

Workshop on Sea Safety and Fisheries Management: Training and Capacity Development of Local Self-Governments

Report



01–02 March 2023

Kerala Institute of Local Administration (KILA), Thrissur, Kerala

Report prepared by
A.J. Vijayan

Organized by

International Collective in Support of Fishworkers (ICSF) Trust
and Kerala Institute of Local Administration (KILA)





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Published by

International Collective in Support of Fishworkers Trust

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Front Cover

Participants at the workshop on sea safety and fisheries management: training and capacity development of local self-governments / ICSF

Front Inside

Dewang Subil who used his drone to rescue stranded fishers at sea, seen along with the then MLA Geetha Gopi and members from the fishing community

Back Inside

Participants engaged in group discussion on Day 02 of the workshop/ ICSF

Back Cover

Life of a Fisherman / George Koruth

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ISBN 978-93-80802-95-4

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List of Abbreviations

| | |
|--------|--|
| ADAK | Agency for Development of Aquaculture Kerala |
| ADB | Asian Development Bank |
| B Tech | Bachelor of Technology |
| CIFT | Central Institute of Fisheries Technology |
| CMFRI | Central Marine Fisheries Research Institute |
| CRZ | Coastal Regulation Zone |
| EEZ | exclusive economic zone |
| ERT | Emergency Response Team |
| FAO | The Food and Agriculture Organization |
| FFDA | Fish Farmers Development Agency |
| FIRMA | State Fisheries Resource Management Society |
| GPS | Global Positioning System |
| HP | Horsepower (unit of power) |
| ICAR | Indian Council of Agricultural Research |
| ICSF | International Collective in Support of Fishworkers |
| IRTC | Integrated Rural Technology Centre |
| KILA | Kerala Institute of Local Administration |
| Km | Kilometre (unit of length) |
| KSMTF | Kerala Swatantra Matsya Thozhilali Federation |
| KSSS | Kottayam Social Service Society |
| KUFOS | Kerala University of Fisheries and Ocean Studies |
| LSGI | local self government institutions |
| m | Metre (unit of length) |
| MLA | Member of the Legislative Assembly |
| MSSRF | M.S. Swaminathan Research Foundation |
| NIFAM | National Institute of Fisheries Administration and Management |
| NM | Nautical Miles |
| QSSS | Quilon Social Service Society |
| SAF | Society for Assistance to Fisherwomen |
| SEUF | Socio Economic Unit Foundation |
| SEWA | Self-Employed Women's Association |
| SIFFS | South Indian Federation of Fishermen Societies |
| C-STED | The Centre for Science and Technology Entrepreneurship Development |
| TSSS | Trivandrum Social Service Society |
| UN | United Nations |
| VHF | Very High Frequency |

FOREWORD

The Kerala Institute of Local Administration (KILA), along with the International Collective in Support of Fishworkers (ICSF), organized the Workshop on Sea Safety and Fisheries Management. It addressed challenges and opportunities related to sea safety and fisheries management, enhancing the training and capacity of local self-governments. The active involvement of various stakeholders showcased the workshop's success.

It saw the enthusiastic participation of several panchayat officials, Public Service Organization (PSO) representatives, and members of the fisherfolk community. This diversity ensured a comprehensive and inclusive discussion, facilitating the sharing of knowledge and experiences.

A series of important recommendations were formulated through the workshop. They highlight the pivotal role of Local Self-Government Institutions (LSGIs) in ensuring sea safety and promoting the well-being of the fisherfolk. The participants recognized the need for LSGIs to engage in formulating and implementing policies pertaining to sea safety and fisheries management.

A key recommendation was the establishment of an exclusive sub-plan dedicated to the fisherfolk community. This will address their unique needs and challenges, providing targeted support to enhance their livelihoods, safety and general well-being. The participants emphasized the importance of formulating policies that effectively address the specific requirements of the fisherfolk.

Discussions on sea safety included the improvement of infrastructure and facilities at fishing harbours; the enhancement of training and capacity-building programmes for fishers; the promotion of modern technology for safe practices; and the implementation of effective disaster management strategies in coastal areas.

The participation and insights shared at the workshop have significantly contribute to, one, the development of effective policies and practices for safeguarding the lives and livelihoods of fishers; and, two, ensuring sustainable fisheries management.

Thrissur, Kerala, India
12 July 2023

Dr. Joy Elamon
Director General (DG)
Kerala institute of Local Administration

DAY 01

1. OPENING SESSION

1.1 Welcome Address and Introductory Remarks

Sebastian Mathew, Executive Trustee, ICSF Trust

Welcoming the participants, Sebastian Mathew began the workshop by introducing its aim: to understand and move towards implementing the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) adopted by the Food and Agriculture Organization (FAO) with a focus on fisheries management and sea safety. As part of this aim, ICSF had already organized many meetings, including three national ones for marine, inland and women in fisheries. The Kerala meeting was the first sub-national workshop for understanding the SSF Guidelines, he said. The SSF Guidelines have been translated into Malayalam by Central Marine Fisheries Institute (CMFRI) to make the document accessible.

Mathew highlighted a few key portions of the SSF Guidelines that the workshop should pay attention to, for instance, Chapter 6 of the SSF Guidelines—which focuses on social development—and Chapter 12—which focuses on capacity building. Through this workshop, the participants should try to formulate a combined strategy to implement them, he said. He used the example of ‘sea safety’ to illustrate this: Should sea safety and fisheries management be combined? Could local self-governments play any role in implementing the combined strategy? Though there are many examples for the latter in different parts of the world, capacity of local self-governments need to first be developed for this, he said.

He recalled the national workshop that was held in September 2019 at the KILA (<https://www.icsf.net/wp-content/uploads/2022/03/930.ICSF213.pdf>). In this, the group had examined the possibility of coordination between local, state and national levels in implementing the SSF Guidelines. The group had also discussed the involvement of local bodies in fisheries management and sea safety. In the current workshop, said Mathew, there were representatives from select panchayats as well as from trade unions, cooperatives, self-help groups and other civil society organizations. This workshop’s focus was on discussing whether consultation and cooperation was possible in implementing programmes for the development of small-scale fisheries and on understanding fisheries management and sea safety. The discussions would also include the recommendations from a report prepared by KILA on the role of local bodies in disaster management in the context of climate change.

Mathew also hoped that the participants of the workshop would go on to conduct awareness programmes on these topics at the local level. He also expressed the expectation of seeing an increase in participation of the fishing communities in the planning process. A local sea safety protocol should also gradually evolve, he said, which would make possible speedy interventions to reduce the extent of accidents and disasters at sea.

1.2 Keynote Address

Joy Elamon, Director General, KILA, Thrissur

Joy Elamon reminded the participants that though the focus of the workshop was on fisheries management and sea safety, it was important not to forget the general objectives of the SSF Guidelines—that of food security, poverty eradication and sustainable development. Along with these, it was also important to keep in mind the United Nation (UN)’s sustainable development goals, he said, also emphasizing the importance of health, education, gender justice and life below water.



Joy Elamon, Director General, KILA delivering the Keynote address, where he emphasized on the general objectives of the SSF Guidelines—that of food security, poverty eradication and sustainable development

In Kerala, in the past, people were able to overcome hunger through the carbohydrates and protein available in abundance in nature, that is, tapioca and fish, especially sardines. But today the availability of sardines is an issue; and the reason is climate change and an increase in sea temperature. It is in this complex situation that we are also forced to think about management of natural disasters. Local bodies have a big role to play in the mitigation of natural disaster risk and taking steps towards adaptation, as it is the local people who reach the disaster zones first. Although all local bodies in Kerala have prepared plans for this, said Elamon, they are weak and have many gaps. One reason for these gaps is that these plans were prepared in the context of floods. He emphasized the need to rework these coastal area plans and hoped this workshop would help with that, making use of ICSF's vast experience in coastal fisheries issues.

1.3 Drone-Assisted Search and Rescue Operations in Small-scale Fisheries: The Thalikulam Experience, Kerala

Geetha Gopi, Former MLA, Nattika, Kerala

Dewang Subil, University Student, Drone Pilot and Photographer (via video call)

Geetha Gopi began by highlighting the risks faced by fishers, which are often under-appreciated by those settled in land. Using her experience as an MLA working in her constituency Nattika in Thrissur district, which has three coastal panchayats, Geetha said that she knew the fishing community to be hardworking and in need of better intervention from authorities.

Geetha then spoke of a specific incident in Thrissur, which took place on 5 January 2021. Four fishermen had gone missing at sea. Their craft had been damaged, and the fishermen were holding on to broken pieces of the craft. Despite involving the navy and the coast guard, with a helicopter and a rescue craft search, they couldn't locate the fishermen. But a local student of Bachelor of Technology came forward with the idea of using a drone to conduct the search. Initially, the police were hesitant to take the student into sea, as he didn't know swimming. But with Geetha's intervention, the boy was allowed to go to sea and deploy his drone.



Geetha Gopi, former MLA, Nattika, Kerala presenting on Thalikulam experience, Kerala. She highlighted the risks faced by fishers and the need of better intervention from authorities

Dewang Subil, was the next speaker who joined via a video call. Although Subil was studying in Bengaluru at the time of the incident, he happened to be home at Nattika because of COVID-19 pandemic. He went to the beach when he heard of the missing fishermen and learnt that the accident had taken place in the territorial waters. Since the drone camera could only be operated up to a distance of 5 km and the accident site was much beyond, he had to go out to sea. And he eventually found the fishermen at about 11 km from the coast using the drone. It is difficult for helicopters or those going in large rescue craft to see fishermen lost at sea, said Subil. But the drone camera can spot them as it flies quite low.



Dewang Subil, making a virtual presentation on the Thalikulam experience. He addressed the importance of taking precautions as opposed to intervening after the disaster

Drawing from this example, Subil suggested having suitable safety equipment, such as life jackets or buoys, on small-scale fishing craft. If the fishermen he saved had carried such equipment, they would not have suffered as much. Subil highlighted the importance of taking precautions as opposed to intervening after the disaster. He also suggested that the authorities help provide fishers with safety equipment. The opening session ended with a round of self-introduction of the workshop participants.

2. Session 1

2.1 Interventions of Local Self-Government Bodies in Fisheries Development, Management and Livelihoods: A Case Study of Select Coastal Local Government Bodies

Shibina Elayil, Research Scholar, Central University, Kasaragod, Kerala

Chair: V. Vivekanandan, Trustee, ICSF Trust

Shibina Elayil presented an independent case study that she conducted in four coastal grama panchayats and one coastal municipality. The panchayats were Valappad (Thrissur district), Chemanchery (Kozhikode district), Aalappad (Kollam district) and Anchuthengu grama (Trivandrum district), while the municipality was Parappanangadi (Malappuram district).

Valappad: This marine coastal panchayat succeeded in the planning and implementation of its Development Plan in the last five years, including the pandemic period. Tables and chairs were distributed among school children. Fishers were provided gear and solar lamps, while fish sellers were provided with ice boxes and cycles. Twenty-six micro units were running here successfully at the time of the study. But no sea safety programmes had been implemented.

