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Session 30

FISHING CRAFTS OF INLAND WATER BODIES IN INDIA

INTRODUCTION

- Fishing crafts are most essential for catching the fish in large scale in water bodies. A large variety of crafts (boats) have been designed for marine and inland fishing in India.
- The types of fishing crafts of India falls under two general categories. These are non-mechanized and mechanized fishing crafts.
- Based on the topographical variations and difference in habits and habitats of fishes, different types of crafts and gears are used in various inland water systems of India.

- The simplest and most primitive types of craft used for fishing in inland waters are the rafts and songas, operated in calm waters.
- In the larger rivers and estuaries subject to strong current and tidal movements, sturdier plank built boats are used.



Rafts





Plank built boats

MAJOR FISHING CRAFTS

Rafts: The rafts are made of various materials as:

- i. Inflated buffalo skin and bamboo sticks are used as platform in lower reaches of Ganges.
- ii. Banana stems or shoal bundles tied to form a floating platform as in ponds, and calm waters of West Bengal, South Bihar and Thanjavur district in Tamil Nadu. They are also used in low and marshy land.
- iii. Earthen pots tied together to support a light platform of bamboo as in the river Ganges near Patna, Gaya and in the river Cauvery.

iv. Coracle - A shallow circular framework of wicker covered with a well-stretched cowhide as outer layer with a thin layer of tar to make it fully water proof – today replaced by tarred calico or canvas, or simply fiberglass.

The structure has a keel-less, flat bottom to evenly spread the weight of the boat and its load across the structure and to reduce the required depth of water often to only a few inches, making it ideal for use on rivers. They are commonly used in rivers Cauvery, Tungabhadra, Mettur Dam and Nagarjunasagar.



Coracle

2. Catamaran: The simplest type of fishing craft may be taken as the one formed by a few curved logs of wood joined together forming a kind of floating raft, such as the ones used along the east coast of India. Four types of catamarans are prevalent in Indian waters, namely the Orissa type, Andhra type, Coromandal type and Kanyakumari type.



Catamaran Coromandal type

3. Dug-out canoes: A simple type of fishing craft for fishing within short distances from the coast is a small-sized canoe, made by scooping logs of wood in the form of boat. The “Odams”, “Thonies”, “Vanchies” etc. of the southeast and south-west coasts of India come under this category. In calm weather, oars may be enough for propulsion; but if winds and currents prevail, sails may be used. A simple form of dug-out, made by hollowing out the butt and stem of the Palmyra palm is commonly used in West Bengal for angling and cast net fishing in inundated calm waters. Similar but sturdier dugouts known as Vallam are used in fishing in the backwaters and estuaries of Kerala.



