The 'Science Technology and Innovation (STI) Hub in Fisheries Sector, Kochi Corporation, Ernakulum district, Kerala state' is an external funded project granted to ICAR-Central Marine Fisheries Research Institute (CMFRI) from Department of Science & Technology (DST), New Delhi during the period 2022-25 with a budget of 3.18 crores. The project focusses on both infrastructure of the institute by establishing the STI Hub and the implementation of the fishery based interventions essentially for the Scheduled Cast beneficiaries for livelihood enhancement.

Objectives:

- To empower the Scheduled Caste fisherfolk through mobilization and strengthening of the Self Help Groups (SHG)/ individual enterprises in marine fisheries sector of Central part of Kerala State.
- To identify the relevant fishery based micro enterprises catering to the location specific needs of SC stakeholders and promote the Entrepreneurial Capacity Building (ECB) of the SHGs/individuals through training and adoption of economically viable and sustainable micro enterprises.
- To elucidate and document the success cases of ECB of SHGs/individual entrepreneurs among SC fisherfolk through ICT interventions to contribute to the Science Technology & Innovation Hub.
- To facilitate the SHGs/entrepreneurs to develop linkages with technical/ institutional/ financial organizations for empowerment.

Methodology

- Empowering SC fisherfolk will be based on the situational analysis through PLA in the selected potential maritime locations in Ernakulum & nearby districts among SC fisherfolk and mobilizing and strengthening as SHGs/ independent entrepreneurs.
- Identifying preferred fishery based micro-enterprises catering to the location specific needs & imparting training on ECB to the mobilised SHGs/individual enterprises through economically viable & sustainable income generating micro enterprises.
- Participatory evaluation & video documentation in each phase & assessing technical feasibility & economic viability of the identified microenterprises & elucidating the success cases of SHG /entrepreneurs as case models for promoting group action on a sustainable basis.
- Assessing the constraints of SC fisherfolk through the data gathered with help of structured interview protocols & ICT based cyber extension packages in the different phases of implementation of micro-enterprises and facilitating the SHGs/entrepreneurs to develop linkages with technical/ institutional/ financial organizations for empowerment.

Working model of STI Hub

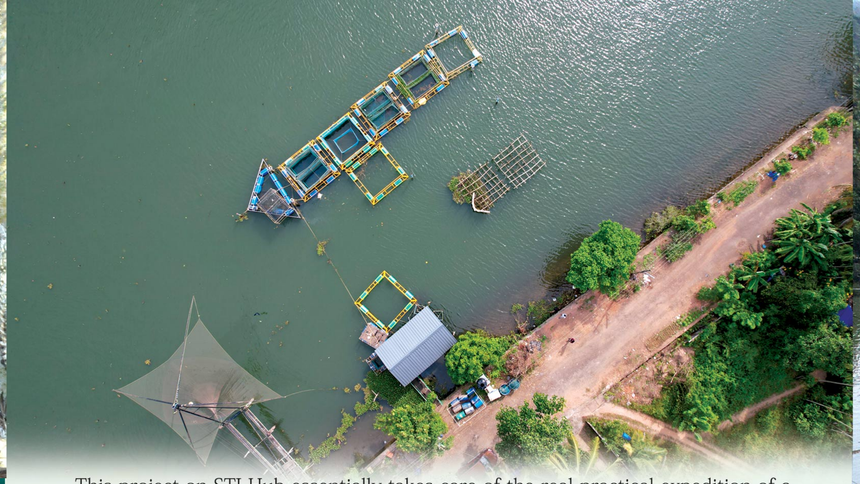
- STI Hub Project envisages on facilitating the SHGs/ individual entrepreneurs in continuing & developing linkages with govt. & financial institutions to access financial credit & livelihood entitlements in resource mobilization by appropriate HRD intervention programmes.
- Self-sustainability will be feasible because, the experience generated by the respective SHG will be used effectively by them to continue an income sustaining enterprise.
- STI Hub of CMFRI is under unified collaboration with Agricultural Technology Information Centre (ATIC), Fishery Resource Assessment, Economics and Extension Division, Programme Monitoring and Evaluation Cell and Krishi Vigyan Kendra (KVK) of CMFRI.
- The practical sales outlet of the products of SHGs can be made available in ATIC sales counter which will serve as the platform for the marketing of the SHGs/entrepreneurs ensuring the sustainability of the interventions.

The target locale of project implementation

The Central zone of Kerala represented by the Ernakulam district essentially will be covered under the project for generating the STI Hub for the fisheries sector. The coastal areas of Vypin, Narakkal, Elamkunnappuzha, Cherai, Vallarpadam, Chellanam and Paravoor locations of Ernakulam district are with maximum SC households which will be selected as the locale of the study in the Central Kerala which can include the border areas of Thrissur, Alappuzha and Kottayam districts. The STI Hub project envisages to cover 500 SC fisherfolk (men, women and transgenders) as direct beneficiaries represented by 500 households which will in turn benefitting 2500 indirect beneficiaries representing their families. The need based expansion of the project locale to other coastal districts also will be envisaged further.