Chemanchery: The main development programmes of the panchayat were the distribution of tables and chairs to children, life jackets to fishers and ice boxes to fish sellers. But during the pandemic, that is in 2020–21, no plan programmes were implemented. The Fisheries Department directly distributed technology devices like GPS to fishers. Overall, not more than Rs 5 lakh (USD 6100)* was spent annually for fishers from the plan funds. The Subhiksham Project (A government initiative in Kerala aimed to combat food shortage within the state, where the local self-government bodies promote inland fishing activities such as bio-floc farming and pond-based fish farming) was not implemented. Fishers also said that climate change had affected their occupation. The panchayat also faced drinking water shortage. There was only limited intervention on sea safety.

Aalappad: This panchayat is infamous for sea sand mining, but not much mining took place anymore. The Dheevara community is—the most important fishing community here—to be well organized under strong community leadership, with many activities being carried out through the community organization. The people here also fare comparatively better in education.

During the 2004 tsunami, 143 people died in this panchayat, but a lot of rehabilitation activities also took place post the disaster. The Punargeham Project (of providing free housing to the fishing community) has also been a failure here, due to the high cost of land. The Subhiksham Project has failed. Development programmes were not implemented much during 2017–18 and later during the pandemic. Out of the 26 local Theeramythri units (a scheme of alternative self-employment for women) that operate here, only 70% was successful. Fishers here are using new technologies. Though authorities tried to promote fish farming, it failed. Coastal erosion is a major issue here, and massive sea walls are being built as in Chellanam, Kochi.

Anchuthengu: Traditional small-scale fishing is the most important occupation here. Though earlier coir making was also an important traditional industry, now it has become insignificant. Through

* Exchange rate is one USD = INR 81.96

the panchayat, children received tables, chairs and laptops, fisherwomen received ice boxes, and fishers received small craft and gear. Exploitation by middlemen is a big issue here. The community also faces climate change issues, losing many houses due to erosion. However, the Punargeham Project seems to have succeeded as 777 families have registered and about 2,000 people are waiting to relocate to safer areas further inland. Fishers do not use safety equipment while fishing. Drinking water shortage is another issue here. In education, the panchayat is backward, and higher education needs to be encouraged. Though the panchayat has been doing a lot of work on social security aspects, lack of adequate ownership rights and records is still an issue.

Parappanangadi: Both the marine and inland fishers here live in the municipality area. The panchayat provided children with tables and chairs. Through the Fisheries Department, children were also given education grants and cycles. The panchayat also distributed fishing gear and extended support for fish farming. A sea food restaurant has been functional under the Theeramythri Project. Moreover, 30 micro units are also functional. A good number of projects were implemented in 2018–19, but development work was stalled in 2020–21 due to pandemic.

After the construction of the fishery harbour in 2021, there has been coastal erosion. The panchayat has been trying to address this through building sea walls and groynes. There is also drinking water shortage and lack of work in the realm of sea safety.

These are some of the important general findings from the case study:

- Fishing communities are lagging in development.
- The most important issue the fishing communities face right now is climate change-related. Unpredictable weather and coastal erosion are causing loss of houses and livelihood assets, leading to an unstable situation.
- Generally, sea safety devices are not being used by fishers, and more awareness on sea safety needs to be spread.
- There is improvement in the interventions of the Fisheries Department in most coastal areas, and there is good coordination between the department and local bodies.



Shibina Elayil, Research Scholar, Central University, Kasaragod presenting the case study on the interventions of local self-government bodies in fisheries development, management and livelihoods in selected coastal panchayats

- Drinking water shortage is a common issue. Though there are pipelines in most places, water is often not available.
- Although there is an emphasis on distribution of education-related freebies to children in the fishing community, such as that of tables and chairs, government support should be extended for their higher education too.
- Around 30% of Theeramythri projects have failed, and efforts should be made to change this.
- Matsya sabhas have to be improved with more participation of fishers.

Following the presentation, Elayil interacted with the participants, and they shared the following comments and questions:

Mercy Alexander from Sakhi pointed out that the case study did not cover health-related issues as well as interventions by the local bodies in healthcare. Considering coastal areas are unique, she argued for changes in the overall guidelines for local bodies on plans and projects, which she believed the case study should have mentioned. She also argued for panchayat development schemes to have a vision of sustainable development. Two of the panchayats presented by Elayil, Aalappad and Anchuthengu grama, have had a bad developmental approach and may not be around for long. With increasing coastal erosion, the panchayat land area is vanishing and fishers are becoming refugees. Alexander argued that housing projects cannot be an answer to this; moreover, constructing new flats or houses is not sustainable development. She also suggested that new challenges like the blue economy should also be studied, while also pointing out that the study had not taken into account the traditional knowledge of fishers as well as the needs of small-scale fisheries.

The grama panchayat secretary of Anchuthengu, Ajithkumar claimed that his panchayat had planned and implemented many creative programmes in the health sector, including for the prevention of communicable diseases. The ambulance provided by the MLA for the area has been managed well by the panchayat, and speedy intervention during calamities at the harbour has been achieved. He also said that since the panchayat is a narrow stretch of land between the sea and backwaters, many development plans could not be implemented because of Coastal Regulation Zone Notification (CRZ) 2019 restrictions. Storage and marketing facilities could not be provided due to the CRZ rules.

Seeta Dasan from Self Employed Women's Association (SEWA) commented that though community health centres and schools come under panchayat supervision, such activities have not been included in the case study. She also contended that coastal erosion is not solely due to climate change. Even fishers point out that erosion is caused by 'illegal' is more commonly used constructions that have been coming up all along the coast. She added that the case study could have also looked at whether the local fish markets are women-friendly and under whose control the markets are functioning.

Sajeevan from Valiarampu, Kasargod, emphasized the importance of tackling coastal erosion and cautioned that seawalls are not a solution but a big financial burden. He gave the example of his own panchayat, where, under the Green Cover project, casuarina trees are being planted on the coast. This also provides an employment opportunity, he said. Though there are many panchayats with both marine and inland fishers, said Sajeevan, unfortunately there is discrimination regarding social security benefits given to inland and marine fishers. This also creates problems for officers and needs to be addressed, he argued.

Balakrishnan from Neeleswaram spoke on how the groynes built to tackle coastal erosion have resulted in other severe consequences, including the intrusion of saltwater during the tide, which affects the sea. Scientific interventions are required to solve these problems caused by construction of seawalls and groynes, he said. Ajeesh from Azheekode, Kannur, said that the low participation of fishers in meetings organized by the panchayat is a problem. He too spoke of the need to change the guidelines provided by the government in order to take into consideration the peculiarities of coastal panchayats. He also pointed out the inadequate number of staff in panchayat offices, especially of implementing officers. One officer is given charge of 10 to 12 panchayats, which creates delays in

distributing benefits. For example, he said, a student might receive a laptop distributed under a scheme only by the end of an educational year.

Anil Kumar from Chemanchery, Kozhikode, pointed out that the case study had missed including some important projects and interventions such as beach cleaning. Panchayats also intervene in creating basic infrastructure facilities in schools, including fisheries schools, which too the study overlooked. Panchayats also engage in making and repairing coastal roads. His panchayat, for instance, is running a gear-making unit. It also constructed 25 tsunami houses and a hall. The provision of Rs 10 lakh (USD 12,201) for the Punargeham Project is inadequate to build a house, he said, and argued for increasing it. He also pointed out the restrictions in building houses up to 100 m from the coastline due to CRZ and called for exemptions.

Susheela Soman from Engandiyur, Thrissur, voiced that CRZ restrictions prevent even the construction of fishers' houses allotted under the Life project. She also pointed out the need to prevent saltwater intrusion in fishers' houses and clear out the silt that is deposited inside after the floods. The secretary of Kaipamangalam panchayat, Thrissur, also called for changes in the government guidelines for panchayat plans. He pointed out that since there is no coastal erosion in his panchayat, the coastal protection project fund had lapsed. The panchayat also welcomed the coastal highway in the pipeline, which he believes will lead to development of tourism and employment opportunities. He expressed concern about the CRZ regulation hindering this project.

Vincent Jain from the South Indian Federation of Fishermen Societies (SIFFS) found the case study and its findings to be too generalized and argued instead for giving emphasis to specific issues. Although the case study suggests interventions in market and economic benefits, it has to mention the kind of interventions required. He also said that the study did not investigate the important issue of waste management.

Jackson Pollayil, the state president of Kerala Swatantra Matsya Thozhilali Federation (KSMTF) in Alleppey, said that the study should be more authentic and factual. To illustrate this, he pointed out that sea sand mining is still going on in Aalappad, while only sea washing has been stopped by the government. He also said that when evaluating activities of a panchayat, the data on budget and population according to occupational groups need to be mentioned. He gave the example of his panchayat, in which the fishers' population is large, but out of the total budget of Rs 43 crore (USD 5,245,660), only Rs 13 lakh (USD 15,861) had been earmarked for fisheries sector. He also shared that the Punargeham Project in his panchayat had been planned keeping in mind the CRZ, which is inevitable. Finally, he added that coastal tourism too needs to be studied properly as the need of the hour is responsible tourism, rather than the current brand of tourism aimed at profit for big hotel chains and lack of job opportunities to local people.

Abdul Razik from KSMTF in Kozhikode highlighted the educational benefits to fisher children given by the Fisheries Department started in the year 1984 has not been studied before and its impacts must be evaluated. Although all small-scale fishers are now using mechanized or motorized craft, fuel price rise and kerosene shortage is a big issue, and so, the possibility of marine electric motors should be studied. He too noted that seawalls and groynes are not adequate or the right solution for coastal erosion. He also advocated for improving traditional fish processing methods, like salting and drying, in consultation with coastal women and to be tried out as a pilot project in a few places.

Santhosh Kumar, deputy director of Kerala's Department of Fisheries and the coordinator for the Punargeham Project, put forth that the project outlays of panchayats should have been evaluated in the study. Earlier studies have shown that the outlay for fisheries sector is less than 0.5%. Out of this, less than 25% is earmarked for livelihood needs, while safety projects don't even receive 10% of these funds. The district panchayats have allocated a substantial amount for fish farming only because it is part of a centrally sponsored project. Lack of sufficient number of officers in panchayats is a major issue. Recently, 38 new officers were appointed in matsya bhavans in the state, and he hoped this would help change things soon. The poor finance of the state has also affected the panchayats.

State's share in the employment guarantee programme is 40%. The case study, he pointed out, has concentrated more on only two projects, Theeramythri and Punargeham. He too argued for revision in guidelines handed down by the government. Echoing others in the discussion, he also held that the construction of seawalls are not the solution for coastal protection, which are temporary and will ultimately ruin the coast.

Responding to the points raised by the participants, Elayil shared that the data collection was done directly from the panchayats, the Fisheries Department officials and fishers. The case study largely focused on assessing plan programmes. The study found that in some of the plan programmes, no spending had taken place. Elayil conceded that since the study had not evaluated coastal erosion technically, there could be errors in its conclusion. She also agreed that health and education sectors, aspects of tourism, waste management and coastal roads need to be studied. She also pointed out that there were efforts by the government to respond to natural disasters.

