

Seven Years of Sustainable Aquaculture Development in Myanmar (Burma)



Funded by the European Union

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Improve Capacity of the Aquaculture Sector

Sustainability:

- Improved livelihoods and household nutrition
- Mangrove protection/restoration
- Domestic seed production
- Reduce overfishing
- Improved opportunities for women
- Increased export income for sustainable seafood



University, Industry & Farmer Capacity Building, Training and Demonstration Programs

Sustainable aquaculture



Enable sustainable increases in livelihoods from aquaculture production without creating adverse socio economic or environmental impacts.

Resilient small-scale fisheries



Secure and enhance the contribution of small-scale fisheries to poverty reduction and food security in priority geographies.

Value chains and nutrition

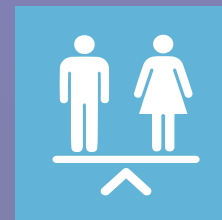


Increase the availability, access and consumption of nutrient-rich, safe fish, especially for women of reproductive age, infants and young children.

Cross cutting themes



Climate Change



Gender Equity



Entrepreneurship



Improved University labs and facilities



BEFORE



AFTER



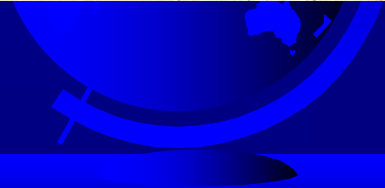
Office and Aquaculture Library





Student internships

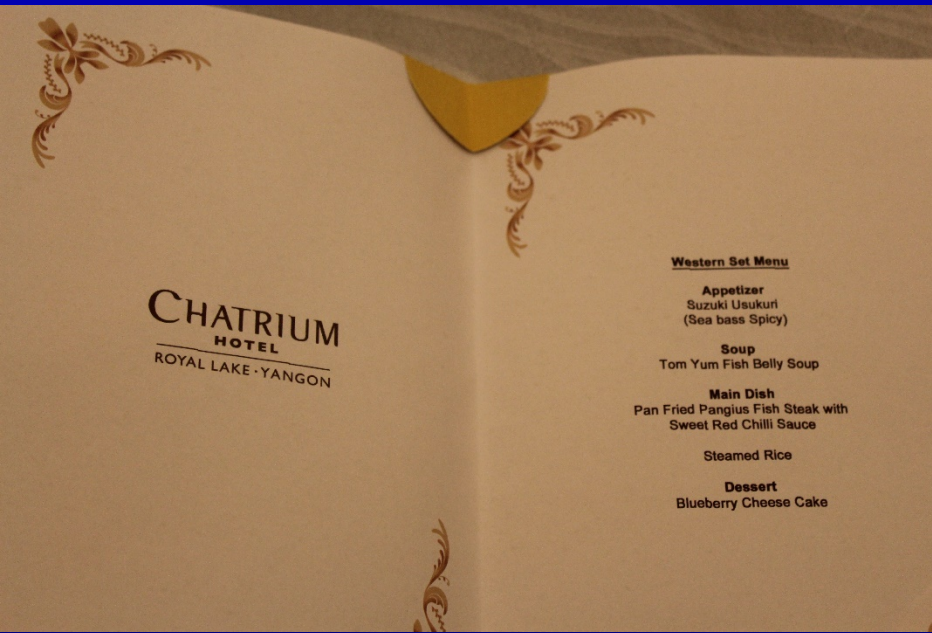
- 90 Internships with domestic industry in less than 3 years
- 12 Internships with industry abroad



