

WORLD FISHERIES DAY - 2020

An award-winning story of "Nambikkai Fish Farmers Group" under category "Best Self-Help Group"

"Swachh Bharat not only changed India, but also changed our lives paving way to sustainable living" says Mr. Kennit Raj recalling his experience

Shri. Kennit Raj is a fisher residing in Nambikkai Nagar, near Marina beach in Chennai. Until 2014, his daily routine was fishing along the coast line and selling in the local market. After fish sales, he used to dump the fish-waste at a common place in the surrounding locality where other fishers also disposed the fish waste. This led to the repugnant smell and unhygienic living conditions making the lives of fishers living around difficult.

In 2014, Swachh Bharat campaign was launched by the Hon'ble Prime Minister Shri. Narendra Modi with a motto of making India clean. This 'call to the nation' by the Prime Minister towards cleanliness, triggered fishers community at Nambikkai Nagar to initiate fish waste management activities. Shri. Kennit Raj volunteered to clean the garbage and approached many people for help, but none came forward. However, his prior experience as Panchayat President came in handy at this dire time



Figure 1: Shri. Kennit Raj and a team member exhibiting their product Plankton $^{\text{Plus}}$

while he was scouting for assistance and he reconnected with authorities in Central Institute of Brackishwater Aquaculture (CIBA) for guidance and support in this front.

In 2016, Shri. Kennit Raj formed Nambikkai Fish farmers Self Help Group (SHG) by gathering a few fish farmers and started recycling waste at his own house. ICAR-CIBA came forth to support this SHG and established a "Fish Waste Processing Unit" on 18th February 2019. This unit is being operated by the Nambikkai SHG producing value added products like Plankton^{plus} and Horti^{plus} under Swachh Bharat Initiative.

Benefits of Plankton & Horti



Figure 2: Product Horti^{Plus}

Plankton^{plus} & Horti^{plus} are prepared out of fishwaste collected from fish markets and fish processing units. Plankton^{plus} is used to boost and maintain the healthy plankton bloom in the aquaculture system. It is primary and essential food

for initial stages of fish and shrimp. Plankton^{plus} usage in aquaculture farms enhances the growth of shrimp, which in turn helps in reducing the consumption of feed by 20% without affecting growth and production. Supplementing Plankton with feed can improve the growth of shrimp.

Horti^{plus} is used as organic manure for agriculture/horticulture. The solid waste is used as manure for raising saplings, vegetables or other trees. It helps in rapid growth of vegetables like Brinjal, Ladies Finger, etc. It increases vegetable yield, improves germination rate and in turn increases the number of branches in the plant.

Operational Strategy:

Collection of raw material is critical for production of Plankton^{plus} and Horti^{plus}. For procuring raw material (organic acid & enzyme), linkages have been established with Chennai based vendors through ICAR-CIBA.

Nambikkai group approaches large and medium fish markets and processing centres for procuring fish waste as raw material. After garnering the fish waste, it is treated and processed. Group members were trained on safe fish waste handling practices. It is mandatory for the group members to use face mask and hand gloves while processing to evade any mishap/injuries.

Fish waste processing unit has a production capacity of 2000 litres Plankton/month. The annual turnover of one unit is Rs.16.80 lakhs with a net profit of Rs.4.56 lakhs. After the agreement with a private company, the group has produced 4500 liters of Plankton^{plus} and 550 KgHorti^{plus} and received Rs.2.78 lakhs. Recently, a semi-automatic fish waste processing technology has been designed with CIBA's intervention to minimize the human contact and increase the productivity.

Highlights:

Processing Capacity 166 kg/day

Recycling fish waste and creating a sustainable living

Total Profit of Rs 8.5 Lakhs in the year 2019-20

Trained 110 fishermen and women on recycling fish waste

A member of Nambikkai group registered a micro level enterprise for creating "wealth from waste"



Fig.3 Shri. Kennit Rai with Nambikkai SHG members and staff



Fig. 4 Felicitaton of Nambikkai SHG with "Best SHG in Fisheries" award World Fisheries Day – 2020 by Hon'ble Minister of State for Fisheries Shri Pratap Chandra Sarangi and Secretary, Dept. of Fisheries, Dr. Rajeev Ranjan, IAS

Way Forward

The two value-added products offered by the Nambikkai Fish Farmers SHG are cost-effective and one of the best quality products. From this intervention, Nambikkai group members benefitted largely with enhanced profits and their standard of living improved significantly. The long-term objective of the SHG is to establish a plant in 2 Ha of land and expand product sales to cater to the

demand across country. The vision and perseverance of the Nambikkai SHG members in their words is to offer a clean society deserves applause. Their dedicated efforts resulted in the inclusive growth and sustainable living by creating an alternate livelihood from the concept of "Wealth out of waste".