Vivekanandan, the chair of the session, in his concluding remarks said that the findings of Elayil's study instigated a good discussion. At the same time, he found the enormity of the issues to be tackled and the state's lack of focus on them to be disappointing. He especially rued the lack of solutions for even basic issues. He posited that coastal erosion is a big challenge that cannot be tackled by local self-governments alone. There is indeed a limitation on the panchayat and other local bodies to intervene in environmental issues, as many of them transcend the boundaries of the panchayat, and even of districts and the state; they are also scientific and technological issues. CRZ, which is meant to protect both the coast and the coastal communities, has had many dilutions. Unfortunately, this also holds true for fisheries management. Consequences of projects implemented by those beyond the local governments are huge. For example, the coastal highway can affect the everyday lives of people. The coastal highway road at Kollam has also already distanced people from the sea. The issue of guidelines too is serious and must be checked; monolithic solutions may not work as the issues are complex.

3. Session 2

3.1 Role of Panchayats in Improving Safety at Sea and Regulating IUU fishing

M.K. Sajeevan, Associate Professor and Head of Department, Fisheries Resource Management, Kerala University of Fisheries and Ocean Sciences (KUFOS)

Chair: M.V. Baiju, Senior Scientist, Indian Council of Agricultural Research (ICAR)-Central Institute of Fisheries Technology (CIFT), Kochi

The chair of the session, Baiju, began with a brief introduction to sea safety. This is one of the riskiest occupations in the world, he said, with the risk being more with fishing vessels when compared to other marine vessels like ships. While there are some international guidelines regarding sea safety, the emphasis in the session and in the workshop would be on small fishing craft. At sea, people of different countries with different languages need to interact with each other. Hence, light, sound and signals are important communication tools. After Cyclone Ockhi, there is more awareness and deliberation on sea safety in our society, he said. At a meeting organized by SIFFS, the group had a discussion with fishers to understand their experiences. Along with sea safety, Illegal, Unreported and Unregulated (IUU) fishing is also an important issue, he added.

Sajeevan started his presentation by stating that fishing, especially fishing in offshore waters in small fishing craft, is a high-risk occupation. At the same time, majority of fishers all over the world fish on small craft. Small-scale fishing is very diverse, with different types of craft and gear used for different periods of fishing. Hence, the required information for ensuring safety at sea is also varied. Often, we get to know about small-scale fishers only after mishaps as there is no system of recording their details before they venture into sea. Usually, only the vessel owner's details are available. This



Sajeevan MK, Associate Professor and Head of Department, Fisheries Resource Management, Kerala University of Fisheries and Ocean Sciences (KUFOS) presenting on role of panchayats in improving safety at sea and regulating IUU fishing

makes it time-intensive to gather information about the actual workers out at sea, complicating the search and rescue operations and often delaying them.

Hence, the first requirement is to have a system whereby accurate daily information is recorded at all fishing centres/villages about those who set out to fish in the sea. Such information should include area of the sea the craft is headed to, crew details, craft registration number, expected period of operation at sea (days/weeks) and the type of fishing activity. In the small-scale fishing sector, advanced technological devices are usually not needed to secure safety at sea. Basic principles like precaution and alertness become important. Risks that these can help avoid include: fire, person falling into water, leakage of craft, engine damage, propellor damage, lack of fuel, lack of drinking water and food, and damage to communication device.

To avoid fire in the craft, fuel should be kept away from the cooking area. There should be regular checking of electrical systems. General safety devices should be kept in their appropriate places and must be properly secured. Fuel should not be used for cleaning purposes. Items on the craft should be stored in such a way so as not to restrict mobility. The deck should always be clean. The doors of the engine room should be closed properly. Air circulation and lighting systems must be in good working condition.

Excess loading in the craft should be avoided. There should be no blockage in the water drain so that the water that falls inside the craft can drain easily. Heavier items should be kept below other things. Frequent servicing is necessary to prevent engine damage. Communication devices should be used only for proper needs. Using whistles will help get the attention of other vessels nearby. During any accident, the priority should be to save life and not materials.

Fishers venturing into deeper waters should take more precautions. They should know the protocol on vessel navigation. The respective panchayats could conduct sessions on this for the fishers. Since the communication at sea would be with large ships, fishers should always be alert and aware of standard practices. Larger ships should not mistake them for pirate vessels. Coir and ropes in the craft should be used carefully. Fishers should avoid sitting on the edges of the craft to avoid falling into sea, especially while others are not watching. Often, life-saving devices are not taken along

in small craft due to lack of space, but fishers should always try to carry whatever is possible as one cannot predict the occurrence of an accident. Craft going to deeper waters must have radars/reflectors. There are also a few unforeseeable risks, such as sudden thunderstorms, hurricanes, cyclones, etc. But nowadays early weather warnings have helped reduce this risk, he said.

Moving on to fishing regulations, Sajeevan pointed out the increasing importance of fisheries management. With the increase in cost of fishing—like investment costs in craft and gear—the income of fishers has become low despite high catch. Collective self-regulations need to be implemented, and panchayats should be able to intervene to correct this. As incomes become less, fishers move towards harmful practices like catching juvenile fishes, which too must be mitigated by local bodies. They should try to provide basic infrastructure facilities for getting fair price for the fish, concluded Sajeevan.

The session was followed by a discussion with the participants. Sebastian Mathew from ICSF wished to know if the Kerala government has formed an expert committee on sea safety, what its terms of reference are, and the extent of the committee's activities. Vincent Jain from SIFFS felt that the presentation had focused more on general aspects of sea safety rather than giving specific attention to the small-scale fisheries sector. Out of 1.9 lakh fishing craft in India, 1.7 lakh are small-scale fishing craft, he said. To secure the safety of the fishers working on these large number of small-scale craft, the suggestions have been restricted to life jackets and buoys, and Jain emphasized the need to move forward from these. He outlined the importance of recognizing the different safety devices required for one-day fishers and multi-day fishers. Classifying the minimum required safety devices for these fishers, he stressed, would reduce accidents. He also pointed out that a good number of accidents occur in month-long deep sea fishing trips when fishers defecate (as they have to place themselves on the edges of the craft). Providing suitable toilets could avoid such accidents. Moreover, efforts must be undertaken to make fishers better aware of such safety requirements, he said. He also shared that CIFT recommends a rope called 'lifeline' in every craft, and he demonstrated the uses of this rope.

Jackson Pollayil from KSMTF pointed out that fishworkers involved in one-day fishing trips reject the life jackets distributed by the Department of Fisheries as these obstruct their fishing. He recommended that simpler and less heavy life jackets be made available. He also pointed out that the government's marine ambulances are not functional and that the absence of an authority to implement safety protocols is a problem.

Baiju responded that it is important for workers as well as authorities to cooperate in using safety devices. The central government has arranged for safety devices and equipment of international standards in fishing vessels, given there is subsidy available for deep sea fishing. However, since there is a large fishers' population in the country, the government would not be able to provide safety devices to every fisher.

Abdul Razik from KSMTF said that the government does not consult fishermen before implementing changes in the fishing sector. This can be seen in the construction of harbours, which leaves coastal people to face the consequences. He gave the example of how local fishers succeeded in rescuing some fishers at sea after an accident, after the rescue mission by the authorities failed. Given the impracticality in fishers registering with the fisheries office every time they have to go out to sea, Razik instead recommended the setting up of a telephonic reporting system. He also suggested adding 'holds' beneath the craft to provide support to fishers in case of a capsizing accident.

After having heard all the comments, Sajeevan responded that simpler life jackets are now available, and they would also be made universally available. He also expressed that meetings on safety aspects should be held with the fishermen at the panchayat level and that the other stakeholders would be willing to participate in them and discuss the safety measures for one-day fishing. He also agreed that at all panchayats, facilities need to be created to get good price for fish. He recommended the installation of adequate ice plants and vehicles for this and called upon the panchayats to take initiative on this if needed.

3.2 Role of Panchayats in Sea Safety, Fisheries Management and Social Development

P. Aneesh, Assistant Director, Fisheries Station, Vypin, Government of Kerala

Chair: S. Santhosh Kumar, Deputy Director, Thiruvananthapuram, Department of Fisheries, Government of Kerala

Although Kerala's Department of Fisheries have many development programmes for the marine fisheries sector, the lack of sufficient number of officers is affecting implementation of several projects, began P. Aneesh.

Officers are needed for the following important activities:

- Registration of fishworkers and fishing craft and gear
- Disaster management activities
- Coastal safety
- Search and rescue
- Awareness programmes
- Implementation of Act and Rules
- Weather warnings
- Activities related to fish landing centres and fishing harbours

First, Aneesh lined out the safety measures undertaken by the Kerala Fisheries Department. The department's sea safety programme works in favour of not only the fishers but also others, he said. A 24x7 master control room service is available so as to take action within 15 minutes of a report of anyone falling into sea. Apart from this, there are also 3 regional control rooms with modern communication equipment. In rescue operations, the Fisheries Department also coordinates with other agencies. There are 9 fisheries stations in the state. Radars with 30 nautical miles coverage are also present. The very high frequency (VHF) system works up to 10 nautical miles.



P. Aneesh, Assistant Director, Fisheries Station, Vypin, Government of Kerala presenting on Role of Panchayats in Sea Safety, Fisheries Management and Social Development. He shared that about 900 persons from coastal areas in the state were trained in Goa on sea rescue operations and they are now a part of the rescue squad

When it comes to enforcement and rescue operations, Aneesh shared that there is a marine enforcement wing under a superintendent of police with 3 circle inspectors and 60 police officers. But no one is given any arms. Kerala is the first state in the country to have marine ambulances, with 3 ambulances that are each 23 m long. Apart from saving lives, the rescue craft also help with finding lost fishing craft and gear. Between 01 April 2022 and 31 January 2023, in Vypin alone, 82 lost craft were found and brought to the shore and their value was around Rs 80 crore (USD 9,759,368). Patrolling in Vypin was carried out 848 times. In 172 rescue operations, 1,060 people were safely brought to the shore. Aneesh also pointed out that the patrolling craft are taken for rent, and often there is difficulty in obtaining them.

Data on rescue operations in 9 fisheries stations are as below:

- 2,357 patrolling operations
- 564 rescue operations
- 5,696 fishers rescued and brought safely to shore
- 33 deaths; 13 missing people

The rescue operations are augmented by 900 persons from coastal areas in the state who were trained in Goa on sea rescue operations. Among these, 612 persons are currently part of the rescue squad. There are also coastal police stations in the state to complement the work of other official bodies in sea safety. Noting the importance of data, Aneesh shared that in the marine fisheries sector, more than 50,000 fishing craft in the state have been registered. They are classified into four categories: 1) Non-motorized craft 2) Motorized craft 3) In-board canoes and 4) Trawling/gillnet/hook and line mechanized craft. Registration is done using the RealCraft software. Vessel tracking device is compulsory for all mechanized craft, and this helps provide live data of fishing craft working within the territorial waters of the sea. All craft have colour codes for easy identification and the registration number has to be displayed prominently. The life period of each type of fishing craft is also fixed: 12 years for wooden craft, 15 for steel craft and 18 for fibreglass reinforced plastics (FRP) craft. After a check of the vessel's working condition, the life period may be extended for another 3 years. Marine plywood is banned. The regulation of the vessel's life span is strictly implemented for mechanized craft.