Dug-out canoes

Dug-out canoes

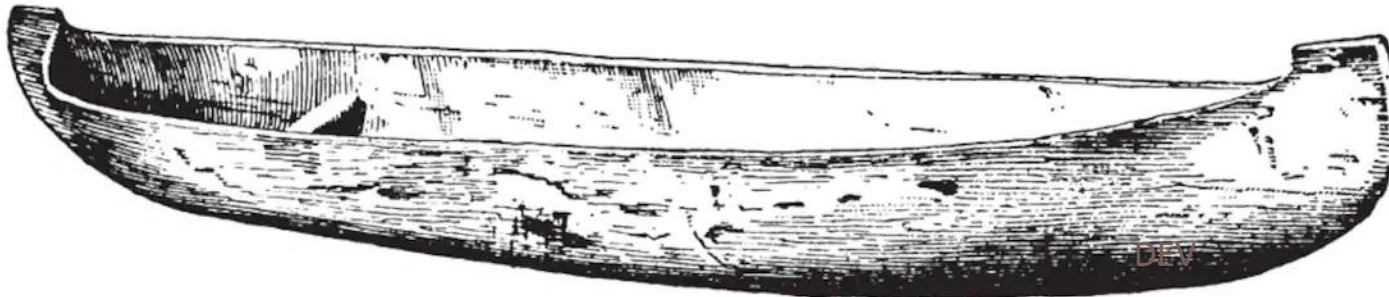




Fig. 4.3 FRP sheathed canoe

4. Plank built boat: This is an enlarged variety of dug-out canoe made of planks on the sides, largely used in Kerala. The plank built boats are of various types and are used for fishing in rivers with strong currents and tides, and in the larger backwaters and lakes for operation of large nets. The boat, (Chhandi nauka) used for operating drift nets, may be as large as 18 m. long and 3 m. wide. In the Chilika Lake and the river Mahanadi, flat bottom plank built boats, known as Nava are in use.

Machua type boats are used for the operation of large nets in the estuaries of Gujarat. Small riverine and estuarine crafts, known as 'dinghis' are employed extensively in West Bengal for operation of purse nets and dip nets. These dinghis have narrow tapering bows and sterns and have no keels, larger boats of this type are used for operating larger nets.



Dinghi




Dinghi in West Bengal



Plank Built (Tona Vallam)

- 5. Large fishing boats:** Large fishing boats are used for carrying fishing operation with the dragnet. It is generally 35ft. long, 5 ft. broad and 1 foot deep. It is partially decked with splitted bamboo.

- 6. Bachhary boat:** It is a long boat but narrower than chhandi boat. It is specially used for fishing with the bachhary jal. The boat has valley like projections with shallow spaces or ponds in which live fishes like *Channa spp.*, *Clarias batrachus*, *H. fossilis*, *Anabas testudineus* that are placed and transported through boat from the catching area to the consuming centre, i.e., to any of desired places in the living condition.

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- a) BATCHARI- operated in rivers of W.B. Used for operation of drift nets, bag nets n dip nets in sea, rivers & estuaries. Found suitable for mechanization
 - b) CHOT- used for shore seine operation in Hooghly river, small lateen sail. Used for operating heavier gear like seine net & bag net
 - c) SALTI- hull oval in shape, operates set nets in creeks (Odisha-Balasore)
 - d) CHANDI- N. Orissa, W. B., to operate bag nets, seines & drift nets, seldom carries sail
 - e) MACHWA- for operating large nets in estuarine waters of Gujarat

