

***SWARNANDHRA***  
**COLLEGE OF ENGINEERING AND**  
**TECHNOLOGY**

---

department of cyber security

COMMUNITY SERVICE PROJECT

***TITLE: “AQUACULTURE DEVELOPMENT  
AND ENHANCING TECHNIQUES “***

*REPORTED BY :*

K.NAGA SAI SRI

(23A21A4632).

# *INTEGRATED AQUACULTURE*

Integrated aquaculture is a farming method that combines fish farming with plants and/or animals to increase productivity, reduce waste, and improve income sustainably.

# TYPES OF INTEGRATED AQUACULTURE

---

- *Polyculture system*
- *Integrated Fish-farm system*
- *Aquaponic system*



# *BENEFITS AND CHALLENGES*

---

## BENEFITS:

- Efficient Resource utilization
- Heigher Productivity
- Waste recycling

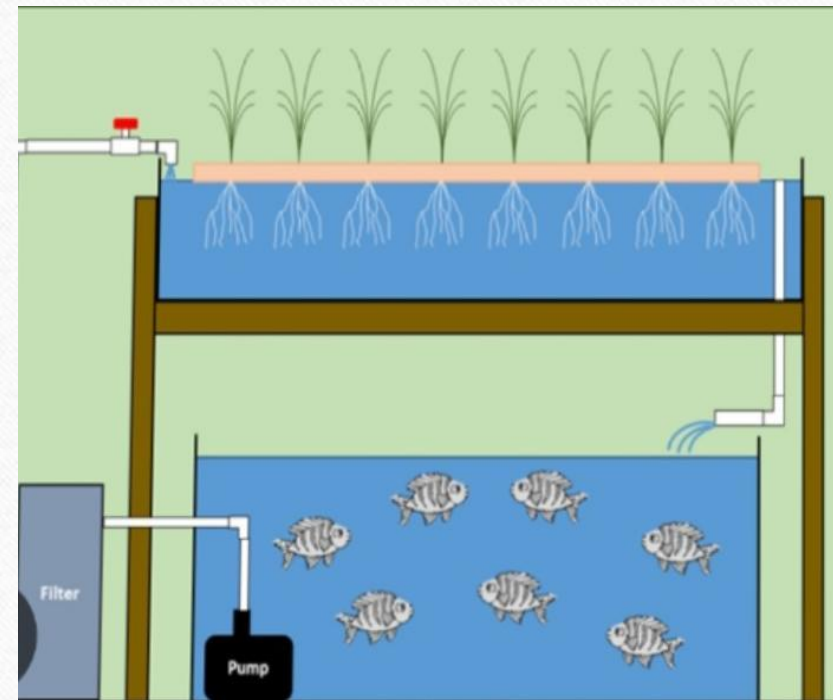
## CHALLENGES:

1. System complexity
2. High initial investment



# *SYSTEM DESIGN AND MANAGEMENT*

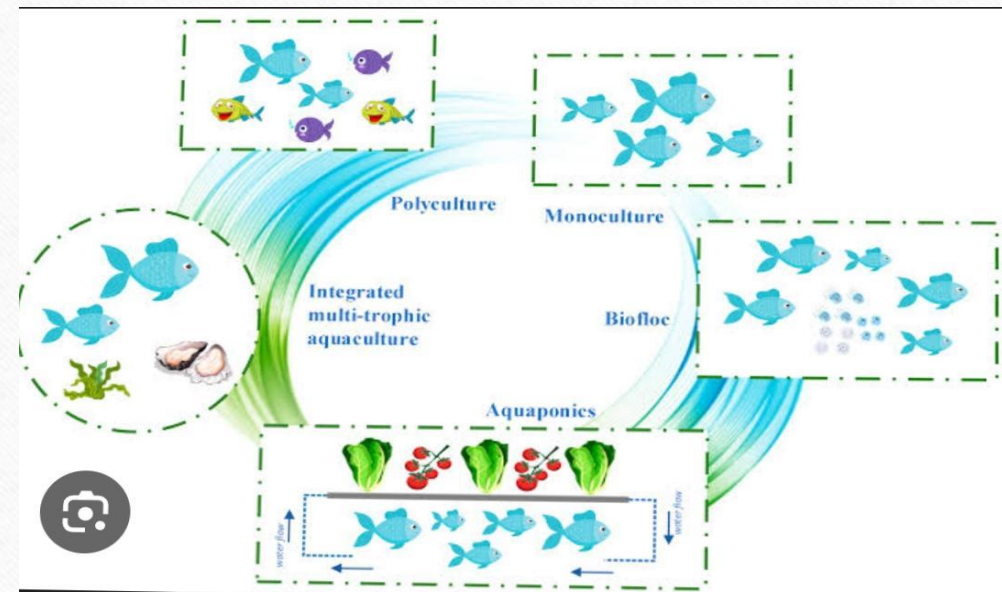
- System components and layout
- Management of water and nutrients
- Monitoring and control systems





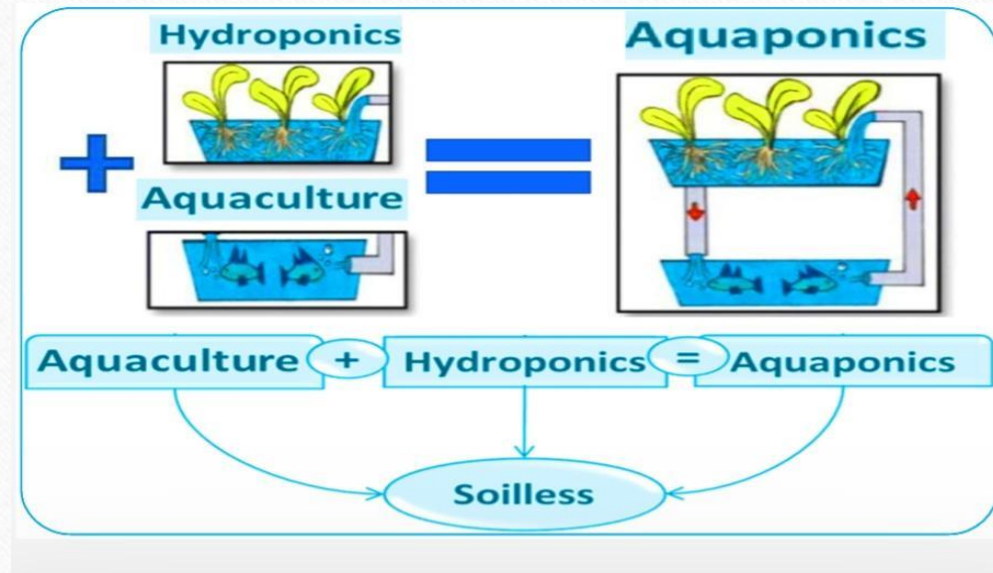
# Economic and Environmental Impacts

- Economic benefits and costs
- Environmental impacts and sustainability
- Social and community impacts



# *Management and Maintenance*

- Regular system monitoring
- Management of fish and crop health
- Optimization of system performance





# *CONCLUSION*

---

Aquaculture is essential for food security and farmer livelihoods. By adopting sustainable practices and modern technologies, we can increase production while protecting the environment. The future of aquaculture depends on balanced and responsible growth.





Thank  
You