Speaking of some specific restrictions that have been put in place in Kerala, Aneesh shared that since September 2018, mechanized fishing craft have been prohibited from fishing within 12 nautical miles of the state's waters. Also, since 2018, sleep area, toilet and kitchen have been compulsory for mechanized craft. Depending on the size of the craft, maximum horsepower (HP) of engine to be used are regulated thus: up to 15 m: 140 HP, 15 to 17.5 m: 200 HP, 17.5 to 20 m: 250 HP. Within 12 nautical miles, mechanized craft are allowed innocent passage only and no fishing is permitted. In all fishing craft, lifesaving as well as navigation devices are compulsory, and they should be checked once every 5 years. Boys aged below 15 years are not allowed to go fishing. *Srank* (steersmen) should have technical training certificate. If the ownership right of fishing craft is to be transferred, permission of the Fisheries Department is compulsory.

Mechanized fishing is prohibited in waters less than 30 m deep in Kerala's southern region from Kollamkode to Paravur of Kollam, and beyond that in waters 20 m deep till Kasaragod. Fishing craft of other states cannot operate in Kerala waters without permission from the Department of Fisheries. Pelagic trawl and purse-seine gear are prohibited up to 12 nautical miles, and from sunset to sunrise all types of trawling gear are prohibited. Mesh size of different gear are regulated and order is issued to prevent juvenile fishing. Minimum mesh size for 58 types of different gear has been fixed. These measures are expected to protect fish resources from depletion. Field verification is also done to implement these rules.

Fishing with lights is restricted and lights of more than 12 watts are banned. Penalty fees for different types of violations are also fixed. Using fishing craft for other purposes is prohibited. In the financial

year 2022–23 alone, until the date of this workshop, 230 fishing craft had been caught for violations of rules and regulations and Rs 1.51 crore (USD 140,296) collected as fine. As traditional small-scale fishers might find it difficult to follow these rules and regulations, the department concentrates only on violations by mechanized craft. If the mechanized craft are tied up, the owners have to pay fine, however Fisheries Department do not have facilities to keep all motorized craft.

Though the craft owner gives the crew list to the department at the time of registration, they don't inform the department when workers are changed. In mechanized craft, around 30% of workers are from other states. Efforts have been made to try out a punching system for the first time in model fishing harbour, Munambam. Aneesh shared that discussions are ongoing about the technical aspects of vessel tracking. He shared that the state's deep sea fishing craft often go beyond the country's exclusive economic zone (EEZ) boundaries. Fishermen switching off their tracking devices was another problem, which makes it impossible to give them weather warnings.

Lining out further issues faced with fishers and craft owners not meeting the regulations, Aneesh said that even though subsidies are offered for constructing bio-toilets and registration of VHF radio sets, fishers do not come forward to fix these in their craft. Small craft fishers are not willing to update their fishing licences, and they do it only at the time of renewing kerosene permits. On ensuring the safety of fishers, Aneesh shared that the department has asked all fishers to use personal safety devices. The government has issued a notification with details of the different navigation and safety equipment required for each type of craft. Aneesh further added that fishers should be vigilant at sea and should avoid sleeping with lights switched off, which could lead to accidents.

Pointing out that being strict about installing all devices as per law in small craft would result in licenses not being issued to small-scale craft, Aneesh shared that the department instead gets an affidavit from the owners for fixing these on board and then goes ahead with issuing the licenses. Speaking of the systems in place for fisheries management, Aneesh shared that Kerala is in the process of forming 'management councils'. The chairperson of a village-level management council would be the panchayat president, while in municipal areas, it would be the ward councillor. These management councils will have representation from fishers' cooperatives and trade unions as well. The member secretary of the council would be the matsya bhavan officer. Councils will also be formed at the district and state level to ensure fishing regulations are met, to work towards conflict resolution and to carry out awareness programmes.

Aneesh concluded that the department hoped to achieve, through these actions, an abundance of fish or Chakara - a marine phenomenon in which many fish and prawns throng together during a particular season as part of mud bank formations.

In the discussion that followed Aneesh's presentation, the participants raised various questions. Abdul Razik from KSMTF pointed out that when there is a collision between large, mechanized craft and small craft, there is more damage to the small craft, but very often it becomes difficult to get compensation from mechanized craft as they do not display their registration numbers properly. He also suggested that the restriction on the life span of small canoes be corrected, as there are FRP craft that have worked smoothly for over 25 years. Despite the regulations in place that Aneesh pointed out, mechanized craft still fish extensively within 12 nautical miles, including at night, said Razik. He shared that there are no officials on patrol to prevent this illegal activity. Razik also argued that the taking of unilateral action against only small craft for catching juvenile fish is incorrect. Mechanized craft from Karnataka state with banned gear fish up to Kozhikode, but no action is taken against them. He also pointed out that the ban of square mesh gear remain only on paper.

Seeta Dasan from SEWA shared that juvenile fishes are being caught in many places. For example, at Muthalapozhi fishing harbour, ring-seine craft are engaged in this, but very little action is taken to prevent this. Though light fishing is banned, it continues to be carried out without any action from the authorities. For conservation of resources, the number of fishing craft should be restricted. Plastic waste in the sea is growing, with most of this waste coming from interior areas through water

channels and some of it from fishermen who use plastic bottles to attract fishes. To prevent these activities, Dasan argued for regulations to be put in place, involvement of local self-governments, conducting awareness programmes and convening matsya sabhas.

The secretary of the Anchuthengu grama panchayat, Ajith Kumar touched upon the issue of accidents. He pointed out that in Muthalapozhi, accidents at sea happen regularly because of the siltation in the harbour mouth. Fishers contend that the problem is not that of lack in using safety devices, but the unscientific and dangerous construction of the fishing harbour. Also, accidents occur due to gear put up by outsiders, in which the fishing craft get entangled. There are also issues with fishers not receiving warnings on time. When they do get the warnings, they often do not take them seriously. The grama panchayat secretary shared that recently three fishermen deaths had occurred even though warnings were issued against going out to sea. The secretary proposed discussions and awareness campaigns to address these problems and suggested that local bodies take the lead.

After having heard all the suggestions and issues, Aneesh responded that insufficient number of officers and police force remains a problem. He also pointed out that weather warnings are complex. Even though warnings are put out often, there are usually mistakes in them. Sometimes warnings are issued even when the weather is good, hence the authorities hesitate to pass on the warnings to the fishers.

Concluding the session, the chair Santhosh Kumar shared his suggestions. Matsya sabhas must be convened, for which a handbook has been prepared by the department. Panchayats should come forward for the effective implementation of the Suchitwa Sagaram (Clean Ocean) Project. He emphasized that positive results can be achieved only through coordination and cooperation, with people themselves coming forward after being aware, and not through compulsion. He wound up the discussion by highlighting that Kerala is the only state in the country to start fisheries management through people's participation.

DAY 02

3.3 Sea Safety in Small-scale Fisheries

T. John George, Former Merchant Navy Navigation Officer

Chair: V. Vivekanandan, Trustee, ICSF Trust

The presenter, John, has done research on safety devices required for small-scale fishing craft and has also given training to small-scale fishers in Tamil Nadu and Kerala. He started his presentation by stating that when it comes to sea safety for fishermen, generally at the international level, prominence is given for workers in large, mechanized fishing craft. There is use of heavy machinery, hence there are guidelines on safety devices for that. But in the case of small craft, this is of no use.

Drawing on the general apathy of humans towards safety, John extended it to the fishing sector. Fishers learn skills and knowledge from their elders, and this includes issues of safety. Thus, they do gain some knowledge on risks involved in fishing. But in small craft, safety is always the last priority. The main problem is that there is not enough space in the craft. Along with five fishers, the craft has to accommodate big gear as well as the catch after fishing, leaving little space for anything else. Most importantly, with mobility within the craft being affected, fishers tend not to carry safety devices with them.

One basic requirement in a fishing craft is a flag mast. If a light is fixed on top of it, it would brighten the area around the craft, and other craft, including ships, would be able to spot it and avoid collision. But most of the small fishing craft in India do not have a flag mast, and it is also difficult to fix one. In small craft, light is kept on the deck. Often, as they shake, for ships coming far away they may act as a flashing light. But often they may not be noticeable, and accidents could occur.

Small fishing craft can easily capsize, in just a minute. Personal safety devices like life jackets are not suitable for the Indian climate as they were invented by those living in cold weather conditions. Wearing them in hot climate makes fishing very difficult. They have to be worn throughout the ride



John George.T, Retired Merchant Navy Sailor, presenting on sea safety in small-scale fisheries. He explained the need for fishers to know about changes in the weather when they are out in the sea, with which they can plan their fishing trips

till the fishers return to the shore, as they cannot be put on suddenly at the time of an accident. Even in other countries fishers are generally hesitant to wear life jackets. One cannot swim wearing it, but would have to lie on their back in the water. Life buoys should be tied in such a way that they can be thrown easily into water. But it is difficult to fix them in the correct position in canoes. There are now floating belts that can help with swimming, but they are yet to be tested and developed for fishers' use.

Fishers going on small fishing craft should ensure five things:

- A powerful light with capacity to flash for at least nine hours.
- Even if engine is damaged there should be sufficient water for staying in the sea for two to three days till the rescue team can arrive. Often, fishers die due to lack of water.
- A folding knife should be tied to the body. When a craft capsizes, fishers can use the knife to cut themselves off the gear if they get entangled in it.
- A waterproof mobile phone would be of use if they fall into water.
- They must carry a first aid kit to treat injuries or burns.

Additionally, fishers on small craft can take these measures: 1) Ensure that another craft is in the vicinity and in line of sight while out at sea. 2) When anchored at night, at least one person in the craft should be awake and keep at least one light on in order to avoid collisions at night.

Current weather forecasts mainly focus on two elements—temperature and humidity—and this includes predictions on rain. Both these parameters are not of much help to fishers, who need to know the height and direction of waves and the speed and direction of wind. These statistics are not available on the Meteorological Department's mobile app. However, it is available on the website of the Indian National Centre for Ocean Information Services (INCOIS), where the status of the sea in various areas is updated every six hours. While this information is also available in the Fisher Friend Mobile App of the M.S. Swaminathan Research Foundation, it is on a spreadsheet and of little use to fishers.

Fishers can gauge the weather of the coast at the time of setting out to sea. What they need to know is about changes in the weather when they are out in the sea, with which they can plan their fishing trips. John also shared some information on patterns of natural phenomena. Cyclones or thunderstorms often come from the Bay of Bengal. On rare occasions, they may reach the Arabian sea through Sri Lanka, like Cyclone Ockhi. The ones that originate in Oman do not reach the sea off Kerala.

