 3 4 5 6 99
22	Scholar residence?	<i>Government Hostel</i> <i>Private Hostel</i> <i>Own House</i> <i>Rented House</i> <i>Others</i>	1 2 3 4 99
23	Do you study regularly?	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
23 (a)	If not, Reason?	<i>Continuous illness</i> <i>Lack of interest</i> <i>For employment</i> <i>Learning backwardness</i> <i>Distance/Difficulty of travel</i> <i>Others</i>	1 2 3 4 5 99
24	Distance from residence to school/college	<i>< 1 km</i> <i>> 1 km - 3 km</i> <i>> 3 km - 5 km</i> <i>> 5 km - 10 km</i> <i>> 10 km</i>	1 2 3 4 5
25	Do you avail mid-day meals from schools? (Students from 1 to 10 standards)	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
26	Do you avail free books and uniforms?		
27	Do you utilize the high tech classroom available in the school?	<i>Yes Utilize</i> <i>No</i> <i>Yes, Not use</i> <i>Unknown</i>	<i>a</i> <i>b</i> <i>c</i> <i>d</i>
28	Do you experience difficulty/retardation in learning?	<i>Yes</i> <i>Partly</i> <i>No</i>	1 2 0



29	Are you aware of higher education opportunities? (8 to 12th Std. students)	<i>Don't Know</i> <i>No Answer</i>	88 98
30	Educational discontinuance during study: (age group of 6 to 18 years)	<i>Yes, later continued</i> <i>Discontinued</i> <i>No</i>	1 2 0
30 (a)	Reason for drop out	<i>Lack of financial support</i> <i>No Interest in Education</i> <i>Neglected from friends or teachers</i> <i>Other Family Issues</i> <i>Health Problems</i> <i>For livelihood</i> <i>Others (_____)</i>	1 2 3 4 5 6 7
31	Does the child admitted to preschool? (3 - 6 years)	<i>ICDS Aganavadi</i> <i>Private</i> <i>Not admitted</i> <i>Others</i>	1 2 3 99
32	Have you received any assistance from the panchayat for education?	<i>Yes</i> <i>Partly</i> <i>No</i> <i>Don't Know</i> <i>No Answer</i>	1 2 0 88 89
32(a)	If yes please mention the assistance:	<i>Study Equipment</i> <i>Laptop</i> <i>Academic Coaching assistance</i> <i>Scholarship</i> <i>Study Room</i> <i>Awareness to Parents</i> <i>Transportation facilities</i> <i>Others</i>	1 2 3 4 5 7 8 99
Health			
33	Does the household has any member suffering from terminal diseases?	<i>Yes</i> <i>No</i>	<i>a</i> <i>b</i>
33 (a)	If Yes, please mention the disease:	<i>(Please see the list of diseases)</i>	
34	Treatment availed?	<i>Allopathic</i> <i>Ayurveda</i> <i>Homeopathy</i> <i>Traditional treatment</i>	1 2 3 4



		<i>No treatment received</i>	5
		<i>Others</i>	99
35	Type of hospital	<i>Government Hospital</i>	1
		<i>Voluntary Organization / Trust</i>	2
		<i>Hospital</i>	3
		<i>Private Hospital</i>	99
		<i>Others</i>	
36	Is Treatment assistance or palliative care availed?	<i>Yes</i>	<i>a</i>
		<i>No</i>	<i>b</i>
36(a)	If yes from where:	<i>Primary / Community Health Centre</i>	1
		<i>District / Taluk Hospital</i>	
		<i>Govt Ayurveda / Homeo Dispensary</i>	
		<i>NGO</i>	2
		<i>Social Organisations</i>	3
		<i>Private Institutions / Individuals</i>	4
		<i>Others</i>	99
36(b)	Who initiated or informed to apply for the assistance?	<i>Self</i>	1
		<i>People's Representative/Ward Member</i>	2
		<i>Local Government Officials</i>	3
		<i>Kudumbasree</i>	4
		<i>Fisheries Promoter</i>	5
		<i>Socio-Political Organisation/Activists</i>	6
		<i>Health Department Officers</i>	7
		<i>Others</i>	99
36(c)	If not received, status of application:	<i>Applied not received</i>	1
		<i>Availed currently not received</i>	2
		<i>Not applied</i>	0
For Disabled Members only			
37	Do you avail any assistance from the Gram Panchayat?	<i>Yes</i>	1
		<i>No</i>	0
		<i>Partly</i>	2
		<i>Don't Know</i>	88
		<i>No Answer</i>	98
37 (a)	If yes, which of the following?	<i>Financial Assistance</i>	1
		<i>Wheelchair</i>	2
		<i>Water Bed</i>	3
		<i>Medicine expenses</i>	4
		<i>Self Employed</i>	5
		<i>Medical assistance</i>	6
		<i>Vehicle</i>	7



