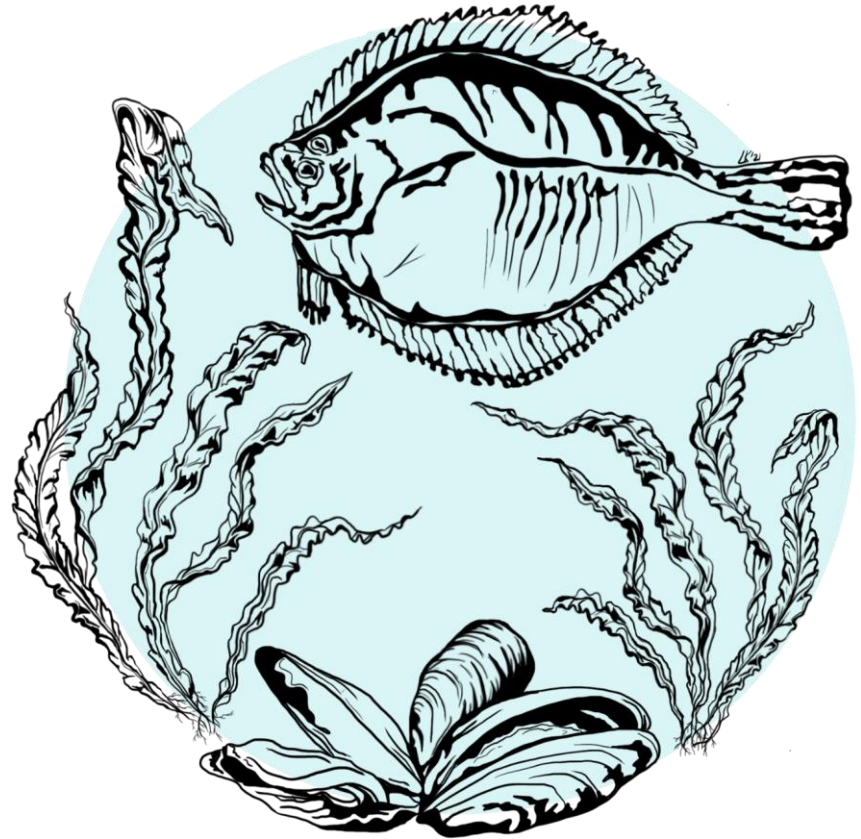


Kansen voor meerwaardige maricultuur innovatieconcepten in Nederland

Leodie Kruidhof

MSc Bio Inspired Innovation

Project Manager BlueLinked



Kansen voor

Hoe maken we Nederland weer een echte frontrunner op het gebied van 'water'-innovatie? Ik zie kansen.

meerwaardige

People. Planet. Profit. De nieuwe economie bestaat uit concepten die regeneratief zijn en bijdragen aan het welzijn van mens, dier en planeet.

maricultuur

Zout over zoet. Met een toenemende schaarste van drinkwater zitten onze kansen hem met name in zout water.