For the fishers in Kerala, the weather during monsoon is the most important in terms of sea safety. The wind speed during monsoon is between 33 to 45 km/hour, which is moderate weather for big ships, but bad weather for small-scale fishing craft. Warnings are issued only when the wind speed exceeds this limit. But these weather changes and wind patterns are also similar across all coastal areas. During monsoon, the wind speed can be more than the intimated one in certain parts of the sea, and hence accidents can occur. The Arabian Sea is generally turbulent, and in certain areas turbulence can be severe. But warnings are not issued for specific areas, and so more accidents occur in such areas. This often happens in the last phase of monsoon. Cyclones hit in a large area, and warning can be given about 10 days early. In Western countries, weather warnings are given specifically for small fishers, but this system does not exist in India. The Indian Meteorological Department (IMD) traditionally gives weather forecasts meant for farmers and not for fishers, who are neglected.

After John's informative presentation, the participants shared their feedback and raised a few questions. According to Vincent Jain from SIFFS, enough research does not take place in small-scale fisheries safety systems. Accidents occur more often at the surf crossing zone. Research is required on safety devices in these zones. Fishers who go for deep sea fishing do not carry two-way communication devices as satellite phones are expensive. There is also no data available on incoming and outgoing fishing vessels at the harbours. Jain concluded that it is important to address these issues to save fishers' lives.

Mercy Alexander from Sakhi acknowledged that while the sea safety systems presented earlier by the Fisheries Department official are relevant for large, mechanized craft, John's presentation addressed small-scale fishers. Even at panchayat-level meetings, stereotypical safety devices meant for large craft are discussed, and this needs to change. The safety devices that children use when they learn to swim need to be developed for the use of fishers and be distributed to them. Fishers had to discard the safety devices they were given after the tsunami as they did not find it useful.

Abdul Razik from KSMTF voiced that the authorities should take into consideration the traditional knowledge of fishers regarding weather. He pointed out that the younger generation of fishers have very little knowledge on this. He also pointed out that the unscientific breakwater construction for ports and harbours have resulted in accidents to small fishers.

Fathima, a fisheries officer from Thrissur, shared that the Fisheries Department has introduced an app named Sagara. Though fishers can register on this app while going into sea and after coming back, they do not use the app. The participation in the app remains low even after conducting awareness classes. She also shared that fishers have expressed interest in a new type of life jacket, which can be inflated and was introduced by a naval officer.

Jackson Pollayil from KSMTF pointed out through recorded data that weather warnings issued by authorities cost the state's fishers 72 working days in 2022. Often, the warnings were incorrect too. Ajith Kumar, secretary of Anchuthengu panchayat, emphasized that an emergency response team (ERT) should be established under the leadership of local governing institutions. Additionally, it is imperative to ensure the active participation of the fisherfolk community in these ERTs.

In conclusion, the chair, Vivekanandan, said that there are many limitations in preparing safety devices for small fishing craft, which must be acknowledged and accepted. Fishers should comply with suggestions to reduce risks as much as possible. Fishing is a high-risk occupation, and often, safety lies very much with the fishers, who should not rely on rescue operations at the cost of precaution. However, he added, local bodies can indeed play a role in the safety of fishers in near-shore waters, as government protocols often cause delay. The participation of community and voluntary services are required for faster rescue operations.

All small-scale fishing craft are not the same, they need to be classified and defined and distinct safety criteria need to be developed for each type. Also, there are gaps in research and development of devices for small-scale marine fishers at the scientific and technological level. Accidental deaths in the sea have become common and this should not be acceptable. When issuing no-fishing notification due to bad weather, government should also take the responsibility of providing adequate compensation for loss of work, concluded Vivekanandan.

4. Session 3

4.1 Role of Panchayats in Sustainable Fisheries Management

K. Rajesh, Senior Urban Fellow, Centre for Urban Governance, KILA;

C. Ramachandran, Principal Scientist, ICAR-CMFRI

Chair: K. Ajeesh, President, Azhikode Panchayat, Kannur

K. Rajesh started off the session by stating that he was not an expert in fisheries, but that he had 27 years of experience in decentralization and development planning of local self-governance. Quoting the example of Tribal Sub-Plans that have succeeded in providing housing facilities to them, he rued the fact that such discussions do not take place among coastal fishing communities. Plan funds are not allocated in the fisheries sector according to the population. This workshop, he suggested,



Rajesh. K, Senior Urban Fellow, Centre for Urban Governance, KILA presenting on the role of panchayats in sustainable fisheries management. He insisted that in coastal areas at local level, plans should be prepared with participation of fishers

should recommend a sub-plan for the coastal sector. He pointed out that when the 14th Plan was discussed at KILA, suggestions from the fisheries sector were very weak. He concluded from all this that democratic participation is absent in this sector.

In his opinion, the Theeramythri Project is a good lesson, and there is a need to think about whether it could be reorganized and given legal recognition. The possibility of ownership rights of sea and the coast needs to be discussed. While the commons are widely discussed in other states, Kerala lags behind in this regard. Coastal panchayats should have an action plan on sea safety. Though all panchayats have disaster management plans, they are generally weak. Local plans should be prepared in coastal areas with the participation of fishers, with a focus on local economic development. Theeramythri can provide a good example for this, and it needs to be strengthened.

Though it has already been suggested that coastal areas should have local learning centres like in tribal areas, it has not been implemented. Similarly, the suggestion to develop fisheries schools in the model of residential schools in tribal areas also remain only on paper. Political will and interventions are required for changes in this sector, he reiterated.

Following Rajesh's presentation, C. Ramachandran started with defining fisheries using a 1992 article, written in the context of the crisis of marine fisheries in Peru at the time, from the journal *Science*: fisheries is 95% politics and 5% protein. The term 'overfishing' or 'excessive fishing' was first used in 1854 by John Cleghorn of Britain. Noting that while the number of fishing craft had increased in Britain, the fish catch had decreased, Cleghorn had pointed to the phenomenon of overfishing. The ban on commercial fishing of Atlantic Code in 1992 continues to be in effect in Canada. In Kerala, the question of whether there is overfishing was raised in 2015. Fishers too began to vocalise the need to regulate the size of fish to be caught. According to him, fisheries management consists of three questions, four solutions and four annexures. The three questions are: 1) How to catch fish (fishing technology)? 2) How much fish should be caught? 3) Who should catch fish? The five solutions are: 1) Regulations and actions on technology (for example, mesh size of gear) 2) Spatial regulations (for example, monsoon fishing ban) 3) Regulation on production inputs (for example,



C. Ramachandran, Principal Scientist, ICAR-CMFRI presenting on role of panchayats in sustainable fisheries management. He spoke on how most of the activities of panchayats in coastal areas centre were around welfare measures and showed the need for people's participation in fisheries management

number of craft, regulation on horsepower of engines, etc.) 4) Regulation on production outputs (for example, quota). European countries, where the last solution is strictly implemented, together decide on the total allowable catch and divide this among the countries. Then each country allows quotas for fishers, which is transferable. In Europe's North Sea, monitoring and implementation is very strict. Violations are dealt with even bullets.

The four annexures in fisheries management are the following: 1) Information 2) Institutions 3) Incentives and 4) Identity. Information or data is important for fisheries management. Often, even fishers are reluctant to provide information. This attitude needs to change. Tropical countries should not imitate fisheries management practices of those employed in regions of temperate waters, like in Europe. The nature of fish resources of both seas were different. While temperate waters have less species and larger quantities, tropical waters have thousands of diverse fish species with low quantity per species.

Noting the importance of local self-government institutions (LSGIs), Ramachandran said that panchayats could do a lot for fisheries management, but there are limitations too. Panchayats could prepare biodiversity register of their sea area with the participation of fishers. But the boundaries may often restrict action-oriented fisheries management. Most of the activities of the panchayats in coastal areas currently revolve around welfare measures.

Ramachandran concluded that people's participation is essential for fisheries management. Following the presentation, Sebastian Mathew of ICSF pointed out that the fisheries management presented by Ramachandran is a classical approach and that there are now changes to this approach, with more importance being given to sustainability. Fisheries management includes economics, environment and administration as well as gender and climate change. It should also have a human rights approach, with the realization of the role of fisheries in food security. The new approach should also consider consequences of non-fisheries development. Ramachandran concluded the session with the remarks that the issues in the fisheries sector are complex. Moreover, fishing communities have been losing their identity and consciousness, and this requires a change.

4.2 Sustainable Fisheries Management and Our Prevailing Circumstances

V. Vivekanandan, Trustee, ICSF Trust

Chair: K. Ajeesh, President, Azhikode Panchayat, Kannur

V. Vivekanandan emphasized that in order to implement sustainable fisheries management, there first needs to be an understanding or analysis of the marine fisheries sector in Kerala as well as in India. From this analysis, solutions should be found, and then the role of LSGIs in implementing these solutions can be examined. He highlighted the now worldwide acknowledgement that fisheries management cannot be implemented without the participation of fishing communities.



V. Vivekanandan, Trustee, ICSF Trust presenting on Sustainable fisheries management and our prevailing circumstances. In his lecture, he spoke on how in the fisheries sector where a natural common resource is being exploited, co-management must be implemented by fishers and the government jointly

The fisheries sector, wherein a natural common resource is exploited, needs to be managed jointly by fishers and the government.

The concept of fisheries management came from the temperate waters in Western countries. There, fleet fishing, which is based on a smaller number of species but available in large quantities, is regulated. In tropical waters like that in Kerala and the rest of India, where there are a diverse range of species, various types of gear and craft are used. It is also important to bear in mind that even with properly managed fisheries in temperate waters, species like cod, herring and anchovies have still collapsed.

Though India can learn from the management concepts of the Western nations, the means and approaches would have to be different. Here, there are varied traditional social structures (many may be based on religion) as well as systems and values, such as *karanila** and fisheries management has to be implemented taking these into account. Given many of the fish species in India's seas have no boundaries—they travel beyond the boundaries of villages, districts and even states—they cannot be

* A system where significant number of persons have a custom-bound claim to income even if they do not perform any productive work activity on that particular fishing trip. *Karanila* literally means 'shore status' - a privilege granted to anyone who expresses a demonstrable interest in associating with a fishing unit by being present on shore when the unit is ready to set out to sea. (Kurien, J., & A. J. Vijayan. (1995). *Income Spreading Mechanisms in Common Property Resource: Karanila System in Kerala's Fishery. Economic and Political Weekly*, 30(28), 1780–1785. <http://www.jstor.org/stable/4402997>)

solely managed at the local level. Sardine, for instance, travels from the Arabian Sea in the west coast to the Bay of Bengal in the east coast. Hence, there needs to be a multiple-level management system.

In India's management principles, who can fish and who cannot be allowed to fish is of great importance. In the 1980s in Kerala, traditional fishing communities raised this question. In response, the trawling ban was adopted as a method of management. Today, fishers with large horsepower catch more fish, so laws are required to regulate this. At the same time, in this management regime, fishers' participation is important, with LSGIs playing an important role to facilitate this, concluded Vivekanandan.

