

Reviving the Blues- A Venturesome approach towards sustenance

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Nature's call for sustainability can never be put off the head. It being one of the most crucial environmental issue presently, there have been many interventions by those organizations Concerned for human and environmental protection. But however, may be due to lack of money or due to lack of awareness and public participation, a major breakthrough have not been achieved yet.

Fish since 2 million years ago, have been one of the most relished nutritious food item and even we do see our future food security tightly bound within the industry. But however, that typical human nature of greediness have placed a threat of overexploitation upon the resource and thence getting the stock plummeting. Scientists have even pointed out that, many of our valued fisheries is getting exhausted and even more getting extinct. This alarming situation is thus putting up the need for an innovative counteract. Apart from over exploitation, destructive fishing esp. using trawls, is yet another environmental hazard causative. It via its operation destroys ferociously the habitat and thereby affecting survival, food chain, breeding and many more such, finally culminating in stress. The stressed fish behaves beyond normal and dies after sometime or even as a part of over.

Control Measures

According to the recently published database (SOFIA-2020), the proportion of fish stock within biologically sustainable levels decreased from 90% in 1974 to 65.8% in 2017. Its even more startling to hear about the increasing carbon dioxide emissions associated with the unsustainable frequent fishing practices which contributed to a release of about 207 mt of carbon dioxide in 2016, that too alone by the marine fishing vessels.

Overfishing apart from affecting biodiversity and ecosystem processes, also causes social and economic consequences too. Regarding achieving Sustainable Development, FAO puts forward the following measures –

- Stronger political will, better technology and its transfer, enhanced governance, proper control over fishing, strengthening of global monitoring system for transparent and timely information to public and most importantly transforming consumer perception through market mechanism and education.
- Public participation with properly bound rules and regulations.

They have even pointed out that, it is the developing countries with least management, whose fishery resources is most affected. Hence there is need for re-adoption of policies in such areas to fulfill sustainability dreams.

Yet another major concern is regarding the fish “wasted”. One is the fish lost in quality and quantity driven by inefficiencies in the value chain esp. with regard to developing countries without proper facilities for post harvest handling and preservation. Another is regarding the fish by catch and discard, which became a serious wastage and an international issue in fisheries management since 1970’s .The survival possibility of discarded by catch and their disposal after harvest and its ultimate loss to the biodiversity, is a major subject matter. Hence solving these challenging factors to sustainability is the new major concern for the world and hereby I wish to provide through this article, an impetus towards this common goal.

An Impetus

An UK based innovative tech company named Safety Net Technologies, owned by Mr. Dan Watson, has introduced a valuable solution to counter the over exploitation of fish stock. Currently, it is accounted that about 1 in every 5 fish is discarded, thus causing 16 mt of fish getting wasted every year globally and about 20% of the vessel space too getting wasted. Hence, we have SN Technologies, who have come up with the solution –PISCES, which can reduce the by catch by 90%, improve revenue by 25%, decrease fuel cost by 20%, reduce sorting time, avoiding fines for unregulated fishing practices, help save labour cost and also to comply with the regulations.

They basically work in collaboration with the fisherman, thus initiating an interest in them to try the new technique’s application.

Pisces

It is basically a light emitting device, whose coloured light could attract some fishes

whereas repel some others, which can retrofit onto many of the used gears, which uses the principle of fish's different behavioural responses to different wavelengths of light. The device is easy to fit, recharge and contain 6 different colours, from which one's choice can be selected according to the species and by catch concerned. It offers minimal interference to fishing operation and automatically turns on underwater, that too only when needed. It uses wireless chargers and requires no additional tools or fittings for set up. The major advantage regarding PISCES is that, it doesn't weaken or weigh down the net.

Its features include –

- One kit with 10 lights
- Naturally buoyant and made out of impact resistant and UV stable plastic
- Robustly housed for deep sea fishing
- Extremely bright 80 lumen light source and has remote control select between 6 colours- deep blue, cyan ,blue, green, red and white
- Fully charged within 8 hours and one full charge gives 60 hours of underwater illumination.

Currently they have been successful with species including- Haddock, Eulachon, Turtle, Nephrops, Crab, Whiting , Plaice , Dab and still struggling on to building up success stories with other species too.

Conclusion

Sustainability –the concept of Live and Let Live, thus directs human power and intellect towards the goodness and well being of all mighty creatures on Earth, thence to cap off into coexistent harmony.