innovatieconcepten

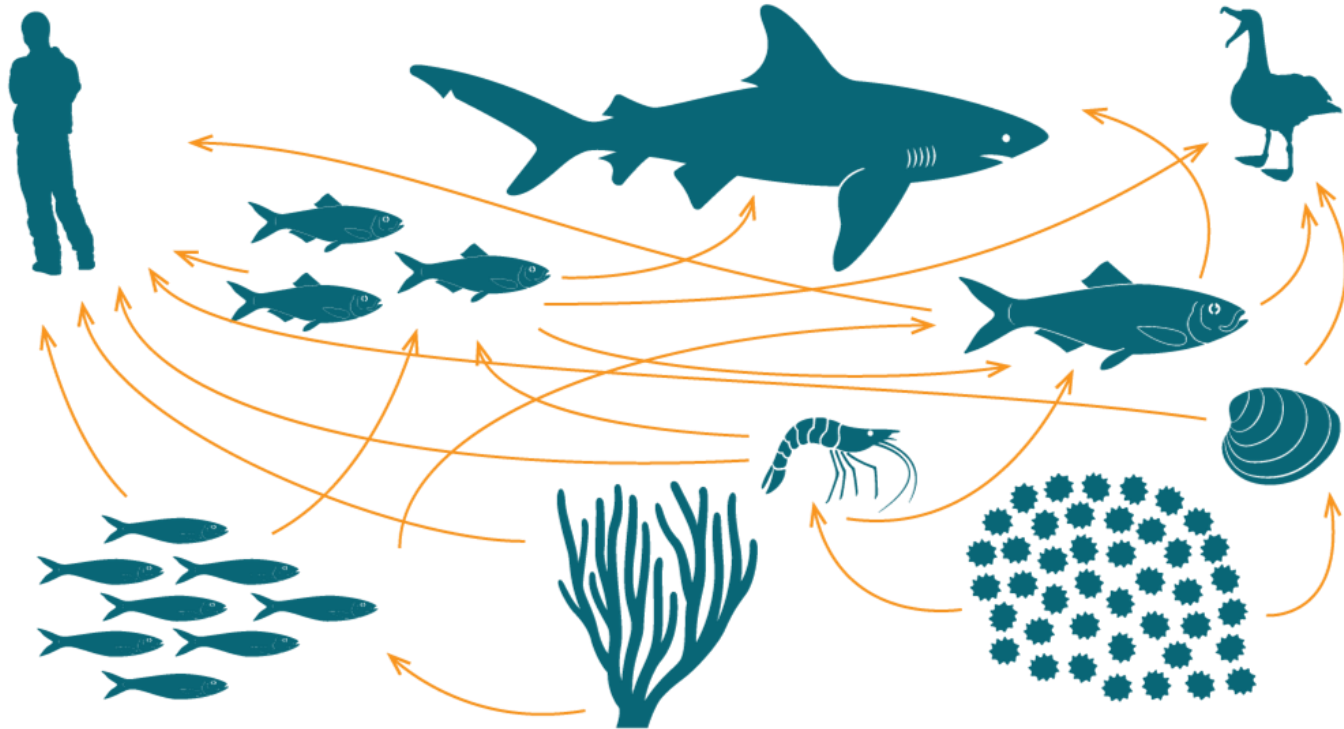
Veel interessante innovaties zoals: dubbele dijken, IMTA, co-cultivatie etc.

in Nederland

Zo'n $\frac{1}{3}$ van Nederland grenst aan zee (451 km). Als dichtbevolkt land moeten we efficiënt omgaan met onze ruimte.

Stap 1. Leren van de natuur op systeemniveau

Mission-oriented Innovation System



van ecosysteem naar systeemtheorie

System Function	Description	Indicators
SF1 Entrepreneurial activity	Private sector engagement in the industry, including incumbent diversification, start-up activity and full-scale product demonstration.	1) the number of new entrants, 2) the number of diversification activities of incumbent actors, and 3) the number of experiments with the new technology.
SF2 Knowledge generation	Production of knowledge can occur at research institutes, such as polytechnic universities, independent research centres or within private companies in R&D departments. This is known as 'knowledge by searching'. 'Knowledge by doing, using and interacting' occurs through knowledge gained whilst developing commercial projects.	1) R&D projects, 2) patents, and 3) investments in R&D.
SF3 Knowledge diffusion	Knowledge diffusion is the exchange of knowledge and can occur between the varying actors that produce knowledge. It can be facilitated by networking organizations, R&D collaborations or on commercial project collaboration.	1) the number of workshops and conferences devoted to a specific technology topic, and 2) the network size and intensity over time.
SF4 Guidance of the search	Guidance of the search is the visions set forth by either the government in support of a new technology or from within the industry itself.	1) specific targets set by governments or industries regarding the use of a specific technology, and 2) the number of articles in professional journals that raise expectations about new technological developments. (positive vs negative)
SF5 Market formation	Market formation is the concrete establishment of a new market, often mandated by the government in the initial phases of development and support by policy measures, subsidies, tax breaks, etc. Commercial market formation occurs once the technology has matured.	1) the number of niche markets that have been introduced, 2) specific tax regimes for new technologies, and 3) new environmental standards that improve the chances for new environmental technologies.
SF6 Resource mobilization	Public resource mobilization dedicates financial and human resources towards supporting a new technology, such as through tax breaks, subsidies, funding research institutes, etc. Private resource mobilization occurs within companies that either invest in or diversify into a new technology. This can be either human or financial resources.	This function is difficult to map by means of specific indicators over time. In this case the best suited method to create insight in the fulfilment of this function is to detect, by means of interviews, whether or not inner core actors perceive access to sufficient resources as problematic.
SF7 Counteracting resistance to change/legitimacy	Legitimacy is the private, public and civil society acceptance of a new technology. Actors can either resist change or increase legitimacy for new technologies through the formation of networks or coalitions. Such coalitions may lobby for or against specific policies, or more generally place an issue on the political or public agenda.	1) the rise and growth of interest groups and their lobby actions.