4.3 Alternate Livelihoods Development: Experiences of Theeramythri

*A.K. Mathew, Former Consultant, Theeramythri Project, Department of Fisheries, Government of Kerala
Chair: V.R. Ajith Kumar, Secretary, Chirakkara Panchayat, Kollam, Kerala*

The primary reason for launching the Theeramythri Project, said Mathew, was the aid received by the Kerala government as part of the Tsunami Rehabilitation Project from the Asian Development Bank (ADB). The state government decided to put together this aid with the grant received from the Prime Minister's Relief Fund and implement it as one project. ADB, which not only gives funds but also does supervisory monitoring, had put in place the condition that the fund should be spent with participation of non-governmental voluntary organizations. As the Kerala government was not willing to do that, instead, the project implementing unit of the Fisheries Department coordinated with six agencies to launch Theeramythri. These agencies are Fisheries Resource Management Society (FIRMA), Agency for Development of Aquaculture (ADAK), Matsyafed (The Kerala state co-operative federation for fisheries development), Fish Farmers Development Agency (FFDA), National Institute of Fisheries Administration and Management (NIFAM) and Society for Assistance to Fisherwomen (SAF). They also sought the cooperation of few technical support agencies to implement the project, which include Integrated Rural Technology Centre (IRTC), Centre for Science and Technology Entrepreneurship Development (C-STED), Socio Economic Unit Foundation (SEUF), Quillon Social Service Society (QSSS), Kottayam Social Service Society (KSSS) and Trivandrum Social Service Society (TSSS).



Mathew A.K, Former Consultant, Theeramythri programme, Department of Fisheries, Government of Kerala presenting on alternate livelihoods development. He spoke on his experience with the Theeramythri project right from its inception, its functioning and its scope for development

The first phase of the project was implemented from 2006 to 2010. All over the state, 2,500 micro enterprise units were started, with around 10,000 beneficiaries and the involvement of 120 local self-governments from 9 districts. Each beneficiary received Rs 1 lakh (USD 1,220) as a one-time benefit from the ADB grant. During the project period an amount of Rs 160 crore (USD 19,518,976) was spent.

In 2010, to continue this programme, a new sustainability project named Theeramythri—for gainful alternate self-employment of women in the families of fishing communities—was submitted to ADB. In 2010–11, an extensive survey was conducted, and 1,340 units were selected from 114 panchayats. Out of this, 600 units were under SAF. Theeramythri councils were formed in all the panchayats. A 10-day long training was conducted for 242 Theeramythri council leaders at IRTC. From 2011 onwards, Theeramythri was included in the state budget and plan.

Every year, Rs 7 to 8 crore (USD 853, 955 to 975,949) is allocated for this project. Each year, on an average, about 100 new activity groups are formed. In each group, there are 2 to 5 members. Each member has the eligibility to receive a grant of up to Rs 1 lakh (USD 1220). While this covers 75% of the plan amount, out of the remaining, 20% is bank loan and 5% is beneficiary contribution.

Beneficiary selection is transparent. The plan fund aid is given to business enterprises of women aged between 18 and 55 years. After identifying the women, training and technical help for new initiatives are given. There is a dedicated group involved in this programme. Corruption is less than 1% in this programme. The main businesses funded through this project are tailoring units, provision stores, snacks units, flour mills, beauty parlours and dry fish sale. Out of the 1,400 units now functioning, 450 are tailoring/fabric boutique units, 100–150 are provision stores, 60–70 flour mills and 45 beauty parlours. In the north of Thrissur, there are also supermarkets and seafood stalls.

After starting this new project, 1,400 active groups came into existence. Through this, more than 5,000 fisherwomen have received direct employment and income. Annual business turnover has crossed Rs 80 crore (USD 9,760,440). Monthly income/profit is around Rs 250 lakh (USD 305,014). This is achieved through the daily labour of about 5 to 6 hours per day. About 12-lakh workdays in a year have been created. Bank loan repayments have also been good. All over the state, 114 Theeramythri councils have been formed. LSGIs have taken the role of local guardians of the Theeramythri units. The panchayat president is also the chairperson of the Theeramythri council, while the Matsyafed officer is the treasurer. Representatives of activity groups are also members of the council. Many panchayats have allocated funds for the activities of Theeramythri.

Mathew concluded his presentation with suggestions for improving the programme. In future, he said, formation of category-wise federations will do the scheme good. Actions for the growth of existing units should also take place. Individuals and families should be considered as a unit. There should be more participation of panchayats. SAF in the Fisheries Department needs to be strengthened. Leadership with long-term vision is required. After Mathew concluded his presentation, Seeta Dasan from SEWA pointed out that there have been delays in getting the subsidy for the Theeramythri groups.

5. Presentation of Group Discussion

Chair: Jackson Pollayil, President, KSMTF

The participants were divided into three groups and were asked to discuss the following questions:

- I. Do you agree that local panchayats/municipalities have a role in improving safety at sea related to fishing and climate change impacts? If so, what role? Do you have experiences to share?
- II. How can LSGIs contribute to greater awareness of sea safety?
- III. Do you agree that effective fisheries management can contribute to improved sea safety? How can LSGIs contribute to raising awareness about fisheries management?

IV. How can LSGIs improve sea safety preparedness, strengthen community participation and improve coordination across agencies to reduce accidents and fatalities at sea?

5.1 Group 1

This group agreed that panchayats and municipalities can indeed play a significant role in improving safety at sea by enhancing communication and coordination, promoting safety measures, monitoring fishing activities, encouraging sustainable fishing practices and developing early warning systems. These are briefly explained below:

Enhancing communication, convergence and coordination: Establish a communication network and coordination mechanism between fishermen and relevant authorities, such as the coast guard, the fisheries department and the meteorological department, to ensure timely dissemination of information related to weather conditions, sea hazards and rescue operations.

Promoting safety measures: Create awareness among fishermen about safety measures, such as the use of life jackets, emergency communication devices and safe navigation practices. LSGIs can also facilitate the provision of such safety equipment to fishermen.

Monitoring fishing activities: Monitor fishing activities to ensure compliance with regulations related to fishing gear, fishing zones and prohibited fishing practices. This can help reduce accidents at sea.

Encouraging sustainable fishing practices: Promote sustainable fishing practices that reduce the impact of fishing on marine ecosystems and improve the resilience of fish stocks to climate change. This can include establishment of marine protected areas, promotion of selective fishing methods, and regulation of fishing seasons and quotas.

Developing early warning systems: To alert fishermen about impending weather events or sea hazards. LSGIs can help fishermen avoid risky fishing grounds and return to shore safely.

Developing better region-specific Disaster Management Plans: These plans can be informed by more focused and region-specific scientific researches with the assistance of institutions like KSDMA. Local bodies can also train ERT members according to regional specificities.



Group 1 during the discussion. A critical point that emerged from the discussion is that LSGIs can play a key role in effective fisheries management and sea safety, by providing a platform for community participation, promoting sustainable practices, and enforcing regulations to protect fish stocks and ecosystems

Sustainable and effective fisheries management can be achieved through LSGIs by providing a platform for community participation, promoting sustainable practices, and enforcing regulations to protect fish stocks and ecosystems:

Enforcement of fishing and safety regulations: Through the setting of limits on the size and number of fish that can be caught, enforcing closed seasons, prohibiting destructive fishing practices, restricting fishing during vulnerable climatic conditions, and registering the in and out movement of each and every vessel. Fishermen too can help in effective search and rescue missions.

Community participation: Encourage community participation in fisheries management by involving local fisherfolk in decision-making processes, through effective and democratic forums like matsya sabhas. This can help ensure that local knowledge and perspectives are taken into account in the management of fisheries resources and sea safety.

Management of fish landing centres: This can include ensuring that the landing centres are well-maintained and hygienic and that fish are handled in a sustainable and responsible manner.

Promotion of sustainable aquaculture: This can include promoting the use of low-impact aquaculture systems and adopting environment-friendly feed and farming techniques.

Capacity building: Build the capacity of local fisherfolk and other stakeholders in fisheries management through training programmes and other capacity-building initiatives. This can help ensure local communities are equipped with the knowledge and skills they need to participate in sustainable fisheries management. Although Kerala's LSGIs have the potential to play an important role in improving fisheries management and sea safety, they also pose some limitations.

Limited resources: LSGIs often have limited financial and human resources to effectively manage fisheries and ensure sea safety. This can result in inadequate infrastructure, equipment and personnel to respond to emergencies, enforce regulations and monitor activities. Formulation of projects according to the felt needs may pave way for technical problems like audit objection as per the guidelines and thereby the lapsing of the fund. For instance, as a result of the flood, silt accumulation in the Canoli Canal decreased the depth of the Chetuva River, wreaking havoc on the local ecosystem. However, the panchayat faced obstacles in the formulation of the project, as it may result in audit objection since the project may not fit the framework of the guidelines provided.

Limited technical expertise: LSGIs may not have the technical expertise or knowledge needed to effectively manage fisheries and ensure sea safety. This can result in inadequate planning, implementation and monitoring of activities related to fisheries management and sea safety.

Fragmentation: The responsibilities for fisheries management and sea safety are often spread across multiple LSGIs and different departments, which can result in fragmentation and a lack of coordination. This can make it difficult to ensure consistent enforcement of regulations and effective response to emergencies.

Lack of authority: LSGIs may not have the legal authority or power to enforce regulations related to fisheries management and sea safety. This can result in a lack of compliance with regulations and an inability to effectively manage fisheries and ensure sea safety.

Political interference: This can result in decisions being made for political rather than scientific or practical reasons, in turn compromising the effectiveness of fisheries management and sea safety efforts.

In a nutshell, while LSGIs can play an important role in fisheries management and sea safety, these limitations need to be considered in order to ensure the effective and sustainable management of fisheries and safety at sea in Kerala. It is important to address these limitations through appropriate capacity building and institution strengthening measures.

5.2 Group 2

On the role of LSGIs in improving safety at sea and mitigating climate change impacts: Currently panchayats do not have any active role in ensuring sea safety related to fishing and climate change impacts. Specific projects targeting fishers are implemented through the Fisheries Department officer. Panchayats need to have an active role, but they do not have the capacity to take up more work considering the lack of human resources. There has to be better coordination between LSGIs and the Fisheries Department.

Suggestions: 1) At least the panchayats from the coastal belt and the panchayats bordering the backwaters should be given one Fisheries Department officer each. 2) Matsya sabhas also need to be strengthened by ensuring the participation of fishers by organizing it on days like Sunday, taking into consideration the availability of fishers.

The group had the following suggestions on the administrative role of LSGIs:

- LSGIs should coordinate with the Fisheries Department in managing and developing traditional and notified landing (beach) centres. Infrastructure facilities like storage units and processing centres should not be attached to these. There needs to be an integration to pool resources for the development of these infrastructure.
- LSGIs can distribute timely compensation for the workdays lost owing to the notification of bad weather by the government.
- Matsyafed insurance premium can be paid through LSGIs and the same be incorporated into the guidelines.
- As a better monitoring strategy for ensuring sea safety, vessel movement monitoring facility needs to be installed in the landing sites (for example, QR code-based system, punching facility, etc.), and LSGIs could take up the responsibility of managing the same.



