

Curriculum Development for

Sustainable Seafood and Nutrition Security (SSNS)

Introduction

Sustainable Seafood and Nutrition Security (SSNS) is a project Co-funded by EU Erasmus+ Programme to address the issue of sustainability of seafood production, supply and consumption through need based higher education, practical research and vocational training.

Period: 36 months (Oct 2017-Sept 2020)

Budget: 999,556.10 Euro

Global perspective

Seafood is the most nutritious and the largest source of animal protein in the world. Its value and contribution of seafood has been increasingly realized. Global consumption and its trade is rising dramatically due to increased population, income and changing food habits from red meat to white meat and seafood.

It is also highly traded food. Currently more than half of all seafood is traded from developing to developed countries. The EU is the largest single regional importer. Farmed seafood contributes nearly half of global seafood consumed. Rapid growth and intensification of some of these systems are causes of serious sustainability concerns. Current EU policy supports international trade between Asia and Europe concentrating on food security as well as safety. However, market-forces drive development of standards and labels that identify social and environmental parameters.

Seafood comes from either farming or fishing. Products have to be sufficient, safe and nutritious but it also has to be socially acceptable, economically profitable and environmentally sustainable. Maintaining its continuous production from both aquaculture and fisheries for seafood and nutrition security has been a complex issue of global significance and a real challenge.



The Asia-Pacific region

The region continues to be the world's largest producer and supplier of seafood. The capture production of the Asia-Pacific region exceeded 50% of world production since 2006. In most countries, capture fishery is either declining or remaining constant. At the same time, recently aquaculture too has suffered a lot due to diseases e.g. shrimp farming. Vietnam produces nearly one million mt/year of Pangasius catfish and supplies white fillet (popularly know as Basa, dory etc.) all over the world. Farmers use excessively high density, and intensive farming method. Indonesia is now in a race to compete with Thailand and Vietnam for aquaculture. Aquaculture is growing rapidly as it has been highly emphasized recently. Fast growing industry has highest environmental damages, and also high risk of collapse. Therefore, growth needs to optimize to ensure sustainability.

Despite the prominence of fisheries, there is a lack of appropriate Master's degree programmes especially focusing on Fisheries and Aquaculture for Food and Nutrition Security addressing the emerging problems of the real world, which the project aims to fill.

Goal

The goal is to contribute to sustainable seafood and nutrition security through improving the quality of higher education and building the capacity of institutions and individuals.

Objectives

- 1. Capacity building of HEI & professionals
- 2. Establish Sustainable Seafood Centres (SSC)
- 3. Develop MSc & training courses
- 4. Develop and incorporate internship
- 5. Strengthen collaborations and linkages among institutions and individuals



Project Activities and Methodology

Work-package 1 (WP1): Existing similar curricula in Europe will be identified. Weaknesses, gaps and needs in Asia will be assessed. Based on these a final report will be prepared. The following diagram shows the steps in brief.



- WP2 Capacity-building and Curricula Development: Professionals from Asian partners will visit Europe and then develop new curricula and vocational training courses for their respective institutions to offer. New MSc curricula/courses will be developed incorporating internship programmes for each partner institution. Similarly, new vocational training courses will also be developed. A Virtual eLearning platform (VLE) will also be developed to share courses, course materials and experiences.
- WP3 Academic staff training and preparation for delivery: A series of lesson plan preparations and course delivery trainings will be organized for Asian lecturers in their home institutions along with developing a training manual. This would be a testing period for new or improved existing courses.
- WP4 Accreditation and delivery of the courses: Each partner university engaging in developing new the curricula/courses will take necessary actions to accredit them as full-fledge MSc program or as a part of existing Master's degree curricula. New curricula/courses developed based on the needs and improved delivery methods would attract more prospective students. Internship programme should be helpful in providing real field experience and opportunity to develop required skills.
- WP5 Quality plan Project team will carry out internal and external quality control processes/systems so that all the Work-packages produce high quality outcomes. Technical and financial auditing will be done by independent expert individuals or organizations.
- WP6 Dissemination and Exploitation brochures and flyers will be produced. Project webpage and a social media pages will be created. An international conference will be organized inviting lecturers of universities around the globe and others interested.
- **WP7 Management & Coordination** overall management of project, activity planning, communication among partners and other stakeholders, and liaise with EU will be done by the Project Coordinator.



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