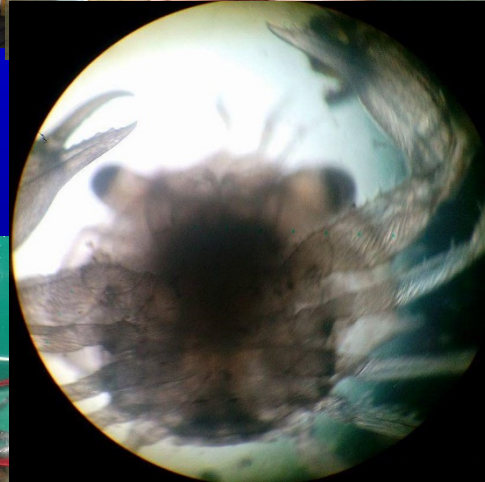
Internships: Vietnam, Malaysia, India



Demonstration Seabass farm in Okkan



Mangrove crab hatchery



Built and operated an eel nursery



University Faculty field trips



Mangrove-friendly Farming of Shrimp, Crab, Fish, Clams and Seaweeds



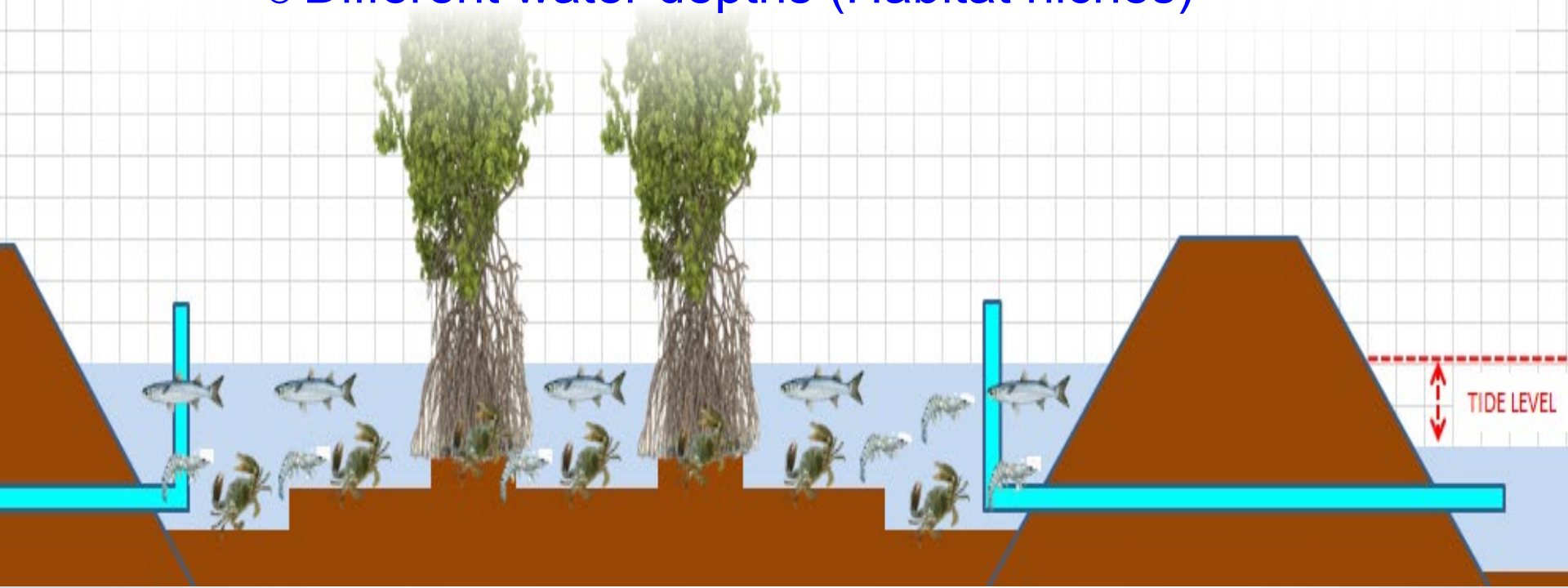
Mangrove Forest Provides Shelter, Substrates & Food for the Crabs



Photo: <https://climatevulture.com/2016/05/05/sea-level-rise-puts-indo-pacific-mangrove-forests-at-risk/>

Pond Structure & Layout

- 1) Culture area of preferably > 1 acre
- 2) Water depth of approximately 3 feet
 - Perimeter ~ 4 ft
 - Mangrove bed ~ 1 ft
 - Different water depths (Habitat niches)



A Farm @ Labutta

- Crablet size increased from 4 mm to 20 mm after 32 days of stocking C1 Crablets (26/9/2019 - 28/10/2019)

28/10/2019



Sources of additional income in polyculture – Filter feeding clams in hapas, low-cost investment





Growing tilapia, seabass, or milkfish in cages, moderate-cost investment





Crablets in hapa nets





Crab nursery





Sources of additional income – Culture of seaweeds in cages, low-cost investment



giz Shrimp, Crab, Fish and Seaweeds

- Shrimp, crab, and fish wastes fertilize seaweeds
- Algae cleans effluent, makes O₂, & sold for agar and sea vegetables





Seaweed, fish and shrimp from same pond
Gracilaria, milkfish, Giant tiger prawn

Why it all fell apart