		<i>Others</i>	99
37 (b)	If applied for, then who took the initiative/ informed to apply for?	<i>Self</i> <i>People's Representative</i> <i>Local Government Officials</i> <i>Fisheries Department</i> <i>Kudumbasree</i> <i>Fisheries Promoter</i> <i>Socio-Political Organization/Activists</i> <i>Others</i>	1 2 3 4 5 6 7 99
Social Security Pension			
38	Do you have any kind of the social security pension?	<i>Yes</i> <i>No</i> <i>NUC</i>	1 0 99
38 (a)	If yes, Which Pension? <i>Old age Pension – Above 60 years</i> <i>Disability Pension</i> <i>Widow Pension:</i> <i>Unmarried Pension – Age above 50 & unmarried</i> <i>Agricultural Pension – Agro workers</i>	<i>Old age Pension</i> <i>Disability Pension</i> <i>Widow Pension</i> <i>Unmarried Pension</i> <i>Agricultural Pension</i> <i>Others (welfare board pensions)</i>	1 2 3 4 5 6
38 (b)	If yes/applied then who took the initiative/ informed?	<i>Self</i> <i>People's Representative</i> <i>Local Government Officials</i> <i>Fisheries Department</i> <i>Kudumbasree</i> <i>Fisheries Promoter</i> <i>Socio-Political Organization/Activists</i> <i>Others</i>	1 2 3 4 5 6 7 99
38 (c)	If not received, mention the status:	<i>Applied Not Received</i> <i>Availed currently not received</i> <i>Not Applied</i> <i>Others</i>	1 2 0 99
Women Empowerment (For females above 18 years)			
39	Have you participated in the activities of the Gram Panchayat for women empowerment?	<i>Yes</i> <i>No</i> <i>Partly</i> <i>Don't Know</i> <i>No Answer</i>	1 0 2 88 98



39 (a)	If yes, which empowerment category:	<i>Women Development Centers</i> <i>Life Skill Development</i> <i>Health/Legal Awareness</i> <i>Small Scale enterprises</i> <i>Financial Assistance</i> <i>Self Help Groups</i> <i>Others</i>	1 2 3 4 5 6 99
40 (a)	Do you have membership in Kudumbasree? <i>(Female above age 18 years)</i>	Yes No	a b
40 (b)	Do you engage in entrepreneurial activities of Kudumbasree?		
40 (c)	Do you have any official responsibility in Kudumbasree?		
<i>Social / Cooperative Organization (Above age 18)</i>			
41	Do you have membership in any Social / Cooperative Organizations?	Yes No	a b
41 (a)	If yes, which organization?	<i>SC Welfare Organizations</i> <i>Cooperative Organizations</i> <i>Padashekara Samithi</i> <i>Others</i>	
42	Do you avail of any aids/assistance from the organizations in the form of?	<i>Small Loan</i> <i>Interest Free Loan</i> <i>Small Enterprise</i> <i>Financial Assistance</i> <i>Capacity development</i> No <i>Others</i>	1 2 3 4 5 0 99
	Have membership in SAF (Women Economy Scheme)?	Yes No	1 0
	Have you received any aid? If yes, which one?	<i>JLG Group</i> <i>Loan assistance</i> <i>Small enterprises</i> <i>Financial assistance</i> <i>Self-employment</i> <i>Fish kiosk</i> <i>Capacity development</i> <i>No assistance</i>	1 2 3 4 5 6 7 0



