## Project title

"Urban Farming"

## Number of students

## (minimum 2)

: No limit

## Project duration (1-6 months):

Best 6 months, no less than 3 months

## Project frame (Bachelor/Master, small project):

Can be any of these. Master thesis is preferred

## Background

Global supply networks exist because goods are not equally available everywhere – they are produced in some places and often needed in other places. This is not a desired state; supply networks exist out of necessity and produce a vast array of negative externalities, such as emissions from transportation. This is true both for non-food and for food products. While production of the former tends to be located in places where there is availability of skill sets and/or low cost of production offsets cost for global transportation, with little potential for distributed production in local markets, the latter bears the potential of production close to consumers. Urban Farming is the discipline that aims at industrializing distributed in-house production in local markets. Production efforts focus on both, common foods, such as different types of vegetables, as well as “new” types of foods, such as protein made of crickets. Potential for local in-house production of food exists especially in areas with unfavorable climate conditions (e.g., very hot or very cold climate), such as parts of Africa and Middle East, but also parts of Norway, Finland, Russia, or Canada. Other applications concern safe and controlled production of marihuana, which has experienced significant growth as legislation has loosened.

## The Challenge

Technologies that enable cost-efficient local in-house production of food have been researched and tested for many years, with increased efforts in recent years. Yet most technologies available can be considered immature or experimental and production has yet to prove cost-efficient as compared to traditional methods in traditional production locations with subsequent global distribution.

Relevant research questions are:

* What are the relevant parameters that contribute or hinder cost-efficient Urban Farming in local markets?
* What are the most important levers in terms that contribute to a positive business case?
* What would be the target cost for local production per unit (of the type of specified) and what is the cost gap to be closed to make local production worthwhile?

## The company:

* The contact person are Jakob Beer at SSI Schaeffer. jakob.e.beer@uis.no

## Supervisor:

* Professor Jan Frick, University of Stavanger Business School.

## Candidate background:

* Ideal background for the project are a mix of students from both engineering and management studies.