Practical expeditions of STI Hub

ECB of the SHGs of SC beneficiaries and individual entrepreneurs in appropriate technologies such as Cage culture, Pearl spot seed production, Fish vending, Fish Fertilizer production, Integrated fish farming, Fish culture, Mussel culture, Oyster culture, Clam processing, Fish drying, Ornamental fish culture, Fish value addition etc. will be imparted. Training will be undertaken in three stages, such as awareness programme, orientation training and demonstration sessions. The data base and success stories of the interventions along with Science & Technological ventures in fisheries sector will be digitised and documented in the state of the art Data Documentation Centre of STI Hub of CMFRI with Entrepreneur Consultancy Cell, Entrepreneur Technology Park & Digital Training Hall on ECB which in turn can act as the case models and practical manuals for ensuring the sustainability of the fishery based entrepreneurial technological interventions further. The practical expeditions of the Hub in various potential localities will be undertaken with a Mobile Training Unit possessing ICT facilities & essential lab equipment and canoes equipped with safety gadgets and all essential digital devices such as cameras and drone to record the interventions.



This project on STI Hub essentially takes care of the real practical expedition of a variety of fishery based technological interventions focusing on location specific, technically feasible, economically viable, environment friendly technologies for the livelihood enhancement and improvement in the standard of living of SC fisherfolk who encounter a plethora of problems leading to poor livelihood conditions & income level which are the inherent hurdles threatening the marine sector like marginalization due to mechanization, crucial unemployment & drudgery (especially in pandemic), acute indebtedness, motorization that demanded heavy investment, inter-sectoral conflicts, shifting of job opportunities, migration to other states and vanishing traditional skills. The Hub will facilitate SHGs/ individual entrepreneurs in developing linkages with govt. & financial institutions to access credit & livelihood entitlements in resource mobilization by appropriate HRD intervention programmes which will ensure sustainability with the unified collaboration with ATIC of CMFRI and KVK through the practical sales outlet of the products of SHGs in ATIC which will serve as the platform for the marketing of the SHGs/entrepreneurs ensuring the sustainability of the interventions after the DST project support. The fully digitized STI Hub in CMFRI collaborates with KIs, net-work of local NGOs, well-defined partnership with VOs, Last Mile delivery, backward linkage with scientific org/ universities (Agri & Fisheries universities) for harnessing and leveraging technologies, forward linkage with SHGs/FPOs/FPCs for sustainability.

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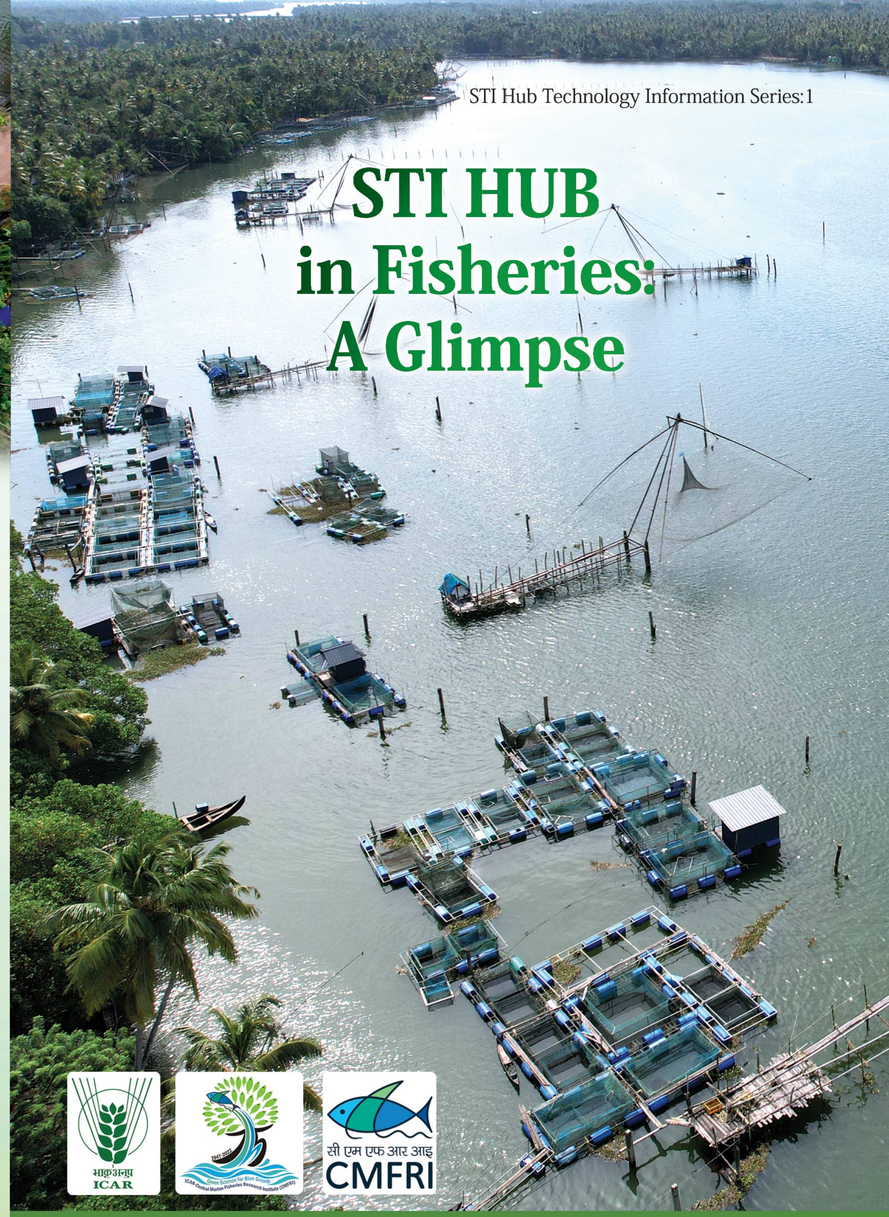
STI HUB in Fisheries: A Glimpse



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