Stap 2. Hoe breng je het systeem in kaart?

Relationship mapping software - genaamd [KUMU](#)



Locatie

Partijen zijn gebonden aan een geografische locatie.

Categorieën

Bedrijven, NGO's, kennisinstututen, publiek-private samenwerkingen of projecten.

Tags

Viskweek, schelpdierkweek, zeewierkweek, visserij, zilte landbouw, slib, natuurbehoud en groene energie.



De Rijke Noordzee

PROJECT



Mission

Nature development in wind farms, and restoration of the flat oyster.

A healthy North Sea, source of renewable energy, rich in nature, and full of life. That is our dream.

Approach

In close collaboration with the wind sector, hydraulic engineering sector, and science they are building artificial reefs for oysters, tube worms, and Northern horse mussels at various locations in Dutch offshore wind farms.

They are currently working on a blueprint in the shape of a 'toolbox' for nature development in all offshore wind farms. The acquired knowledge will be open source so future projects can be started easily and cost-efficiently.

Nature conservation

PRIVATE IMAGE



WEBSITE

derijkenoordzee.nl

LOCATION

ADD LOCATION

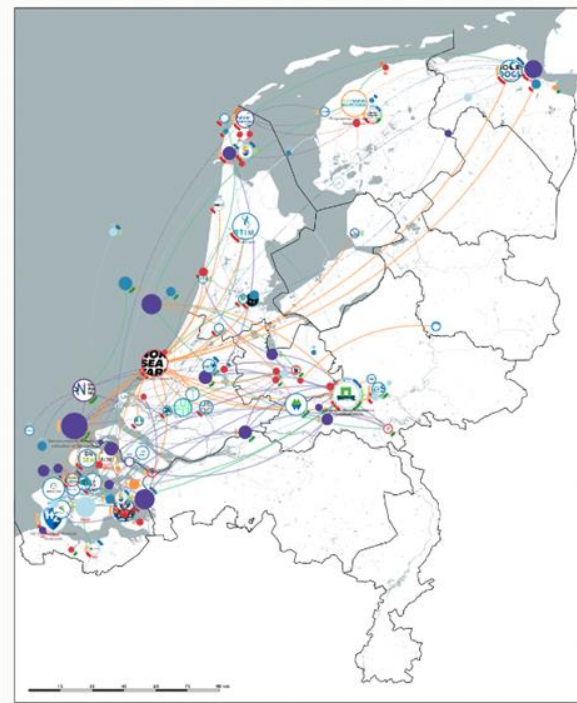
+ New field

METRICS

Search

Legend

- PPC
- Economic organisation
- Project
- NGO
- Knowledge institution
- Collaboration
- Potential
- Project partner
- Member
- Energy
- Fish farming
- Fisheries
- Nature conservation
- Saline agriculture
- Seaweed farming
- Shellfish farming
- Sludge



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Viskweek

4 kweekbedrijven op land:

- Kingfish (Zeeland)
- Seafarm (Zeeland)
- BlueLinked (Zuid-Holland)
- NoordOogst Aquaponics (Groningen)

