

# **WATER CLEANING ROBOT**

(W- BOT)

# UNDERSTANDING THE PROBLEM



\* According to a survey more than 700 million species die due to plastic consumption.

\* And more than 100 million marine mammals die due to the same problem.





# RIVER WORKHORSE

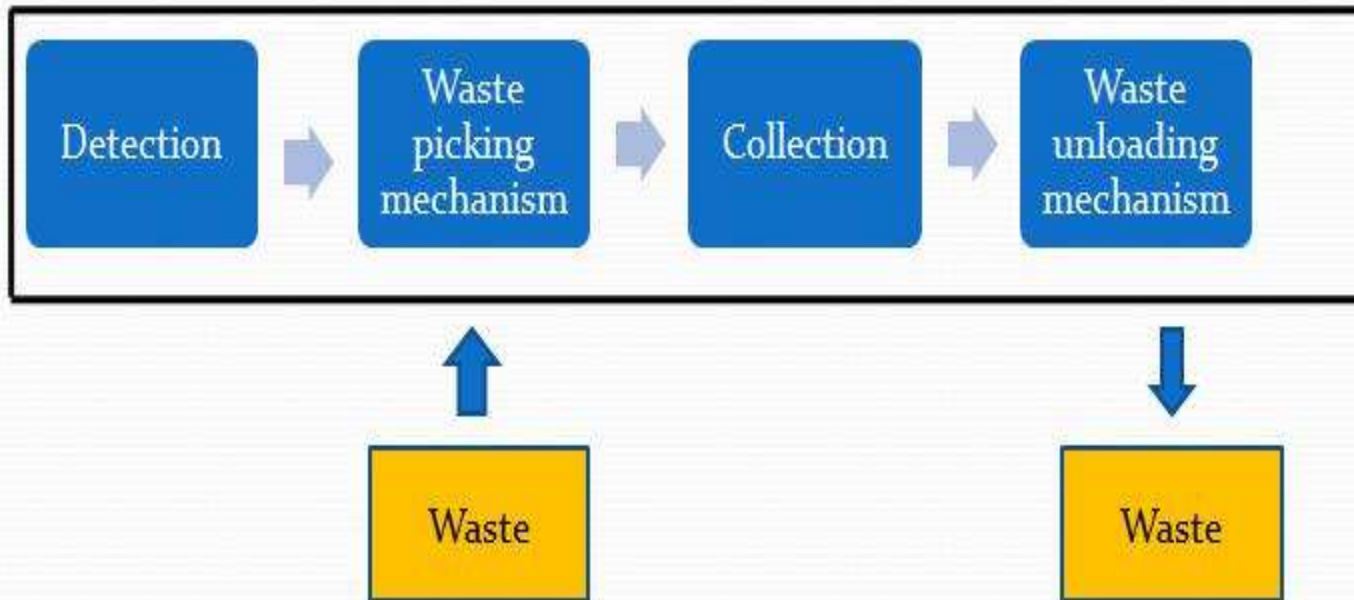
- Rivers such as the Holy Mother Ganga, might benefit immediately from SeaVax survey and waste data patrols.
- The Ganges is navigable for around 1,450 miles from Allahabad to the Bay of Bengal.
- Once waste areas are known in any river with geographic precision, BMS might recommend and develop workable solutions.



# IMAGES OF W-BOT



# WORKING OF WATER CLEANING BOAT






# WORKING MECHANISM:

- **Detection:** The process of detection of wastes is done using a proper motion sensor or by using camera of suitable pixels.
- **Waste picking mechanism:** It drags the wastes in the collecting tank which are being detected.
- **Collection:** There should not be any leakages in the collecting box.
- **Waste unloading mechanism:** When the capacity of collecting tank exceeds its predetermined collecting limit, a compact and portable unloading mechanism comes into action for removal of wastes which are being collected in the collecting box.

# Advantages of w-bot:

- ▶ Safe to use
  - ▶ Very less human contact with the water
  - ▶ Easy to dispose off the waste
  - ▶ Collect more amount of waste in less time
  - ▶ Should not harm the aquatic animals
  - ▶ Very efficient
  - ▶ Cost effective
  - ▶ Durable
  - ▶ Collect majority types of waste
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# ENGINEERING CONCEPT:



- In water related projects, we must focus on various concepts related to fluid mechanics such as buoyancy, metacentric height. There will be a need to check the floatability and stability of the product in water.

THANK YOU

○ PRESENTED BY : DYNAMIC CREATORS