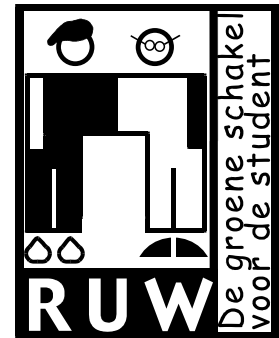


SALINE AGRICULTURE

The report

On Monday 26, 2007 Dr. Willem Brandenburg presented his view of the saline agriculture. The presentations were combined with a dinner in Zeezicht dinner house.



Saline agriculture is not new. For ages in the Netherlands, local communities have been growing and building knowledge around how and what species can be grown on saline soils. Extensive knowledge and "know how" has been also developed on aquaculture.

Saline agriculture involves inland farming on saline soils but also open sea farming of vegetables and animals. Population growth increases the demand for food. The agricultural soils are becoming scarce. Saline agriculture is an alternative for traditional farming inland and for traditional hunting in open sea. Inland, there is shortage of fresh water in quantity and quality. In the sea, the current role of man is very primitive and only limited to hunting. However, sea water is the most abundant in the world so it offers a tremendous potential for agriculture. Saline agriculture offers options for sustainable farming systems and brings back in the agenda old questions about:

- Does saline agriculture offers a new license to kill?
- What does saline agriculture have to offer to North/South countries?
- How saline agriculture can respect biodiversity in land and in sea?

To implement saline farming, we need to learn. We can learn from past experiences on saline farming, using existing knowledge. We can also learn from imitating nature. Current research offers new discoveries on marine ecosystems. Modern plant breeding techniques can develop new plant varieties resistant to saline soils. New plants will become new products on our diary diets in the next years.

Saline agriculture must be implemented based on terms of sustainability. The goal is to reduce the hunting at sea and to farm quality products for the new demands of our society. The Saline farm ideally could be a mixed farm that combines agriculture and aquaculture matching the model of people, planet, profit. It will be for people because it will contribute to ensure food security. It will be for the planet because the saline farms will be designed to balance the input/outputs on nutrients and energy. Since most of the population in the world lives in less then 200 km far from the sea, Saline agriculture can reduce the need for transport of food from inland areas. Also will be profitable. Saline agriculture has the potential to offer farmers a profitable business more than an over-subsidized farming system.

Dr Brandenburg presented two examples of saline farming projects. One in open sea, a project will use wind mills and sea wave generators to produce energy. Moreover, a net or cables will support the growth of algae for biofuel production. The project will be more than an energy production plant. The algae will be a friendly environment for the production of nurseries for fishes. The energy produced of this plant will be enough to supply a large area of the Netherlands. A second example is an in-land fish production farm. The farm will produce worms and fish in an extensive and sustainable system. The worms produced will be feed for the fish within the farm. The surplus has a high value on the market. Three are the conditions for success that this project meets. First, the high price of fish and worms, second the existing knowledge on these type of projects and third market chain is already in place. This is an example of a farm that can have a positive impact on the landscape in a coastal area because it combines land production with aquaculture.

In short, saline agriculture is a new and interesting alternative to traditional food production systems. If implemented correctly, it has the potential to meet the three "P" planet people profit triangle. Coastal ecosystems are very vulnerable. Therefore the implementation of saline agriculture needs to be done carefully, using traditional knowledge and doing more research to learn from nature. Economically, saline agriculture can offer local production of high value food products in the north areas of the planet. In Southern areas the saline agriculture can offer new strategies for food security. However, the investment required for the new farms is large so it can be limited to big companies, large farmers and cooperatives.

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