AquaRescue: An Integrated Flood Rescue System

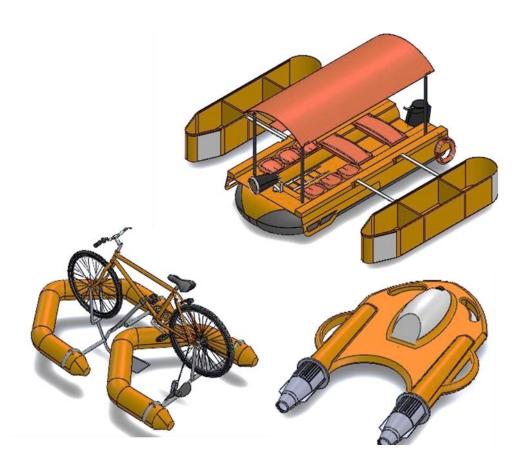
By Team Floodguardians

Led by: Altamash Tamboli

Floods impact over 1.8 billion people globally, and India is among the most vulnerable. During disasters, lack of affordable and rapidly deployable rescue solutions leads to delayed response, loss of life, and damaged infrastructure—especially in low-income and remote areas.

To solve this, we designed **AquaRescue** a sustainable, community-driven, and low-cost flood rescue ecosystem that empowers both authorities and locals to act fast and save lives. The system includes:

- ✓ **Stackable Rescue Boat**: Lightweight fiberglass boat with a modular, stackable design for quick deployment and easy transport.
- ✓ **Pedal-Powered Water Cycle**: Converts a regular bicycle into a rescue vessel using floaters and a propeller, encouraging community-led response.
- **▼ Remote-Controlled Rescue Buoy**: GPS-enabled, battery-powered buoy operable from a distance to reach people stuck in dangerous zones.
- Rescue Jacket: A compact life-saving vest made from recycled plastic bottles and waste fabric designed for mass distribution and affordability.



Part Highlights:

- Reduced rescue time in flood zones
- Empowerment of local communities
- Affordability for low-income areas
- Promotion of circular economy via recycled materials

This project taught us that innovation doesn't have to be expensive it needs to be **empathetic**, **inclusive**, and **locally actionable**.

Det's build safer, smarter, and more resilient cities together.

#FloodRescue #Innovation #Sustainability #TeamFloodguardians #AquaRescue #ClimateAction #DesignForImpact #CommunityResilience #EngineeringForGood