		<i>Others</i>	99
	Have membership in Matsya fed?	<i>Yes</i>	1
		<i>No</i>	2
	Have you received any aid? If yes, which one?	<i>Welfare assistance</i>	1
		<i>Insurance/Protection Assistance</i>	2
		<i>Women bus</i>	3
		<i>Processing Center</i>	4
		<i>Loan assistance</i>	5
		<i>Fuel Subsidy/Kiosk</i>	6
		<i>Small Enterprises</i>	7
		<i>Educational Financial Assistance</i>	8
		<i>Marketing Assistance / Branding</i>	9
		<i>Capacity development</i>	10
		<i>Bonus</i>	11
		<i>Fishing equipment</i>	12
		<i>Others</i>	99

List of diseases

Heart disease	Dengue Fever
Kidney problem	Malaria
Diabetes	Chikungunya
Blood pressure	Japanese Encephalitis
Cancer	Hepatitis
HIV/AIDS	Cholera
Tuberculosis	Typhoid
Measles	Diarrhea
Sickle Cell Anemia	Chickenpox
Asthma	H1 N1
Rheumatic disease	Zika,
Stroke	Nipah
Anemia	Kala-azar
Physical disability through accident	Black Fever
Leprosy	Monkey Pox
Liver cirrhosis	Leptospirosis
Cataract/ Vision disorders	Rabies
Geriatric diseases	Shigella Disease
Polio disease	99. Others



Appendix.2

Interview Questionnaire – LSG officials

Name:

Designation:

1. How long have you been working here?
2. Which schemes this panchayat give more emphasis?
3. Are the schemes designed according to the needs of the beneficiaries (scheduled castes)?

Yes	1
No	0
Partially	2
Don't Know	99

4. Does the Gram Panchayat conduct Matsya sabha?

Yes	1
No	0

- 4a. if yes, do they participate?

Yes	1
No	0

- 4b. if yes, do they share their needs?

Yes	1
No	0

5. What are the schemes implemented for Fisherfolk community? (Relief, Social Security, Education, Health, Livelihood, Women Empowerment, Others.....)
6. Does the projects benefit the Fisherfolk community?



Yes	1
No	0
Partially	2
Don't Know	99

6a. If yes, what percentage benefited:

100% - 90 %	1
90% - 75 %	2
75% - 50 %	3
50% - 25 %	4
25% - 100 %	5

7. Approach of fisher-folks towards the projects?

Preparation:

Very Good	1
Excellent	2
Average	3
Poor	0

Implementation:

Very Good	1
Excellent	2
Average	3
Poor	0

Beneficiary Share

Very Good	1
Excellent	2
Average	3
Poor	0

Evaluation

Very Good	1
Excellent	2
Average	3
Poor	0



8. Does LGs need any special grant for the overall development of fisherfolks through LSGs?

Yes	1
No	0
Partially	2
Don't Know	99

9. How much has this panchayat been able to solve the problems of fisherfolks?

100 percent	1
75 percent	2
50 percent	3
25 percent	4
Not Achieved	5

10. What are the problems faced by the fisheries sector in the LSGs?
11. What can be done with the resources of the LSGs for the upliftment of fisherfolks?
12. Have you experienced any problems from project formulation and implementation?

Yes	1
No	0

- 12a. If yes, what problem?
13. Your suggestions to increase the efficiency of working in the panchayat?



Appendix.3

Interview Questionnaire – Elected Representatives

Name:

Designation

1. Has decentralization made a positive change for the fisherfolks?

Yes	1
No	0
Partially	2
Don't Know	99

2. Does local government institution conduct Matsya Sabha for fisherfolks?

Yes	1
No	0
Partially	2
Don't Know	99

If yes,

- 2(a) Do they participate?

Yes	1
No	0
Partially	2
Don't Know	99

- 2(b) Rate their cooperation?