Group 2 during the discussion. It was suggested that panchayats from the coastal belt and the ones bordering backwaters should be assigned one fisheries officer each

The group had the following suggestions regarding the contribution of LSGIs in improving safety at sea:

- Currently, awareness trainings are offered through the Fisheries Department, while LSGIs are not directly involved in this. There should be coordinated action between the department and the local bodies, with active involvement of the latter as local representatives can facilitate wider participation.
- Such awareness drives should also include other stakeholders like craft owners, traders and community leaders. Sometimes, fishermen are forced to go to sea by these stakeholders even in the event of an alert from the government systems.
- Segregated data on weather information for coastal waters and high seas needs to be given. Most of the weather communications relayed now is of no use to small-scale fishers.

On the role of LSGIs in fisheries management, the group shared the following suggestions:

- Use innovative and interactive methods like social media, popular art, etc.
- Instal digital information boards with necessary real-time information.
- LSGIs should be given an enforcement capacity in a designated territory within the territorial waters (say, for example, three nautical miles as in the case of Indonesia). This way, they can ensure sustainable measures like minimum legal size of the catch, use of banned fishing gear, mesh size, etc.

On the role of LSGIs in improving sea safety preparedness, strengthening community participation and improving coordination to reduce accidents, the group suggested the following:

- LSGIs should collaborate with the Fisheries Department in developing an ERT locally, involving the community. This team should be equipped and trained in the use of search and rescue methods like that of drones as well as trained to offer emergency medical services. Provisions and equipment for this team like life jackets, fuel, first aid kit, etc., can be provided through LSGIs.
- Enhance the role and space for LSGIs to coordinate search and rescue communication and operations, thereby ensuring timely response.
- Develop a safety protocol for sea safety at the local level, including suggestions made earlier to strengthen a bottom-up approach. Financial resources can be pooled through government and non-government institutions for setting up the same.

5.3 Group 3

The major points discussed by the group are as follows:

Establishing an unique ERT of fishermen is crucial for disaster management and marine security, enabling the use of the fishing community's local expertise. Each coastal village should have a plan in place for managing marine disasters that anticipates potential calamities, adaptability, rescue measures, and roles and duties for institutions. It is important to recognize the fishing community's right to representation in decisions regarding programmes that affect them. This representation should encompass diverse perspectives from individuals of different genders, occupations and political backgrounds. Ensuring their presence may require careful consideration of timing and location, and a top-level structure should be established to guarantee accountability.

To improve data management, weather and disaster information as well as safety messaging, there should be greater adoption of technology, such as a digital studio, in all LSGIs. Increasing awareness of the fishing industry's rights can be achieved through formal and informal activities involving community members, officials, legislators and the public. To respond effectively during disasters, multiple departments, including fisheries, coastal police and technical specialists, must work together in a coordinated and cooperative manner. Raising awareness on the significance of life-saving equipment, such as life jackets, life buoys, VHF radio sets, flares and fire extinguishers as well as regularly updating technologically advanced tools is important to ensure sea safety.



Group 3 during discussion. It was discussed that each coastal village should have a plan in place for managing marine disasters which anticipates potential calamities, adaptability, rescue measures, and roles and duties for institutions

Establishing the Marine Haritha Karma Sena (A mission where a team collects non-biodegradable waste from the sea and sends it over to shredding units for recycling purpose) with the participation of the fishing community has the potential to effectively address the issue of marine garbage. Plastic recycling units can provide them work fees. Amenities in harbours can be improved to reduce dangers for fishermen. Local authorities can take proactive measures in all the above-mentioned areas to ensure sea safety. However, they face limitations within government institutions and financial constraints which could negatively impact the fishing community's well-being. It is crucial that adequate human and financial resources are available to prevent such limitations.

Conclusion

Recommendations from the workshop were drawn up based on the proceedings of the various sessions and the group discussions. Following this, Nivedita Shridhar, programme officer of ICSF Trust, delivered the vote of thanks.

ANNEXURES

Annexure 1

Workshop on Sea Safety and Fisheries Management:
 Training and Capacity Development of Local Self-Governments
 01–02 March 2023
 Kerala Institute of Local Administration (KILA), Thrissur, Kerala

WORKSHOP RECOMMENDATIONS

- Introduce a sub-plan exclusively for fishing communities of each local self-government institution (LSGI) of Kerala with a minimum population of 50 families. Budget allocation can be made following the number of families and region-specific needs and issues.
- Make Plan Guidelines more flexible and specific, indicating the potential activities that can be undertaken in formulating budget allocations to ensure sea safety, welfare and quality of life of fishing communities along Kerala's coastline
- Follow patterns of Tribal Sub-Plan under the 14th Five Year Plan in administering a sub-plan to benefit fishing communities.
- Make provisions for sea safety, coastal, marine and inland water disaster preparedness and response related to fishing and social development of fishworkers.
- To develop common facilities for fishworkers' livelihoods development programmes as mandatory components within the sub-plans.
- Strengthen local institutional mechanism of fishing communities
 - o Matsya sabha is an institutional mechanism proposed in the Plan Guidelines for LSGIs to discuss the felt needs and issues of the fishing communities. This institution can be made mandatory by incorporating it into the panchayat and municipal acts. This can also be empowered with legal powers to take decisions on common resources attached to the life of fishing communities. The legal provisions of the Panchayat Extension to Scheduled Areas (PESA) Act, 1996, can be considered a model for preparing guidelines in these dimensions.
 - o Inland fishing communities can also be incorporated under the jurisdiction of matsya sabhas.
 - o This representation should encompass diverse perspectives from individuals of different genders, occupations and political backgrounds. Ensuring their presence may require careful consideration of timing and location, and a top-level structure should be established to guarantee accountability.
- Expand the network of fisheries inspectors
 - o One fisheries inspector has to be appointed to all LSGIs with at least 100 fishing families or to one fishing village in their jurisdiction. This will enable the LSGIs to improve their programmes' quality and effective implementation.
- Develop a system for programme integration
 - o An LSGI-level system for integrating different programmes for fishing communities can be built in the jurisdiction of each LSGI.
 - o The current LSGI-level Theeramythri council system can be empowered and legitimized in this context.
 - o This can act as a system for integrating the activities of all departments and agencies working for fishing communities

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- Provide compensation for lost working days due to adverse weather conditions, as notified by the government, and introduce parametric insurance through LSGIs.
 - Introduce and operationalize through LSGIs a vessel monitoring system (for example, QR-code or punching-based) for fishing vessels to improve sea safety.
 - Develop regional disaster management plans with the participation of panchayat/municipality. Train and build capacity of Emergency Response Team (ERT) members through institutions like KSDMA. The ERT should be trained in search and rescue techniques and operations, including the use of drones, and equipped to provide emergency medical assistance. LSGIs can provide the necessary resources for this team, such as life jackets, fuel and first aid kits.
 - Develop a sea safety protocol at the local level, with the participation of local communities. Financial resources can be pooled through government and non-government institutions for developing such protocols.
 - Establish Marine Haritha Karma Sena with the participation of the fishing communities to effectively address the issue of marine litter. The operation of plastic recycling units and generation of user fees can help meet costs associated with the removal of marine litter.
 - Encourage LSGIs to cooperate with the Fisheries Department to enforce fishing regulations to prevent overfishing, protect fish stocks and promote safety of fishing operations. This can include setting limits on the size and number of fish that can be caught, enforcing closed seasons, prohibiting destructive fishing practices, restricting fishing during extreme climate events, monitoring the movement of fishing vessels, and coordinating effective search and rescue missions with the participation of fishers.
 - Assist LSGIs to build the capacity of local fishing communities and other stakeholders in fisheries management through training programmes. This can help ensure that local communities have the knowledge and skills they need to participate in sustainable fisheries management.
 - Equip KILA to set up a centre to promote development planning of fishing communities and to support the LSGIs when they prepare their plans.

Annexure 2

WORKSHOP PROGRAMME

Workshop on Sea Safety and Fisheries Management:
 Training and Capacity Development of Local Self-Governments
 01–02 March 2023
 Kerala Institute of Local Administration (KILA), Thrissur, Kerala

| DAY 1 Wednesday, 01 March 2023 | |
|---|--|
| 08:30 AM- 09:00 AM | Workshop Registration |
| 09:00 AM- 09:15 AM | Opening Session <i>Chair: Dr. Rajesh. K, Senior Urban Fellow, KILA</i> |
| 09:15 AM- 09:45 AM | Welcome and Introductory Remarks Shri Sebastian Mathew, Executive Trustee, ICSF Trust |
| 09:45 AM- 11:00 AM | Keynote Address Dr. Joy Elamon, Director General (DG), Kerala Institute of Local Administration (KILA), Thrissur Drone-assisted Search and Rescue Operations in Small-scale Fisheries:- Thalikulam Experience, Kerala Smt. Geetha Gopi, former MLA, Nattika, Kerala Shri. Dewang Subil, Engineering student, drone pilot and photographer (Video presentation) |
| 11:00 AM- 11:30 AM | Participants' Introduction |
| 11:30 AM- 11:45 AM | <i>Tea/ Coffee break</i> |
| 11:45 AM- 12:15 PM | Session 01 <i>Chair: Shri. V. Vivekanandan, Trustee, ICSF Trust</i> Interventions of Local Self-Government Bodies in Fisheries Development, Management and Livelihoods: A Case Study of Selected Coastal Local Government Bodies Ms. Shibina Elayil, Research Scholar, Central University, Kasaragod, Kerala |
| 12:15 PM- 01:15 PM | Participants Interaction |
| 01:15 PM- 02:30 PM | <i>Lunch</i> |
| 02:30 PM- 03:30 PM | Session 02 <i>Chair: Dr. M V Baiju, Senior Scientist, ICAR- CIFT</i> Role of Panchayats in improving Safety at Sea and Regulating IUU fishing Dr. Sajeevan MK, Associate Professor and Head of Department, Fisheries Resource Management, Kerala University of Fisheries and Ocean Sciences (KUFOS) |

| | |
|---|--|
| 03:30 PM- 04:30 PM | <p>Session 02 (Cont...)</p> <p><i>Chair: Shri. S. Santhosh Kumar, Deputy Director Thriuvananthapuram, Department of Fisheries, Government of Kerala</i></p> <p>Role of Panchayats in Sea Safety, Fisheries Management and Social Development</p> <p>Shri P. Aneesh, Assistant Director, Fisheries Station, Vypin, Government of Kerala</p> |
| 04:30 PM- 04:45 PM | <i>Tea/ Coffee break</i> |
| <p>DAY 2</p> <p>Thursday, 02 March 2023</p> | |
| 09:30 AM- 10:00 AM | <p>Session 02 (Cont...)</p> <p><i>Chair: Shri. V. Vivekanandan, Trustee, ICSF Trust</i></p> <p>Sea safety in small-scale fisheries</p> <p>Shri. John George.T, Former Merchant Navy Navigation Officer</p> |
| 10:00 AM- 10:30 AM | <p>Session 03:</p> <p><i>Chair: Shri. Ajeesh. K, President, Azhikode Panchayat, Kannur</i> What role can panchayats play in sustainable fisheries management?</p> <p>Dr. C. Ramachandran, Principal Scientist, ICAR-CMFRI</p> |
| 10:30 AM- 11:00 AM | <p>Dr. Rajesh. K, Senior Urban Fellow, Centre for Urban Governance, KILA</p> |
| 11:00 AM- 11:30 AM | <p>Sustainable fisheries management and our prevailing circumstances</p> <p>Shri. V. Vivekanandan, Trustee, ICSF Trust</p> |
| 11:30 AM- 11:45 AM | <i>Tea/ Coffee break</i> |
| 11:45 AM- 12:15 PM | <p>Session 03 (Cont...)</p> <p><i>Chair: Shri. Ajith Kumar VR, Secretary, Chirakkara Panchayat, Kollam, Kerala</i></p> <p>Alternate Livelihoods Development: Experiences of Theeramythri</p> <p>Shri. Mathew A.K, Former Consultant, Theeramythri programme, Department of Fisheries, Government of Kerala</p> |
| 12:15 AM- 01:00 PM | Group Discussion |
| 01:00 PM- 02:00 PM | <i>Lunch</i> |
| 02:00 PM- 03:45 PM | <p>Group Discussion (Cont...) Presentation of group reports</p> <p><i>Chair: Shri. Jackson Pollayil, President, Kerala Swathanthra Matsyathozhilali Federation</i></p> |
| 03:45 PM- 04:30 PM | |
| 04:30 PM- 04:40 PM | <p>Vote of thanks</p> <p>Smt Nivedita Shridhar, Programme Officer, ICSF Trust</p> |
| 04:40 PM- 04:50 PM | <i>High tea</i> |

