

Agri-food Waste Management for Sustainable bio-economy through Higher Education curricula and upskilling

Erasmus+

Higher education

Enriching lives, opening minds.





Joséa Guedje & Matthieu Garcia-Mesa Aix Marseille University



For food self-sufficiency in orphanages and community shelters

July 10, 2025

Erasmus+

Higher education

Enriching lives, opening minds.





Goals

AGRIMA aims to foster universities' capacity building for the green transition through innovative practices and higher education curricula updating in agri-food waste management for the circular bioeconomy.



AGRIMA addresses:

- 1. Advancing pedagogical methods for industrial agri-food waste valorisation based on business-academia synergies.
- 2. Integrating citizen science in bio-economy-enhanced waste valorisation as a means of civic engagement and environmental advocacy.

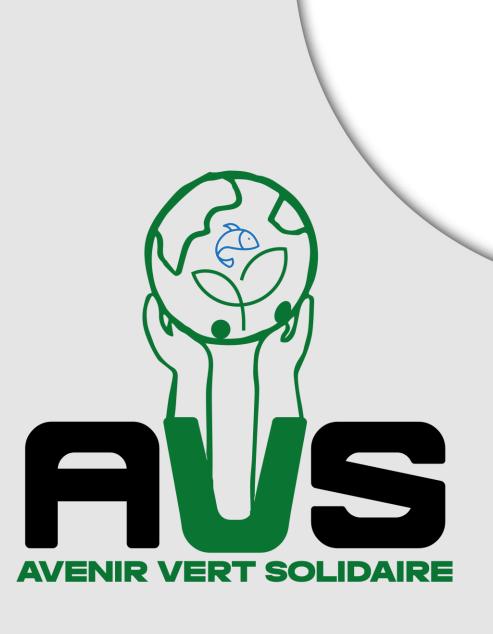






Our Commitments

- 1. Food Security
- 2. Environmental Education
- 3. Circular Economy
- 4. Emotional Well-being
- 5. Enpowerment
- 6. Solidarity









Our Field Actions: Example of Benin

- 1. Preliminary phase: This assessment aimed to evaluate the nutritional and educational needs in seven orphanages, as well as to identify suitable spaces for implementing the project.
- 2. Production Implemented : Approximately 2,000 fish were introduced, comprising two locally adapted species: Clarias (African catfish) and Tilapia



2 Orphenages and 120 childrens





Our Field Actions: Example of Benin

- 3. Invest: Two fish farming tanks measuring 4 m x 4 m x 2 m for aquaculture production. One hydroponic cultivation tank measuring 6 m x 2 m x 0.5 m, dedicated to vegetable production
- **4. Hydroponic cultivation**: The following leafy vegetables were planted in the hydroponic system (Lettuce and Solanum macrocarpon

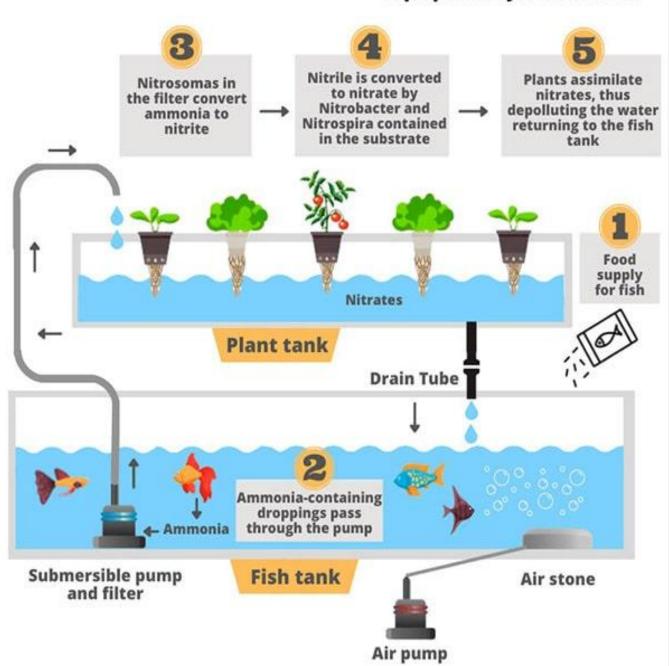


70% collective catering 30% solidarity-based sales by the orphanage.





Aquaponics system schema





Aquaponics is an innovative cultivation method that combines two complementary agricultural systems:

- •Aquaculture: the farming of fish in controlled environments
- •Hydroponics: the soilless cultivation of plants in nutrient-rich water





Control fishing



Control fishing



Control fishing



Control fishing



Hydroponics



Control fishing



Control fishing



Aquaponics Training



Plant Production Training



Plant Production Training



Plant Production Training



Plant Production Training



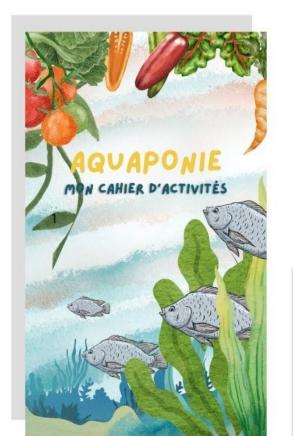
Plant Production Training



Plant Production Training



Plant Production Training







HZUROX4BLE





Fondation de **France**

ENABEL



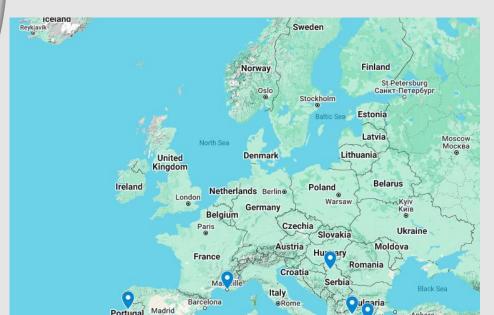
Lauréats de la saison 4 de l'appel à projets MoHo4Young



ODD AMU







Partners

