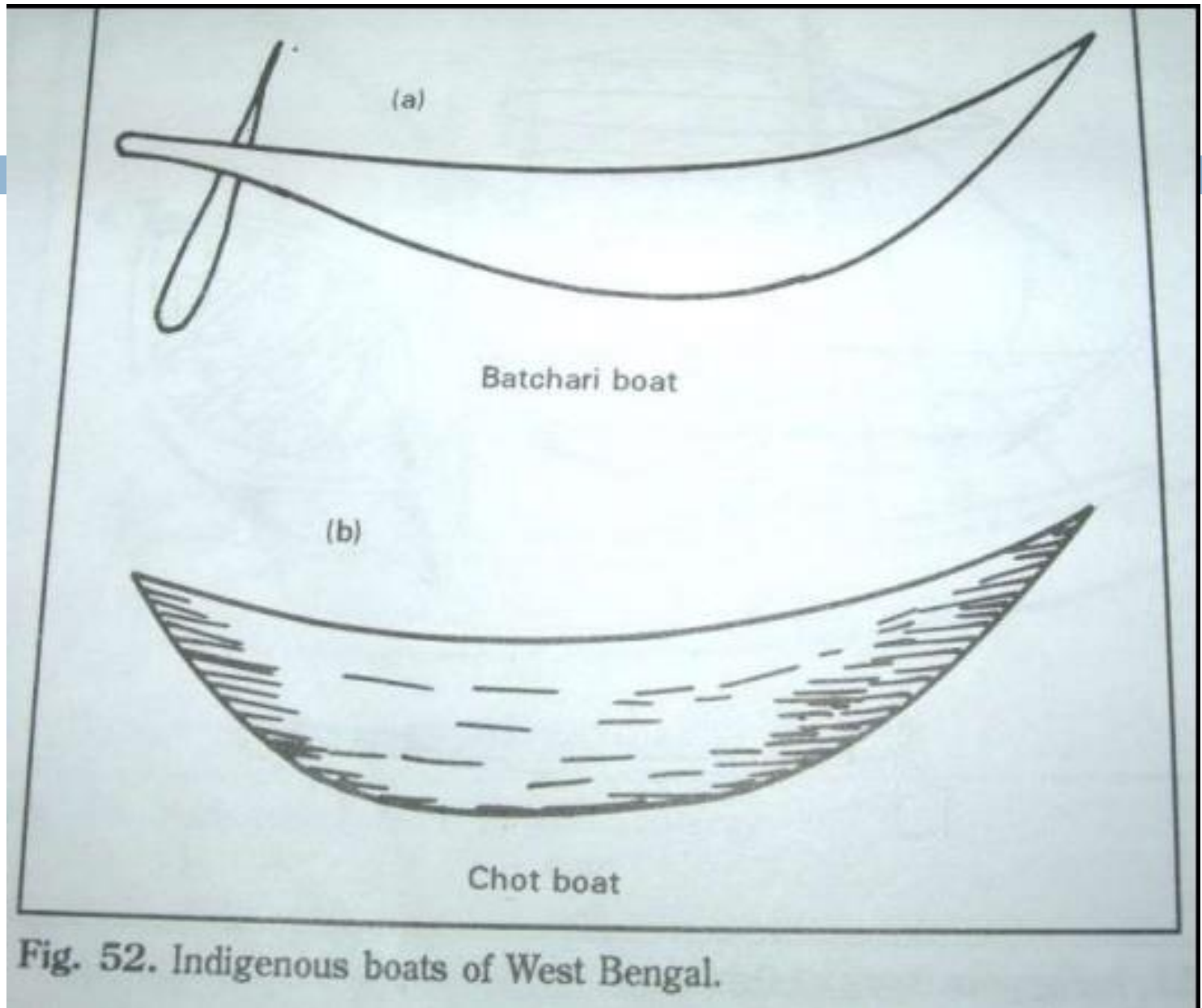
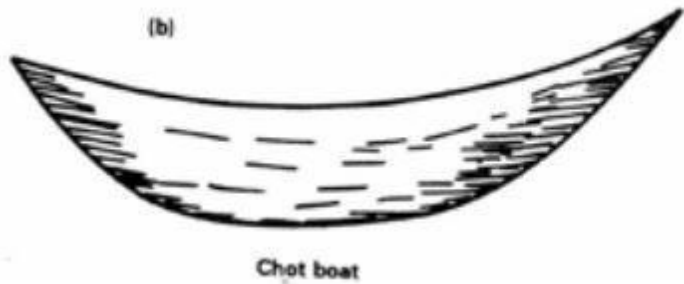


Fig. 52. Indigenous boats of West Bengal.



MACHWA

DEV

7. Mechanised boats: There has been addition of further facilities in the form of mechanised boats for quick transport of fishes from the midwater, i.e., fishing site, to the bank. Motor machine is fitted to the large boats and a rapid transport action of the fishes is thus obtained



Fishing crafts of backwaters

1. Dugout canoe, Catamaran and Outrigger canoe – Used in backwaters and estuaries of Kerala, Odisha and Tamil Nadu.
2. Shoe dhoni – Used in estuaries near Kakinada in Andhra Pradesh; shoe shaped; length about 10 m; wide flat forward and narrow aft with a transom stern (Fishing platform)
3. Plank built flat bottom boat (without keel) – used in Chilika lake