Meeste partijen zitten in
Zeeland > *Aquavalley*

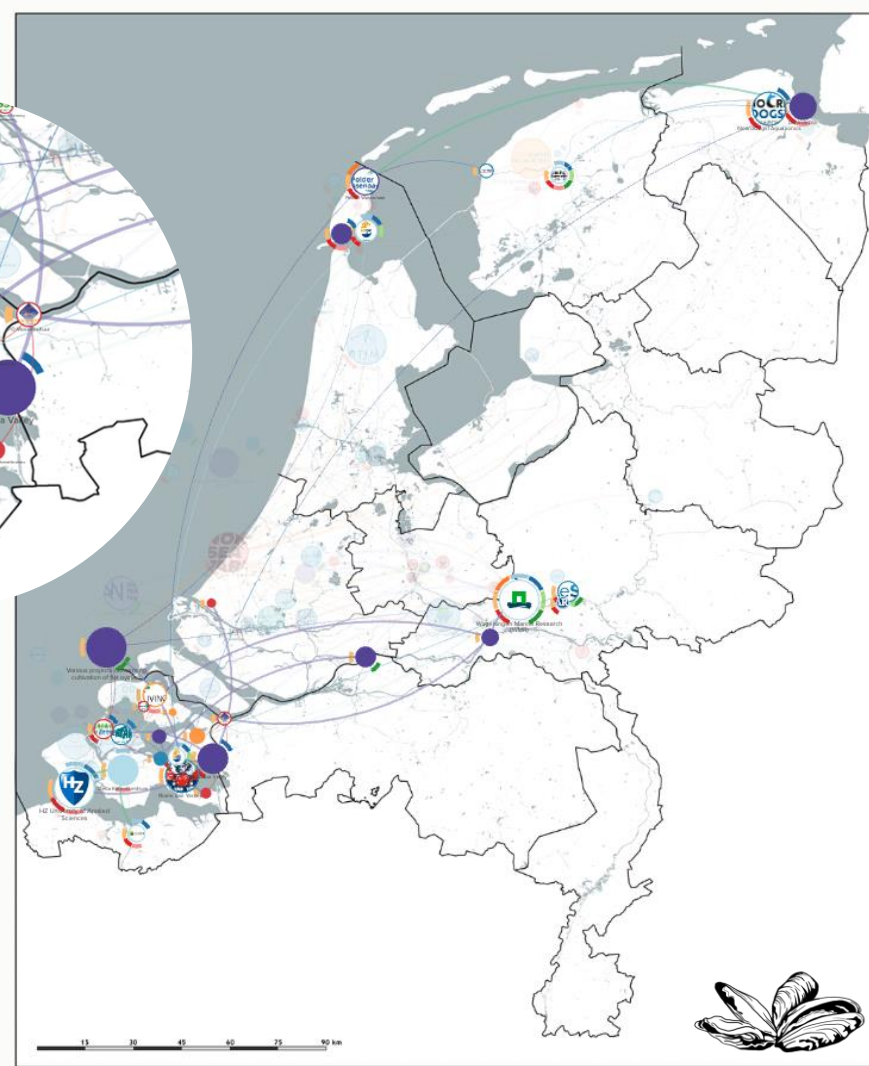


Schelpdierkweek

Veel historie in Zeeland:

- Veel familiebedrijven
- Hechte samenwerking met kennisinstellingen en stichtingen
- Meerdere branche-vertegenwoordigers voor o.a. promoten consumptie

Tegenwoordig steeds meer focus op co-cultivatie.