Excellent	1
Good	2
Average	3
Poor	0

- 2(c) Do they propose their needs?



Yes	1
No	0
Partially	2
Don't Know	99

2(d) Are the plans formulated according to their needs?

Yes	1
No	0
Partially	2
Don't Know	99

3. Do the plans of Gram Panchayat give special consideration to fisher folks for development?

Yes	1
No	0
Partially	2
Don't Know	99

If yes in which field of activity

Sector	Activity
Productive sector	
Livelihood	
Education	
Land / House	
Women Empowerment	
Others.....	

4. Has there been more intervention from the LGs in recent times than earlier?

Yes	1
No	0
Partially	2
Don't Know	99



5. Are the projects being implemented evaluated?

Yes	1
No	0
Partially	2
Don't Know	99

5(a) If yes please mention

(Social Auditing / Panchayat Check List / Others)

6. Do the beneficiaries get the service of fisheries promoters?

Yes	1
No	0
Partially	2
Don't Know	99

7. As a ward member, has the LSGs made special intervention to know the problems of the fisherfolks?

Yes	1
No	0
Partially	2
Don't Know	99

8. Are there any unresolved issues as a former / current elected representative?

Problems	Reasons
1. Livelihood 2. Education 3. Health 4. Social welfare	

9. Suggestions for solving the problems



Appendix.4

Category wise classification of fisheries sector projects

	Major category	Sub Category
1	Fishing (Inland 6 Projects: 12.31 L) 333.00 Lakhs of Total (3.69 %)	Locker rooms
		Fishing Nets / Gillnets / Dingy
		Fiber re enforced Kattamaram / Crafts
		Engine Subsidy
		Equipments for groups (SHGs, SCs)
		Financial assistance
		Life Jackets
2	Fishing allied employment	Insulated Box / Ice Box
		Motor cycle & Icebox
		Financial assistance to retail fishing women
3	Infrastructure (Inland 5 Projects: 33.71 L) 926.07 Lakhs of Total (3.64 %)	Development / Renovation of fish landing centers
		Fishing Markets
		Matsya Bhavan office
		Matsya Fed fish stalls
		Auction halls
4	Education (Inland 5 projects: 5.57 L) 396.08 lakhs of Total (1.38 %)	Laptops
		Furniture (Tables & Chair)
		Financial assistance
5	Fish farming / Cultivation	Fish ranching
		Ornamental Fish culture / Modern Aquariums
		Bio flock / Artificial farming
		Homestead or Backyard pond fish farming
		Fish cultivation (Lake fishes, prawns)
6	Others	Revolving fund to fisheries welfare
		Tourism
		Housing extensions
		Revolving fund for auctioneers



Appendix.5

Extremely Poor households in Coastal area /fisheries

Districts	Coastal Zone Households	% of Total	% In Districts	Total
Alappuzha	338	12%	9%	3613
Ernakulam	430	16%	8%	5650
Kasargod	167	6%	6%	2768
Thiruvananthapuram	457	17%	6%	7278
Kozhikode	382	14%	6%	6773
Thrissur	270	10%	5%	5013
Kollam	173	6%	4%	4461
Malappuram	302	11%	4%	8553
Idukki	41	1%	2%	2665
Kannur	105	4%	2%	4208
Kottayam	12	0%	1%	1071
Wayanad	26	1%	1%	2931
Palakkad	26	1%	0%	6443
Pathanamthitta	8	0%	0%	2579
Total	2737	100%	4%	64006

(Source: Extreme Poverty Eradication Cell, CRD)



Appendix.6

Scale for the Questionnaire

Q.28. Scale on Drinking water sources (Household Survey)

Scale	Type of drinking water source
Good	Own well
	Pipeline Inside HHs
	Jalanidhi Pipeline
Moderate	Public Tap
	Public wells
Poor	Rivers / Canal
	Neighbors / Water tankers
	Rivers / Streams / Springs