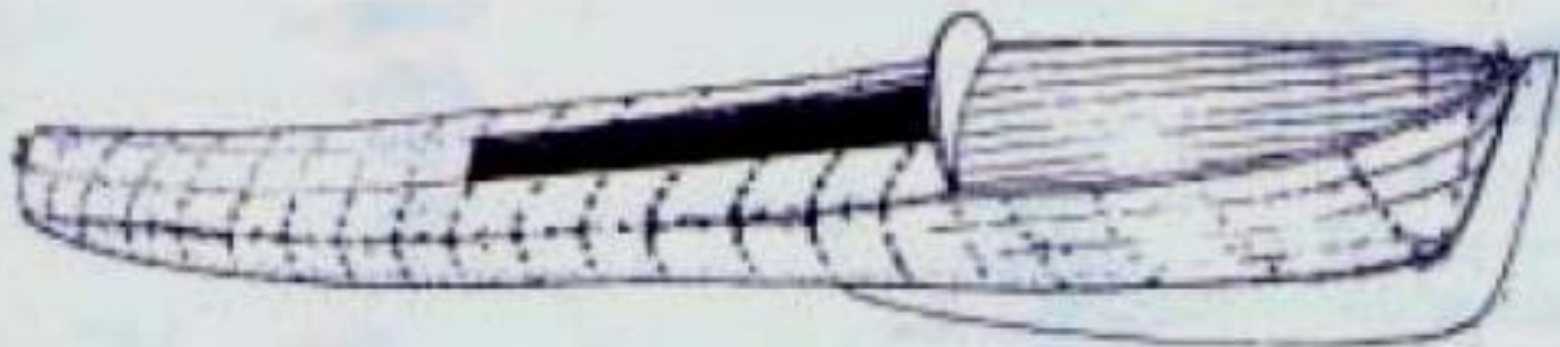
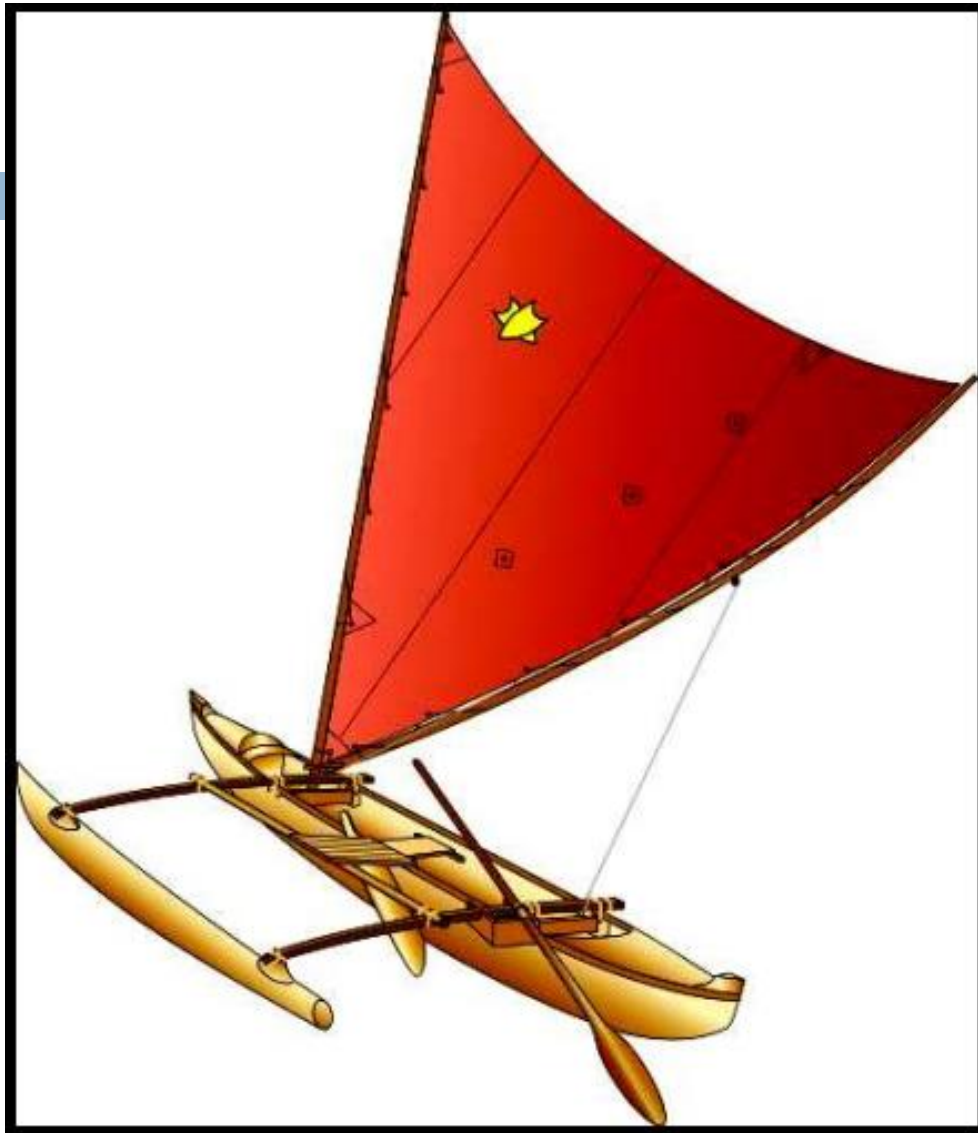


