

**SWARNANDHRA
COLLEGE OF ENGINEERING AND
TECHNOLOGY**

department of cyber security

COMMUNITY SERVICE PROJECT

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

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(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
- Higher Productivity
- Waste recycling

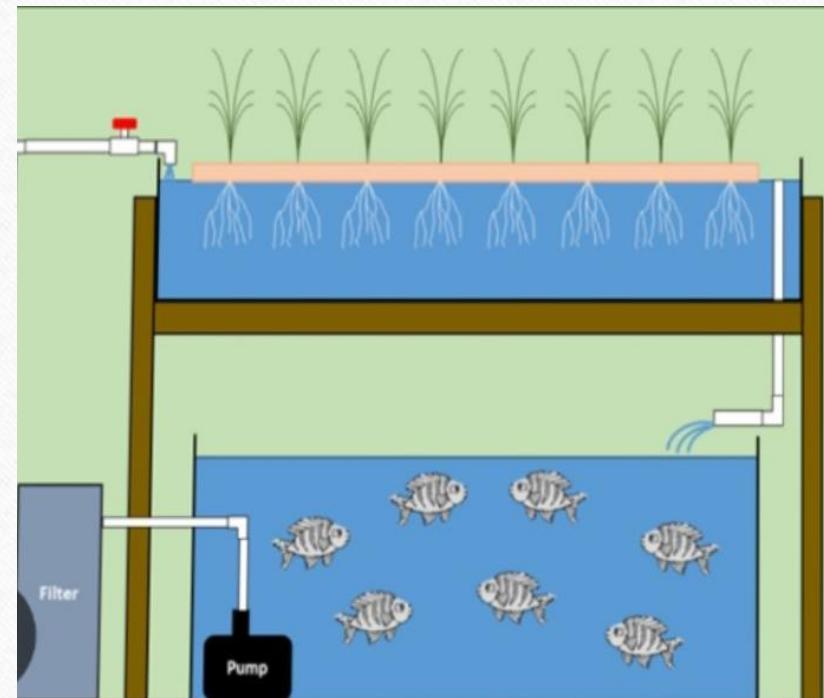
CHALLENGES:

1. System complexity
2. High initial investment



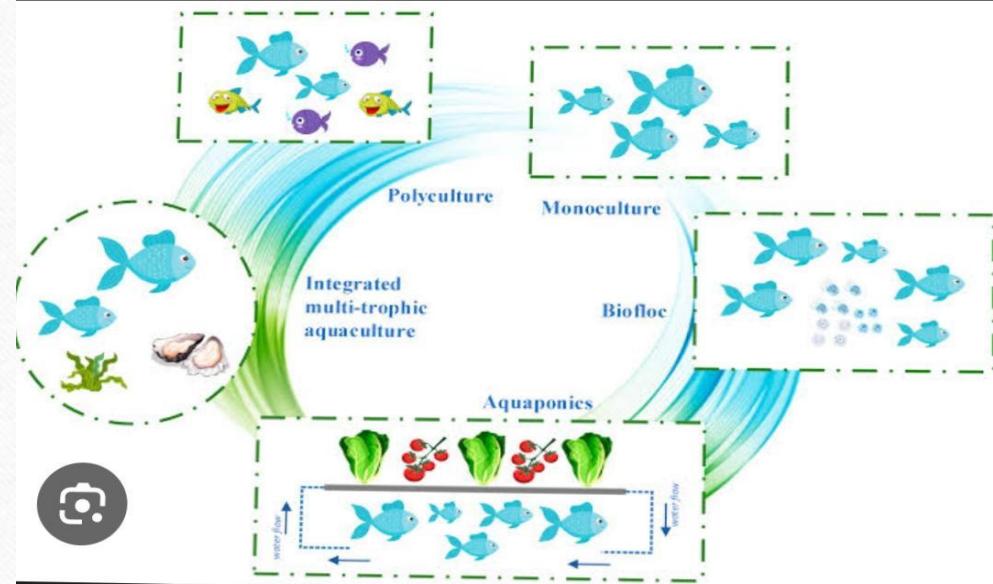
SYSTEM DESIGN AND MANAGEMENT

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



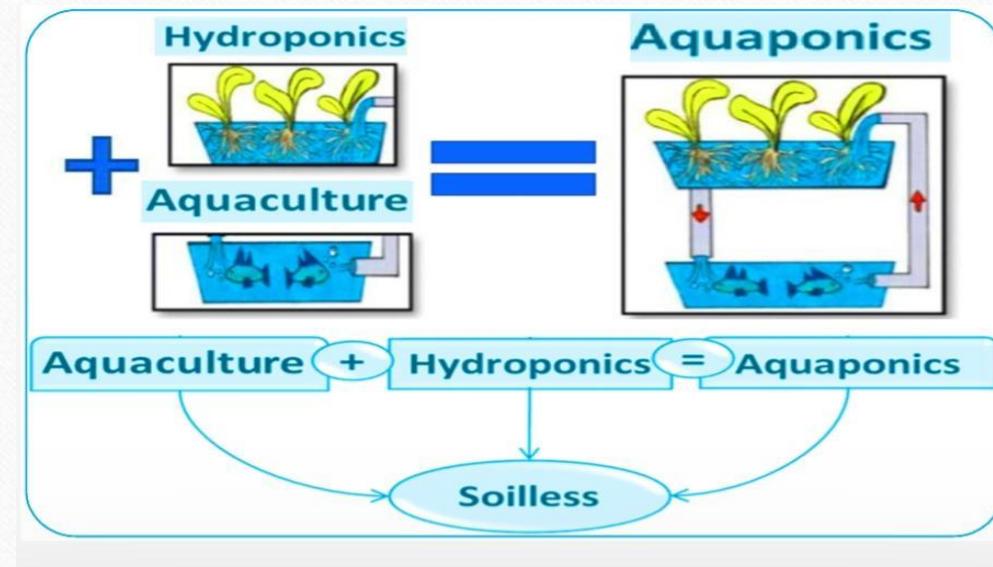
Economic and Environmental Impacts

- 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