La chaine de valeurs dans GENIALG

WP2

WP3

WP4

WP5

WP6

Anticipate the impacts

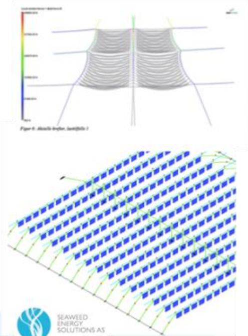
Two European high-yield seaweed species will be assessed: the brown alga *Saccharina latissima* and the green alga *Ulva rigida*

NOW

2018/2019

24 fresh tons of *U. rigida*

90-100 fresh tons of *U. rigida*



- Flexible system with 17-20 LLs; 200m each
- Innovative substrates; industrial hatchery

SES Pilot 2014/15: **100 fresh tons -> 2,000-tons**

www.genialgproject.eu

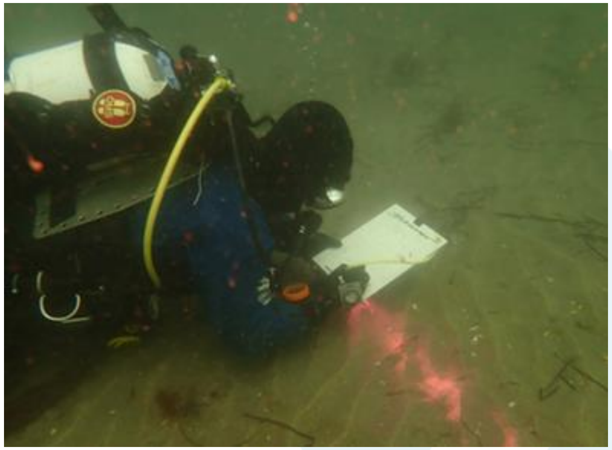
Les services écosystèmiques des cultures d'algues

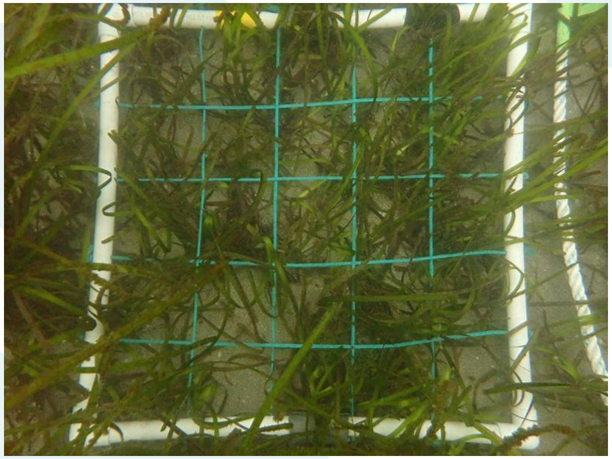
The World Bank predicts that achieving a global production of **500 million fresh tons of seaweed by 2050 (~20 fold** current world production**)** would absorb **10 million tons of nitrogen, which is 30 percent of the nitrogen estimated to enter the ocean**,

and **15 million tons of phosphorus, which is 33 percent of the total phosphorus produced through fertilizers,** from the ocean.

Rising carbon dioxide levels, the leading cause of ocean acidification, can also be mitigated through seaweed. Seaweed has an amazing carbon dioxide uptake and storage; kelp takes in five times more carbon than most land-based plants. That same seaweed production of 500 million tons would consume 135 million tons of carbon, which is **3.2 percent of the carbon added to seawater each year from greenhouse gas emissions.**

Qu’est ce qu’une ferme d’algues et ses impacts possibles?





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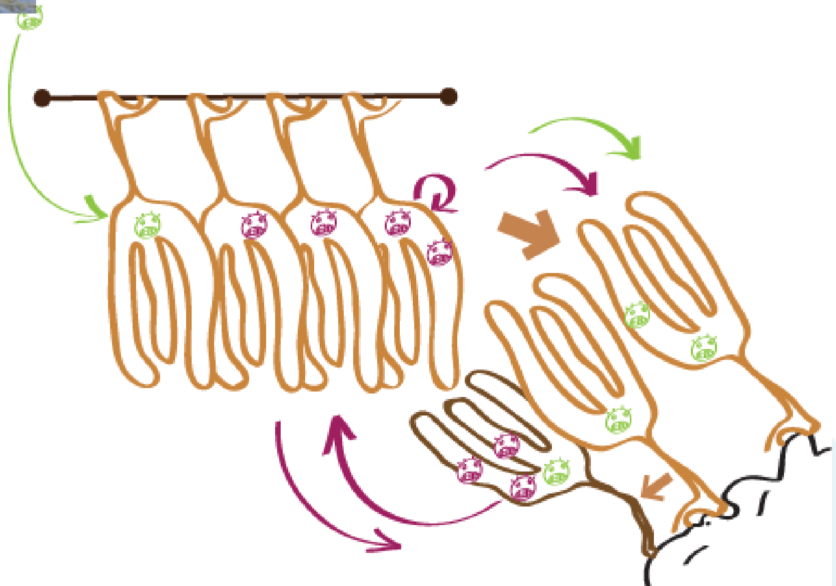
Les maladies sont une menace majeure à une algoculture durable



SAMS

United Nations University

UNU-INWEH

United Nations University
Institute for Water, Environment and Health (UNU-INWEH) & Scottish Association for Marine Science (SAMS)

POLICYBRIEF

Safeguarding the future of the global seaweed aquaculture industry

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Highlights

1. Global aquaculture production continues to increase, whilst capture fisheries stagnate. Many wild fisheries have been overexploited. Cultivation, if managed sustainably, is a viable alternative.
2. The seaweed industry is undergoing a rapid global expansion and currently accounts for ~49% of the total mariculture production. Unabated exponential growth in the last 50 years has meant that the value of the industry reached US$6.4 billion in 2014, providing jobs, predominantly in developing and emerging economies.
3. There is increasing need to address new challenges imposed by trade and market demand. Case studies clearly show that valuable lessons can be drawn from the major seaweed-producing nations and other aqua- and agriculture sectors.
4. Improving biosecurity, disease prevention and detection measures are critical, together with establishing policies and institutions. This will provide incentives and steer the long-term economic and environmental development of a sustainable seaweed aquaculture industry.
5. This policy brief highlights key issues that need to be addressed to create longterm sustainability of this emerging global industry, as it prepares itself for playing an important role in the 'blue' ocean economy agenda.

NERC SCIENCE OF THE ENVIRONMENT

global Seaweed

SAMS

Durant la première manifestation, samedi 19 juillet, à Doëlan, 400 personnes ont répondu à l'appel. Les slogans « Touche pas à ma côte » et « À nous le pouvoir » retentissaient dans tout le port. . Photo Joséphine Van Glabeke © Le Télégramme