Fig 20 -Shoe-dhoni, Cocanada



Outrigger canoe

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Fishing crafts of reservoirs

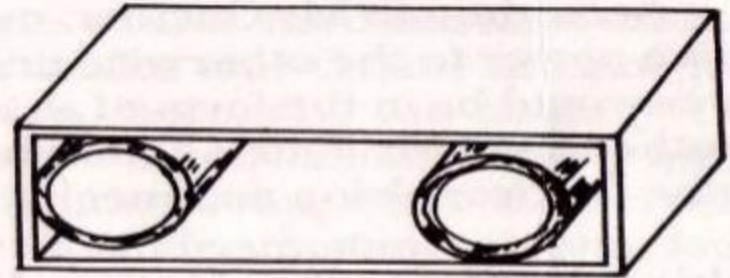
- They include coracle, float with sealed tins, catamarans (Teppa), dried water gourd, inflated rubber tubes, dug-out canoes, plank built canoe, flat bottom plank built boats, tin boats, ferro-cement boats and transport boats.

(a)



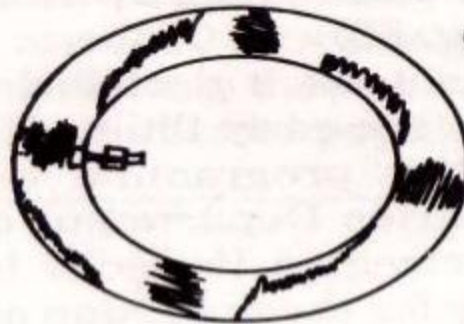
Coracle

(b)



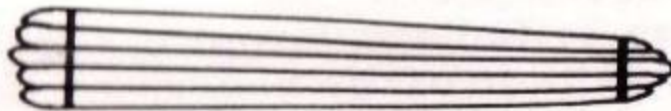
Float with sealed tins

(c)



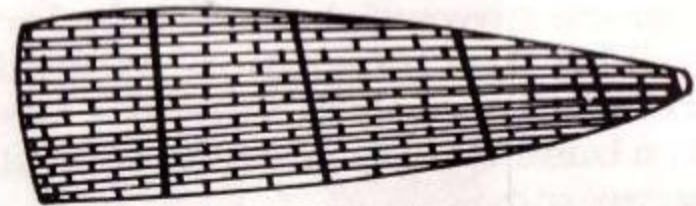
Inflated rubber tube

(d)



Catamaran

(e)



Dried grass raft