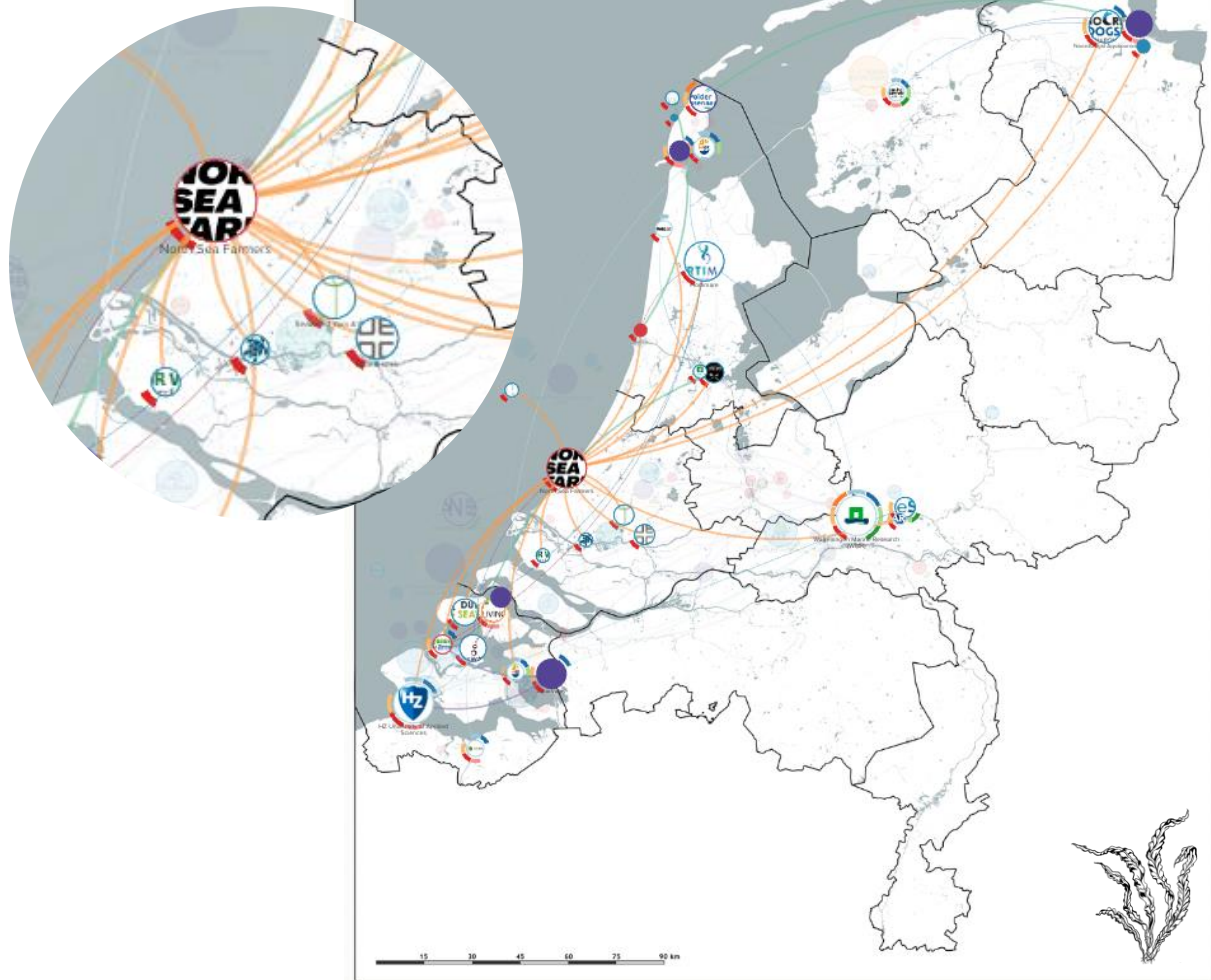
Zeewierkweek

Zeewier is hot & happening

- Meer geografisch verspreid
- Wordt gekweekt voor verschillende doeleinden
- Zowel op land als in zee

Eén duidelijk verbindende speler >

The North Sea Farmers



SF1
Entrepreneurial activity

SF2
Knowledge generation

SF3
Knowledge diffusion

SF4
Guidance of the search

SF5
Market formation

SF6
Resource mobilization

SF7
Counteracting resistance to
change/legitimacy

Stap 3. Waar liggen de kansen?

Voorbeelden van meerwaardige
maricultuur innovatieconcepten:

- Blauwe Polder 1
- Polder Wassenaar
- Dubbele Dijk
- Zeemos

Hoe maken we deze
innovatieconcepten
succesvol?