Q.30. Index on Condition of quality drinking water – Household survey

Drinking water Condition		
Scale	Supply	Source
Excellent	Sufficient	Good
Good	Occasional	Good
	Sufficient	Moderate
	Occasional	Moderate
Fair	Rarely	Good
	Rarely	Moderate
	Sufficient	Poor
	Occasional	Poor
Poor	Shortage	Good
	Shortage	Average
	Rarely	Moderate
	Shortage	Moderate
	Rarely	Poor
	Shortage	Poor



Q25. Scale on condition of sanitation – Household survey

Scale	Type of drinking water source
Good	Own Toilet
Moderate	Common Toilet
Poor	Open Facility
	Neighbors
	Temporary / Deteriorated

Q21-23 Scale on Condition of Housing - Household survey

Housing Condition			
Category	Roof	Wall	Floor
Pucca	Concrete	Concrete / Bricks	Cement
		Concrete / Bricks	Tiles/Mosaic
	Clay Tiles	Concrete / Bricks	Cement
		Concrete / Bricks	Tiles/Mosaic
Moderate	Concrete	Concrete / Bricks	Cement
	Asbestos	Concrete / Bricks	Cement
	Clay Tiles	Stone	Stone
	Concrete	Concrete / Bricks	Stone
		Concrete / Bricks	Mud floor
	Palm leaf/ traditional	Concrete / Bricks	Cement
	Tar sheet / Tin Sheet	Concrete / Bricks	Cement
Concrete / Bricks		Tiles/Mosaic	
Kachha	Asbestos	Concrete / Bricks	Mud floor
		Stone	Mud floor
		Tarpaulin	Cement
		Mud/Wooden	Cement
		Mud/Wooden	Mud floor
	Clay Tiles	Concrete / Bricks	Mud floor
		Stone	Mud floor
		Tarpaulin	Mud floor
		Mud/Wooden	Cement
		Mud/Wooden	Mud floor
		Mud/Wooden	Stone
	Palm leaf/ traditional	Concrete / Bricks	Cement
		Mud/Wooden	Mud floor



		Stone	Mud floor
	Tar sheet / Tin Sheet	Concrete / Bricks	Mud floor
		Concrete / Bricks	Cement
		Palm leaf/ traditional	Mud floor
		Tarpaulin	Mud floor
		Mud/Wooden	Mud floor
		Mud/Wooden	Cement

Appendix.7

Sectoral expenditure on productive sector and fisheries sector under LSGs

Fisheries Sector comparison to productive sector (In crores)												
	Gram Panchayat		Block Panchayat		District Panchayat		Municipality		Corporation		Total	
	Fisheries	Productive	Fisheries	Productive	Fisheries	Productive	Fisheries	Productive	Fisheries	Productive	Fisheries	Productive
2012-13	2.10	154.99	0.38	35.56	1.23	32.45	0.85	13.28	0.81	5.07	5.37	241.35
2013-14	3.24	205.79	0.30	43.73	2.04	43.98	0.83	19.64	3.40	11.19	9.81	324.33
2014-15	2.15	220.03	0.28	44.87	1.09	54.85	0.81	20.89	2.12	12.16	6.45	352.80
2015-16	2.47	210.11	0.04	49.48	0.69	41.13	0.73	27.33	2.70	14.85	6.63	342.90
2016-17	2.09	250.15	0.25	68.06	1.70	66.38	1.44	38.78	2.19	10.95	7.67	434.32
2017-18	3.56	431.88	0.36	143.21	0.18	97.53	2.56	53.63	2.75	19.04	9.41	745.29
2018-19	6.28	408.82	0.90	153.83	1.17	124.65	1.87	51.65	3.88	19.99	14.10	758.94
2019-20	3.42	294.96	0.65	105.64	1.10	64.81	0.90	28.60	0.91	15.94	6.98	509.95
2020-21	10.12	493.24	1.96	193.69	3.69	180.98	2.61	78.17	6.52	63.17	24.90	1009.25
2021-22	12.33	472.83	1.17	130.14	3.28	113.39	1.66	51.12	3.43	30.46	21.87	797.94
GT	47.76	3142.80	6.29	968.21	16.17	820.15	14.26	383.09	28.71	202.82	113.19	5517.07

