



Non- conventional fishing methods

Light fishing

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<https://www.youtube.com/watch?v=DA588OuGEPE>

Light Fishing

- The use of artificial light in fishing operations is a technique to attract and aggregate fish and eventually capture them using various fishing gears such as hooks, gill net, purse seine, beach seine, cast net or other means.



Light Fishing

- Fishing with an artificial light stimulus has existed for thousands of years.
- It started with simple techniques such as burning a large fire on the beach to attract fish, but over the centuries it has become increasingly technologically advanced.
- Today, the use of artificial light in commercial fishing plays a very important role in contributing to the total catch yield and economy of many industrialized fisheries.



Light Fishing

- Light fishing involves the use of lights attached to structures above water or suspended underwater to attract fish to specific areas and facilitate harvesting.
- This type of fishing aid, where fishermen used lights in their fishing gear to attract the target species.
- It has been known for a long time that a light attracts fish, shrimp and insects at night.
- The smaller size group congregate under the lighted area then followed by the larger, bigger size group.
- This behavior of fishes has guided the fishermen to use light in the operation of their gears to increase their catch.



Light Fishing

- This method has been one of the most advanced and successful means employed in some types of fisheries in the world today.
- It is a form of optical bait used to attract and concentrate fish to a spot.
- Many commercial, traditional and recreational fishermen are seen putting on the light on board in the night to attract the fish around their boats.



Light Fishing

- Historically, the source of light has changed with the centuries. It began with artificial light in form of fire lit at the beach which has been used for thousands of years when men discovered that some fish were attracted to light at the beach and they would silently enter the water with their family members, encircled the illuminated zone and dragged the fish to the shore with their legs and noise and killed them with stones, spears or clubs.



Light Fishing

- The next development was the use of torches, being movable and made from coconut husk, split bamboo, carried by fishermen wading in water in the dark night to get the fish attracted, stunned and then captured with basket.
- As time went on, the use of fuel oil; kerosene, gas and electricity, was introduced.



Light Fishing

- Nowadays, the use of powerful luminescent, fluorescent, led lamps are common as the sources of light in commercial fisheries.
- They are more convenient, safer, moved around, last longer but tend to be expensive.



Light Fishing

- It has been scientifically proven that fish and some of their food animals i.e prey have eyes sensitive to blue and green colour because the water where these aquatic animals live in is bluish or greenish in colour and their long wavelengths make them to penetrate deeper in water column.
- This tends to attract and concentrate the fish on the water surface.



Light Fishing

- **Positive benefits can include increases in catch rate, reductions in bycatch, and savings in energy, while negative effects can include ecological costs, overfishing, increased bycatch, production of plastic and marine litter, and greenhouse gas emission.**

Thank
You

