

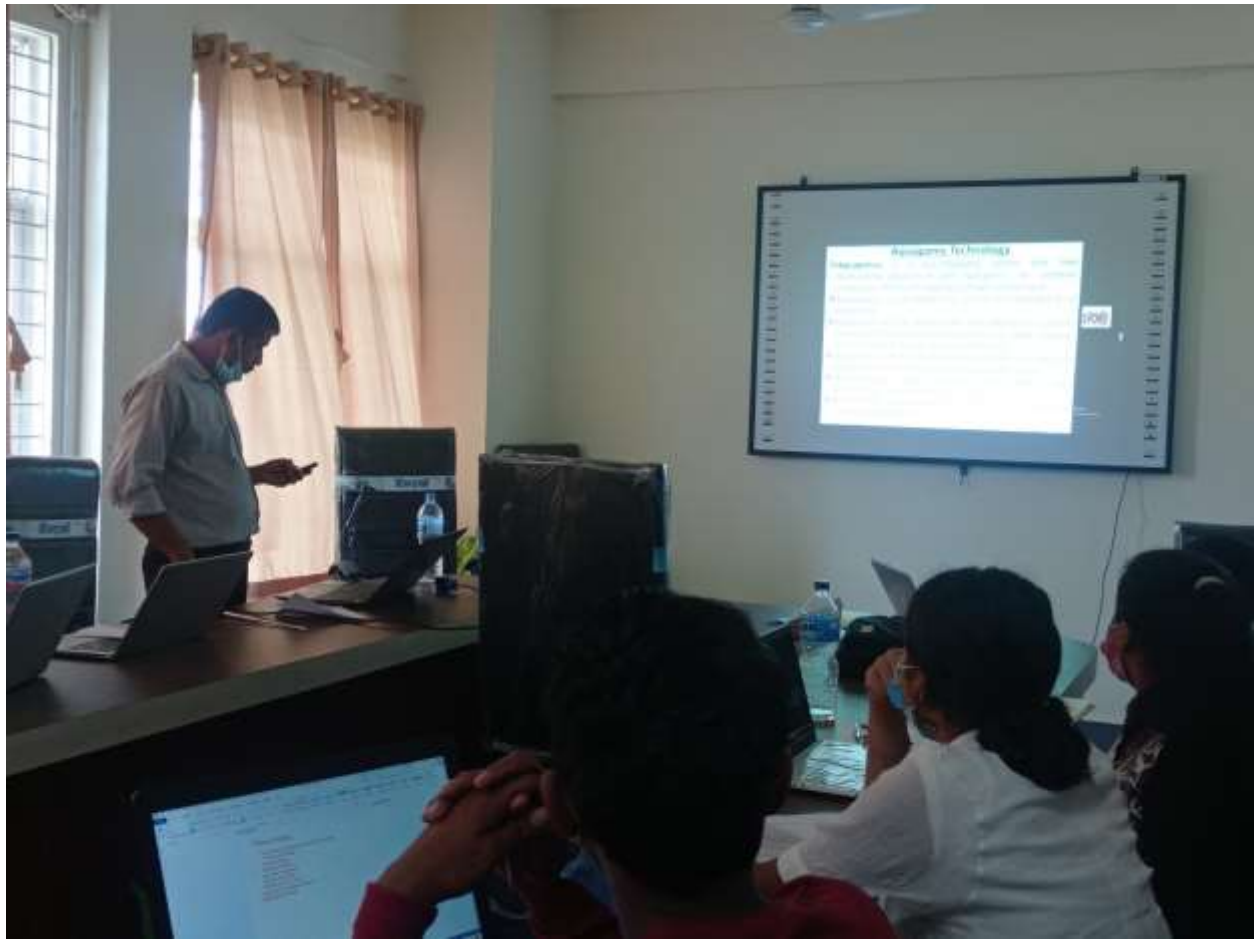


Integrating Talent Development into
Innovation Ecosystems in Higher Education
586227-EPP-1-2017-1-BG-EPPKA2-CBHE-JP

