Today we will be learning about fishing

crafts from unit number three that is

fisheries. The outline of this module are skin boat and FRP boats.

At the end of this module you will be able to describe a skin boat

and describe a FRP boat.

Now skin boats. These are also called as hide boats or locally

known as”Butti”. These Particular boats are made up of

bamboo strips. The bamboo strips are lashed together to form into a

basket like structure and the height of this boat varies from
0.3 to 0.4 meters whereas the circumference of

this boat is around 1.5 to 2meters. In appearance, these

boats look like a wide
circular baskets. So as you can see in this particular picture,

all these are skin boats with the bamboo strips. Now these are

suitable only to use in calm waters, particularly in lakes

and rivers. In case of rough waters it becomes difficult to

use these boats. The base of this boat, as you can see it is

blackish in color. Because the base is applied with coal tar.

So it helps in preventing water seepage. Another very additional

thing that is out attached to this is polythene sheets.

The polythene sheets are attached to this and on top of this

polythene sheets tar is applied again to check water seepage.

Now these boats are used in Goa and Karnataka but these boats

are neither used nor constructed by Goan fisherman's and these

boats are used

To operate gillnets and cast nets.

Next one is the FRP boat. Now these FRP stands for or  the FRP boat is

made up of fiber reinforced plastic. It is composed of

several material, mainly fiberglass and resin, and laid

down by alternating layers and hardened to form into a strong

solid but flexible shape. Based on need  the different types of FRP

boats can be built by moulding.

By changing the quantities of the main component, specially

the resin the finished product can achieve different properties

to suit their desired application. In FRP, layers of

fiberglass materials are glued together with polyester resin.

FRP is poured into a mold and then the FRP hardens at it is

cast out as a solid and a strong hull. In  FRP laminate the fibers

gives strength to the structure,whereas the resin holds the

fibers together creating stiffness and distributing the

load among the fibers.

Now to build  FRP boat, you require these three things. A

wooden plug, FR P mould, and the FRP hull. Now the mould is the

fundamental tool for the production of FRP vessels. Because. the design of the mould will decide what kind of the final hull will be. The most common type is the female mould. It is a reverse or mirror image of the finished hull which allows the FRP material to be laid up on the inside. The mould is made up of FRP whereas the plug is made up of wood. The plug is an exact replica of the final hull. It requires high skill levels to achieve fairness and smooth finish. Therefore better the mould better is the hull. These boards are fitted with outboard engine as well as inboard engines. The most popular reinforcement used is a form of glass. It is processed into filaments, then woven or chopped and supplied in rolls.So there are two types of fiberglass that is chopped strand mat and woven roving. The Chopped strand mat. They're long sheets of fiberglass which are present in various thicknesses,whereas woven roving is placed in between this chopped strand mat to provide more strength and stiffness. Now the resin again is of two types: laminating resin, and gelcoat resin. The laminating resin is translucent, liquid or various pale colors, and it provides the matrix within which the reinforcement is bedded. Whereas

Gelcoat is a viscous liquid applied directly to the mould

without reinforcement, the properties of the finished FRP

may be designed to suit different applications by

changing the chemical

Composition of the resin and varying the reinforcements.

These boats maybe heat or fire resistant, resistant  to acids

and fuels and odour free for water. So this is an added

advantage. Whereas when we talk about the different advantages

First, it requires very less maintenance. We compare it with

the wooden boats,  there It requires a lot of maintenance,

but as far as FRP boats are concerned, they require very

less maintenance. FRP does not shrink or swell.

When we compare these FRP boats again with the wooden boats,

what happens is that once the wooden boats are out of the

water and they are kept in the

sun, they shrink. So, but these FRP boats are not made up of any

wooden material, so they don't shrink or swell.

There is no leakage and no caulking. Why?  because these FRP

boats are not made by joining the wooden planks like the other

crafts here it is made up of an

entire piece of FRP. So no leakage and no callking. That

means there is no ceiling also that is required. Next, they

Rot proof because these are fiber reinforced plastic and it

is not an organic matter so they don't rot. Next point, resistant

to the borers. Yes the sea borers cannot bore, resistant to

the borers. The sea borers cannot attack the FRP. Because

this is not organic material.

Next is corrosion and electrolysis is reduced and the

last one is simple construction because once the mould is

prepared, what happens is they can prepare many boats in a

short period of time because the mould is already ready. So many

boards can be prepared in a short period of time when we talk

about the disadvantages, choice of design of vessel is fixed.

Yes, because mores are used to prepare these boats. So if you

want to change the design of the boat then we have to start

from the initial process, that is, by constructing the wooden

plug and then the mould, and finally the FRP hull. So here

the choice of design of the vessel is fixed. Fire and health

hazard from the chemical. This especially in case where in the

manufacturing industry where this FRP boats are made, there

are health hazards to the

workers there. Next must retain core group of qualified

technicians. Yes, the technicians are already trained.

So in case of the manufacturing industry they have to maintain

the technicians. Next is large startup investment. It does

require large startup investments to start with this

particular manufacturing of these boats.

These are my references.

Thank you.