
Converting fish market waste into feed: an initiative of ICAR-CIFT

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Fishery waste which forms nearly 50% of the total weight of fish landed is an environmental issue in the present scenario. Huge quantity of fish cutting waste is generated in urban markets throughout the country. In this context, ICAR-CIFT has developed a simplified method for the production of feed by directly using the mixed wet waste from markets. Under the Swatchtha Abhiyan initiative of Central Government, a series of demonstration programmes were conducted on fish waste utilisation in urban fish markets and fishing harbours for the benefit of fishermen, fish vendors, Government officials, fish farmers, poultry farmers etc. Since fish market waste is of mixed nature with different parts of fish, emphasis was given to convert the wet waste into fish and poultry feed.

Currently, aquaculture accounts for 40.33% of the world's fish production and feed is the main input in fish culture which accounts about 50-60% of the variable costs of production. Fish frames and other discards contain significant amounts of muscle proteins and have a better balance of the dietary essential amino acids compared to all other animal protein sources. Converting fish discards into feed for aquaculture and poultry is an important option for utilization of unsorted waste from industry as well as fish markets. There is a growing demand for pelleted feeds, due to the intensification of aquaculture activities. Choosing the right feed, using a correct feeding method, calculating the feed cost for ensuring the cost effectiveness are important in scientific and successful management of fish farms.

A total of 26 demonstration programmes were conducted for over 950 people in various fish markets and landing centres of Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra, Gujarat, Lakshdweep etc. and on many occasions elected representatives of Block Panchayat and Grama Panchayat presidents were the chief guests for the training programme. Smt. J. Mercykutty Amma Hon. Minister for Fisheries, Kerala was the chief guest for the programme conducted at Kollam fish market.

Field studies conducted by ICAR-CIFT have demonstrated the high nutritional value and good acceptance among test animals when compared to other commercial feeds. The protein content of the feed developed from fish waste ranged from 32.5 to 45%.

This technology is simple and cost effective which can be practiced by small scale vendors and self-help groups with a machinery cost of nearly Rs. 1.5 lakhs, whereas for handling large quantity of waste bigger capacity machines are required. In effect the programme has evoked huge response from various sectors, including farmers, fishermen, traders and entrepreneurs for converting fish waste into useful products.

The training programmes were well perceived by the stakeholders and many new entrepreneurs have started manufacturing fish feed following CIFT technology. They opined CIFT technology as a simplified process which can be easily adapted at farm level and found to be economical as well.



To support the industry, ICAR-CIFT is entertaining visit to production facilities, training, pilot level production, machine line details

and DPR for the interested entrepreneurs and farmers on converting fish waste into feed and other agricultural inputs



Fishing with modified rescue boats: Report from Jamnagar, Gujarat

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The State of Gujarat is located on the western coast of India. Geographically the state is categorized in to Kutch, Saurashtra, North Gujarat, Central Gujarat and South Gujarat. The state occupies about 33% (1,64,000 Km²) of the total continental shelf area and 10% the total Exclusive Economic Zone of the country. Peculiar geographical landscape of the state offers scope for exploitation of several types of finfish and shellfish resources by both traditional and mechanized fishing. The fishing activities of the state are mainly confined to the Kathiawar Peninsula (Saurashtra) region. Trawl is the

major fishing gear in this region which mainly target ribbon fish, perches, croakers, cuttle fishes etc. whereas in the Kutch and upper part of the Saurashtra, gillnets and bag nets, are the predominantly operated gears.

Jamnagar district is located on the northern part of the Saurashtra and is one of the important fishing areas of the state. A recent survey conducted at Jamnagar, revealed that fishing units and type of fishing in this region is totally different from that of other part of the state.

Fishing boat building in Gujarat state is