## Krishi Vigyan Kendra (Ernakulam) of ICAR-CMFRI

As a part of the Swachh Bharath Abhiyan activities, KVK (Ernakulam) of ICAR-Central Marine Fisheries Research Institute, Kochi initiated the following:

## Wealth from Waste-Organic manure from marine fish waste

*Genesis:* Swachh bharath abhiyan envisages disposal of wastes to clean our premises. One of the programmes defined is to convert waste into organic manures and promoting organic farming. During the foundation day celebrations of ICAR held at Patna, 24-27 July 2015 the Hon'ble Prime Minister of India urged Agri scientists to participate in Swachh bharath abhiyan by doing such activities. Based on this, KVK Ernakulam of CMFRI has initiated composting of marine fish waste into organic manure in a commercial scale and branded it as Fishlizer. These wastes are otherwise dumped into public water bodies, road sides etc. creating hazards to public.

<u>Product details:</u> Fishlizer is produced through aerobic microbial degradation of marine fish waste mixed with coirpith medium. Coir pith is also a waste product of Coil Industry. Fishlizer contain Nitrogen (1.44%), Phospherous (0.45%), Potassium (0.46%), Calsium (1.28%), Magnesium (0.5%), Sulphur (0.15%), Boron (11.3 mg/kg). In addition, the amino acids present in the marine fish would enhance flowering and fruit setting in plants, favouring enhanced production. The standard recommendation is 200gm Fishlizer per grow bag as dasal dose and subsequent 50gms every 15 days interval. It would be interesting to note that ancient *Vrikshayurveda* identified fish manure as the best food for plants!

<u>Product launching and popularization:</u> The product was launched by Dr. AK Singh, Deputy Director General (Agricultural Extension) of ICAR on 14<sup>th</sup> August 2015 at ICAR-CMFRI. The media reports on the product are attached please.

<u>Production and sales:</u> The marine fish waste from Ernakulam market is collected and composted on a regular basis. So far 1.5MT fish waste processed and 1 MT Fishlizer sold in 500 gm packets through CMFRI sales counter with the Swach Bharath Symbol in each packet.

<u>Scaling up:</u> In order to cater to the increasing demand from organic farmers of the district and other KVKs in Kerala, a Satellite Production Centre (SPC)-Fishlizer was commenced in the farm of Mr. Saiju T.P, Puthanthara, at Mulavukadu island near Ernakulam during January 2016. The KVK has designed an equipment for fishlizer sieving and is in the process of fabrication. It is envisaged to mechanize the production process and lower the price. Currently Fishlizer is sold @ INR80/- per kilogram.









CMFRI - KVK Ernakulam Campus cleaning on 24.10.2016