Annexure 3

Workshop on Sea Safety and Fisheries Management:
Training and Capacity Development of Local Self-Governments
01–02 March 2023
Kerala Institute of Local Administration (KILA), Thrissur, Kerala

CONCEPT NOTE

I. Introduction

The negotiated instrument, the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), was endorsed by the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO) at its 31st Session in June 2014. The implementation of the SSF Guidelines is identified as a significant step for enhancing the contribution of small-scale fisheries to nutrition and food security. As part of the implementation process, International Collective in Support of Fishworkers (ICSF) Trust is organizing a sub-national capacity development workshop on fisheries management, social development and safety at sea—supported by the FAO. The workshop will be held at Kerala Institute of Local Administration, Thrissur, Kerala, India, on 1–2 March 2023. Key representatives from panchayats, fishworker organizations, civil society organizations and community-based organizations in Kerala are expected to attend, along with representatives of the Kerala state fisheries and panchayat departments.

II. Background

The SSF Guidelines instrument recognizes the role of decentralized and local government structures in its implementation. The Constitution of India, 73rd and 74th amendments, provide the platform to work in a decentralized manner, and these amendments were aimed at ensuring economic development and social justice also at the local level, similar to the objectives of the SSF Guidelines.

In November 2019, a national workshop of local self-governments institutions (LSGIs) was held in Thrissur, Kerala, to raise awareness about the SSF Guidelines. The workshop focused on how the three-tier system of governance—at the panchayat, state and union level—could aid in operationalizing the SSF Guidelines in India with the LSGs playing a pivotal role at the local level.

The workshop recommendations that were put together based on the various sessions and group discussions pointed towards three main issues that required capacity building of the stakeholders:

- How can LSGs contribute to the social development of fishing communities (coastal and inland) including safety at sea?
- How can LSGs effectively restore, conserve and manage aquatic and coastal ecosystems?
- How can LSGs, union and state governments, and civil society strengthen the participation of fishing communities (coastal and inland) in democratic platforms for local governance?

III. Objectives of the Workshop

Based on: (i) the 2019 workshop recommendations (ii) KILA's methodology for Local Action Plan on Climate Change (LAPCC) and (iii) the need to address sea safety issues, the objectives of the workshop were framed.

The workshop aims to:

- Raise awareness of local self-governments (panchayats) about sea safety issues;
- Promote social development of marine and inland small-scale fishing communities; and
- Equip fishworker organizations and panchayats to engage in sustainable fisheries management.

IV. Expected Outcome

The workshop envisions to sensitize fishworker, civil society and community-based organizations to influence the Gram Panchayat Development Programme (GPDP) in selected panchayats of Kerala state, to include fisheries management, community-based sea-safety preparedness and social development. Local sea safety protocol can improve search and rescue (S&R) of fishers in nearshore/estuarine waters and scale up coordinated and coherent S&R to the national level as necessary.

Annexure 4

Workshop on Sea Safety and Fisheries Management:
Training and Capacity Development of Local Self-Governments
01–02 March 2023
Kerala Institute of Local Administration (KILA), Thrissur, Kerala

LIST OF PARTICIPANTS

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- | | |
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Annexure 5

Workshop on Sea Safety and Fisheries Management:
Training and Capacity Development of Local Self-Governments
01–02 March 2023
Kerala Institute of Local Administration (KILA), Thrissur, Kerala

FEEDBACK

(Based on the feedback received from 28 respondents)

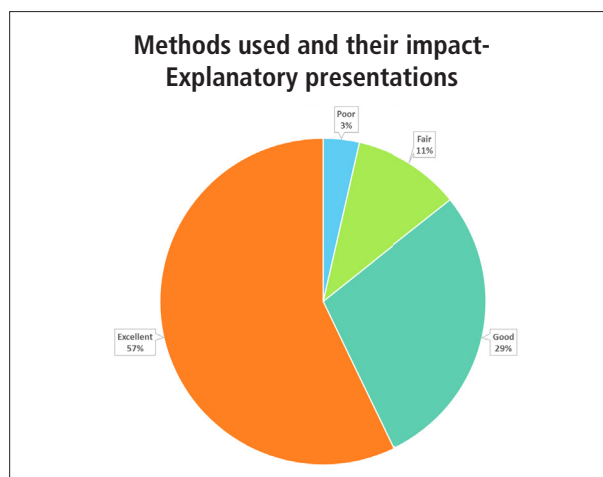
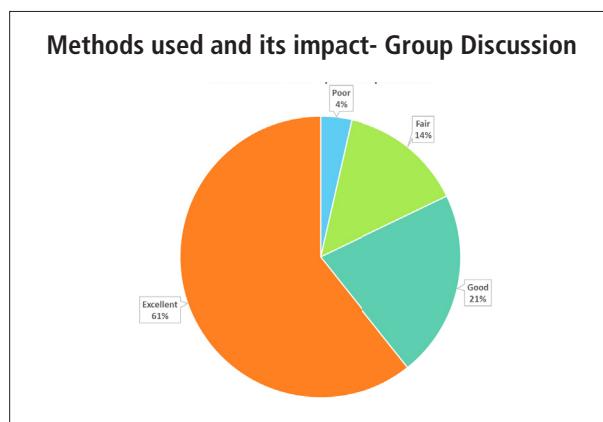
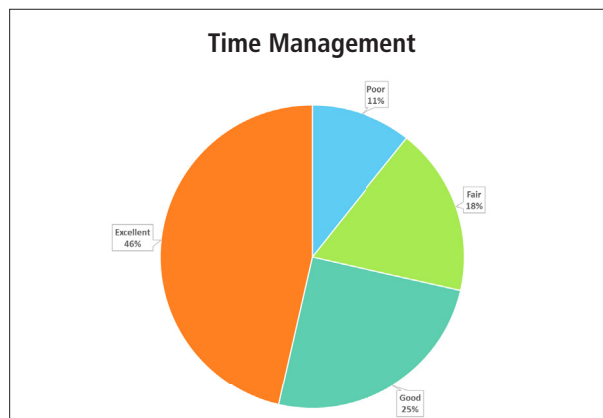
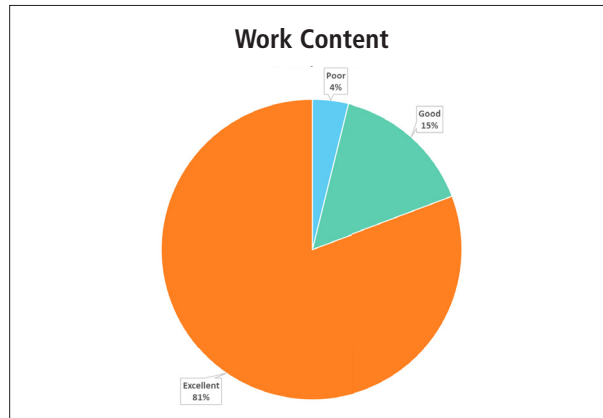
Key learnings

The participants found the sessions on sea safety very relevant. The various sessions provided a critical platform for discussing sustainable and responsible fisheries, which is directly related to their livelihood. The positive response to the panel and group discussions indicate that these are valuable tools for exploring complex issues related to the fisheries sector. Furthermore, participants gained insight into the potential role that local self-governing bodies such as panchayats can play in contributing to the fisheries sector.

Suggestions and comments received

The feedback received from the participants had valuable suggestions to further improve the effectiveness of future workshop. One suggestion was to invite more representatives from fishworkers' organizations to provide a wider range of perspectives on critical issues related to the sector. This would ensure that fishers are better equipped to navigate the effects of climate change. They also expressed the need for fisheries management committees at the panchayat level, with representatives from civil society organizations, non-governmental organizations, fishworkers' organizations and members of the local self-governing body. This could pave the way for sustainable fisheries and co-management practices. Another suggestion was to provide climate advisories in a format that's easily understood by fishers. Participants also suggested the need for workshops on safety at harbours, as well as looking at the basic needs for workers in the fishing sector, such as accommodation in dormitories near the jetty or harbour and other sanitation conditions. Additionally, there is a need to explore modern facilities and technology that can enhance sea safety and better protect fishers.

The workshop was characterized by intense discussions and rich knowledge sharing, with representatives from a range of stakeholders including fishworkers' organizations, local self-governing bodies, civil society organizations, non-governmental organizations, Kerala's Fisheries Department and research institutions. The diversity of participants and their expertise made for a dynamic and productive forum for exploring critical issues facing small-scale fisheries in the realm of sea safety and sustainable fisheries. Based on the answers received for the ranking questions asked, the following charts were drawn:





Workshop on Sea Safety and Fisheries Management: Training and Capacity Development of Local Self-Governments

The International Collective in Support of Fishworkers (ICSF) Trust and the Kerala Institute of Local Administration (KILA) jointly organized a Training and Capacity Development workshop at KILA, Kerala, India on March 01-02, 2023. There were fifty-six participants from the various districts of Kerala. The two-day workshop was organized with an aim to enhance the capacity of representatives of local self-government institutions, officers from the Department of Fisheries, Kerala, fishworkers' organizations, CSOs, and community-based organizations, with focus on sea safety and fisheries management and to engage with the SSF Guidelines to negotiate issues of concern in regard to policy, legislation, lives and livelihoods of the SSF communities. The sessions had presentations by resource persons apart from panel and group discussions to help the participants address their concerns.

ISBN 978-93-80802-95-4



Organized by

International Collective in Support of Fishworkers (ICSF) Trust
and Kerala Institute of Local Administration (KILA)

