

FISHING



- **'FISHING' is the art of catching fish & other aquatic animals.**
- **The implements used for catching fish are called 'Fishing gear'.**
- **Working platform used to reach the fishing ground & to conduct fishing operation is called 'Fishing craft'.**
- **Fishing method - manner or method in which fish may be captured.**
- **Fishing technique - fishing gears as well as fishing methods.**

- **Fishing technology – a discipline which deals with the techniques of fish capture.**
- **It involves direct means of capture eg. Fishing gear, vessel and indirect means such as fish locating technology & technique involved in the application fisheries oceanography & limnology.**
- **The art of fishing is divided into three fields :**
- **i) Subsistence fishing : fishing practiced by fishermen to earn livelihood.**
- **ii) Sports fishing : fishing for sports or recreation.**

- **Iii) Commercial fishing : Fishing for profit or business.**
- **Evolution of Fishing Gear :**
- **In the past very simple fishing gears were used for catching fish.**
- **Over the years these are replaced by more efficient ones catching fish in bulk.**
- **Several factors contributed to development of sophisticated fishing gears.**
- **Earlier times fishes were caught singly.**
- **Later bulk fish catching method developed**

due to demand.

- Need to venture into deeper water for bulk catch led to the development of efficient fishing craft & gears.
- Initially, **hand picking** practiced along shores of lake, river & sea to catch sedentary, stranded or slow moving orgs.
- To prevent escape of fish they were **stunned & stupefied**.
- Stupefied either mechanically or electrically.
- A kind of **spear** was developed to extend fishing.
- Spears pushed by hand was extended by using

- them as casting gear.
- Development of methods like **harpooning** has the ease of retrieving the catch.
- Use of spears cause injury to fish.
- Hence, **grasping instruments** like clamps, tongs & rakes etc. developed.
- In **line fishing**, fishes are lured to a bait. Bait is presented in such way that fish is neither able to take it away nor can escape once taken.
- No. of lines were limited.
- From simple line fishing, long line with several hooks has emerged which can extend upto a considerable length.

- The need to operate over a larger area using a movable fishing line led to development of **trolling lines**.
- **Both permanent & semi-permanent** barriers were erected in areas with changing water level
- To prevent fish from escaping when water flow back, marked the devpmt of **filtering fishing gears**.
- Initially gear material used were wood, stick & flexible branches.
- With discovery of netting, netting fibres were used for gear fabrication.

- From primitive rake, the development of **dredge** & from that to dragged stow net and later trawl.
- **Trawling** is a further development of dredge.
- Introduction of fish detection devices & other electronic equipments led to operation of mid-water trawl to catch pelagics.
- Seine net without bag have evolved from a net wall.
- Seine nets with bag from bag net like stow net.
- The desire to catch shoaling fishes & preventing their escape led to evolution of surrounding nets.

- In case of Purse seine, fish shoals are surrounded by sides & also from below.
- Gears like scoop nets developed to catch fish by dipping in water & then lifting when fish are gathered over them are lift nets.
- Unlike lift nets, falling gears secure their catch from above.
- Gears developed to catch high value fish without causing damage to them using the principle of gilling is gill nets.
- Fishing by entangling them in water plants led to dvpmt of modern entangling gear trammel net.