STUDENTS' TRAINING ON INNOVATIVE TECHNIQUES ON
AQUACULTURE

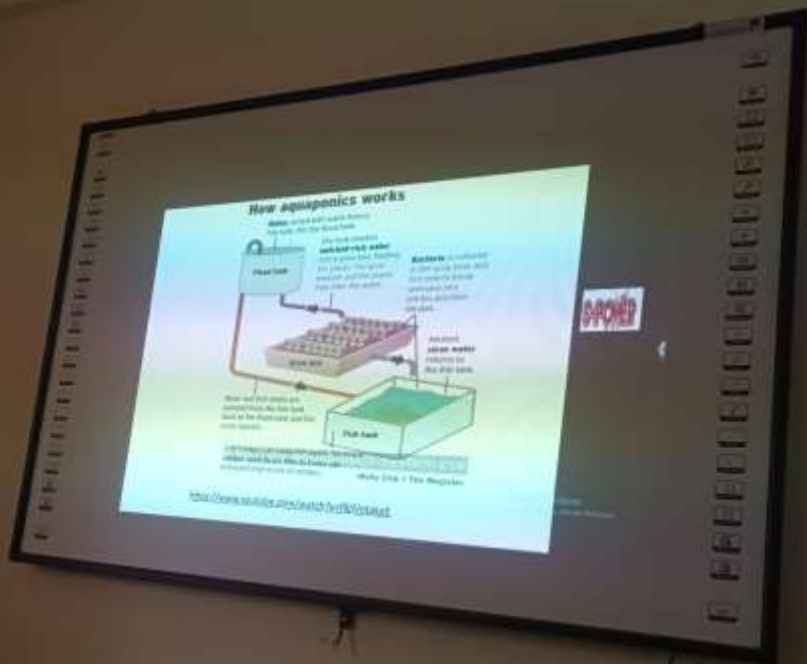
Co-funded by the
Erasmus+ Programme
of the European Union









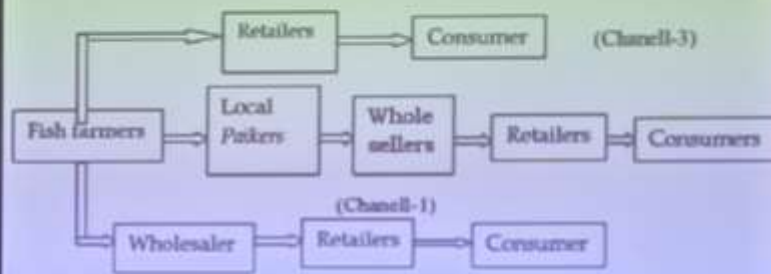


Aquaponic Technology

- ❖ **Aquaponics** is a bio-integrated system that links recirculating aquaculture with hydroponic for combine production of fish and vegetable, flower, and/or herb
- ❖ Aquaponics can be worked as model of sustainable food production
- ❖ Integration of the aquaculture and hydroponic systems creates a constant nutrient production and uptake balance, and use of waste during aquaculture farming
- ❖ Aquaponic is better than Hydroponic (take nutrient from fish feed and solid fertilizer is much more affordable)
- ❖ Nitrosomonas (convert ammonia into nitrites) and Nitrobacter (convert nitrites into nitrates).
- ❖ While nitrite is still harmful to fish due to its ability to create methemoglobin (reduce DO)



Live Fish Marketing System in Nepal



(Channel-2)







Our Innovation in Fish Feed

- ✓ Major innovation is reducing the cost of pallet fish feed (NRs 45/kg) by increasing apparent digestibility coefficient of plant protein based ingredient (90 to 96 %).
- ✓ Develop the new technology on changing curd protein into digestible protein
- ✓ Formulation of plant alkaloids from the different edible plant juice, and solid alkaloids (culture 5%) to raw fish feed during processing time.
- ✓ Plant alkaloids help to change crude protein of fish feed into digestible protein

Our Innovation in Fish Feed

- Major innovation is reducing the cost of pallet fish feed (NRs 45/kg) by increasing apparent digestibility coefficient of plant protein based ingredient (90 to 96 %).
- Develop the new technology on changing curd protein into digestible protein
- Formulation of plant alkaloids from the different edible plant juice,
- Add solid alkaloids (culture 5%) to raw fish feed during mixing time.
- Solid alkaloids help to change crude protein of fish feed into digestible protein

S-POWER

