RECYCLING PLASTIC WASTE COLLECTED BY FISHERMEN FROM THE SEA IN THE KERALA STATE OF INDIA

In June 2017 the Government of the Kerala State and the Kollam District Fishing Boat Operators Association in India launched the Suchitwa Sagaram project involving fishermen to collect the plastic and bringing it back to shore. In particular, the mechanised fishing sector based in the District would not only stop dumping plastic waste into the sea but also collect and bring back to the shore all plastic materials that got entangled in the nets while fishing.

Another relevant aspect of this extraordinary project is the direct

recycling in the port of the plastic waste collected by fishermen to produce a new material used for road surfacing.

On May 2018 the <u>UN Environment website reported</u> that during the first 10 months, fisherman involved in the project have removed 25 tonnes of plastic from the sea, including 10 tonnes of plastic bags and bottles.

The Kerala's fisheries Minister announced that the goal of this project is to be extended to all the 24 fishing harbours of the Kerala State and also become a model for the country and the impacting results achieved in the Kollam district are certainly encouraging.

On June 2018, India was the global host of the <u>2018 World Environment Day under the theme Beat Plastic Pollution</u>. Coordinated by UN Environment and celebrated by thousands of communities worldwide. This initiative has drawn global attention to the urgency of protecting marine resources from the large amount of plastic waste that is killing fish, birds and other marine wildlife.

The campaign launched to the world by UN Environment has drawn attention to this ongoing project in the State of Kerala. Not only the <u>World Economic Forum</u> but also the main media in the region have amply enhanced the results achieved.

From the point of view of the territorial development approach, this project promoted in the Kollam District presents characteristics of great interest, reproducible in other contexts:

• It builds a sustainable solution for a global and territorial problem involving all the interested local actors. The Kerala State is one of India's top producers of fish and is home to more than a million people who depend on fisheries for their livelihoods. With the rising tide of marine plastic pollution, fish output has recently been declining, pushing up prices for consumers and shrinking incomes for the











fishermen. When the trawlers drag their nets through the water, they end up scooping out huge amounts of plastic that get entangled in the nets along with the fish. The project was founded by the initiative of the Fishing Boat Operators Association to stop the destruction of the marine habitat; today 40 boats head back to the Neendakara and Shakthikulangara ports on a daily basis carrying whatever waste plastic they net alongside the fish instead of throwing it back into the water. The fishermen already record a decrease in the amount of plastic in their networks.

- It directly associates the waste collection with the recycling activity. The material brought from the sea by the fishermen is managed by some waste collection centres created close to the fish landing points in Neendakara. 30 women select the retrieved plastic, which is then processed and converted in a plant installed at the fishing port. After being selected, the plastic waste is fed into a shredding machine, which turns it into material that is sold to road crews to strengthen their asphalt.
- The byproduct of the recycling is used to improve the road infrastructure of the territory, generating benefits to all inhabitants. The new material produced shattering plastic debris is oriented to local enterprises charged to build new roads, following an innovative process that has been adopted at national level in India for several years. There are more than 34,000km of plastic roads in India, created converting shredded plastic into material that is used for road surfacing. The innovative process to build plastic roads brings innumerable advantages: it makes the roads more resilient and each kilometer costs roughly 8% less than a conventional road; every kilometer of plastic road uses the equivalent of a million plastic bags, saving around one ton of asphalt; using recycled plastics is a mean to clean the environment and reduce the high costs of their correct disposal. This solution helps to create work, generating small centers and teams collecting plastic waste and many small plastic shredding businesses. The system create in Neendakara by the project is inspired by these experiences ongoing across the country.

The project is led by the Minister of fisheries involving five more Departments of the Kerala State, as the Department of Women building the collecting centers and the Department of Civil Engineering managing the recycling activities. The <u>Sushitowa Sagaram Mission</u> has been charged of the operational and training aspects. Thanks to the results achieved, the approach adopted is spreading throughout the region and the organizers help other fishing communities raising funds to build their own recycling plants. The leader of the Fishing Boat Operators Association declared to the <u>National Geographic</u> the hope that all the fishermen of Kerala, India, and all over the world will join them in this extraordinary and concrete work to save the resources of the sea

To know more

Article in thehindu.com website

UN Environment website













Sanitation.kerala.gov.in website

Article in World Economic Forum website

World Economic Forum Video in Facebook

Article in National Geographic website

Article in ecowatch.com

Article in thebetterindia.com

Article in indiatoday.in

Article in thelogicalindian.com

Article in tmf-dialogue.net

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Plastic Roads in mbapolymers.com

Plastic pollution in World Economic Forum website

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Clean seas campaign in India in cleanseas.org







