

MASTER THESIS PROJECT PROPOSAL

Supervisor - Jean-Baptiste Thomas

Title - Public perception of blue growth: WTP and opinion survey of near-shore macroalgae cultivations amongst residents of the Koster archipelago, Sweden

Research area - blue growth, public opinion, ecosystem services and WTP

Seafarm - The overarching goal of this project is to develop a sustainable system for the use of seaweeds as a renewable resource in a future, bio-based Swedish society. The transdisciplinary research approach includes techniques for cultivating seaweeds to be used as raw material in a biorefinery for the production of food, feed, bio-based materials and bioenergy. The project is split into 5 focus areas, the 5th being a sustainability assessment of the project as a whole, which is being tackled here at Industrial Ecology.

Seaweed farming circumvents several disadvantages related to land-based biomass production, e.g. the need for fertilizers and irrigation, and does not compete for valuable arable land. In addition seaweeds grow very fast, their farming counteracts coastal eutrophication and captures carbon.

One of the challenges in the development of a macroalgae industry on the Swedish west coast will be the lack of legislation and of an established permit assessment process. Public perception towards large-scale cultivations and the education of locals will be vital in the development of these frameworks. Furthermore a baseline of the local residents' attitudes would be a very valuable contribution to the Seafarm project, and will be a crucial part of the final sustainability assessment.

Research tasks (*to be discussed*) – The aim is to assess local perception of seaweed cultivations in the Koster archipelago and beyond. Conduct a public opinion survey in the Kosterfjorden region (Tjärnö, Strömstad, etc.) during the spring/summer of 2015, using a mixture of door-to-door, emailed and mailed questionnaires. This is to be followed by one or several focus groups to further discuss public perception of the cultivation and to identify possible ways of raising awareness of Seafarm in the area. Willingness To Pay (WTP) of ecosystem services provided by cultivations should also be investigated as a part of the surveying.

Required competencies - Swedish and English language proficiency. Ability to travel to the Swedish west coast for (approximately) one week to collect data during the spring/summer (travel and accommodation expenses covered).