

The Dutch Aquaculture Industrie

Jeroen Schuphof

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Jeroen Schuphof (MSc)

- Master Aquaculture and Fisheries at Wageningen University
- ->11 years practical experience with several fish species, design of fishfarms, genetic programs
- Innovation project: fishfarming and horticulture (tilapia and tomatos)
- Hatchery manager Til-Aqua International
- Genetics and consultancy for Til-Aqua International
 - Help startup of hatcherys and farms in several countries (Ghana/Dubai/Colombia/England/Turkey)
- Chairman of the Dutch Society for Aquaculture (NGvA)
- Selfemployed/independant consultant
- “famous” fishfarmer (thanxs to youtube)



YouTube^{NL}

Zoeken



▶ ⏪ ⏩ 6:58 / 9:58



Til-Aqua Natural Male Tilapia Hatchery

2.891.781 weergaven

👍 4K 🗨️ 478 ➡️ DELEN ⌵ ⋮



Advertentie Mentos

ABONNEREN



The Netherlands

- Small country, but large in agricultural production (nr 3 in the world)
- Expensive country to produce (expensive ground/labour):
 - high production level per m²,
 - very efficient.
- Good educational level (many farmers have a university degree!)
- Wageningen University is the best Agricultural University in the world.



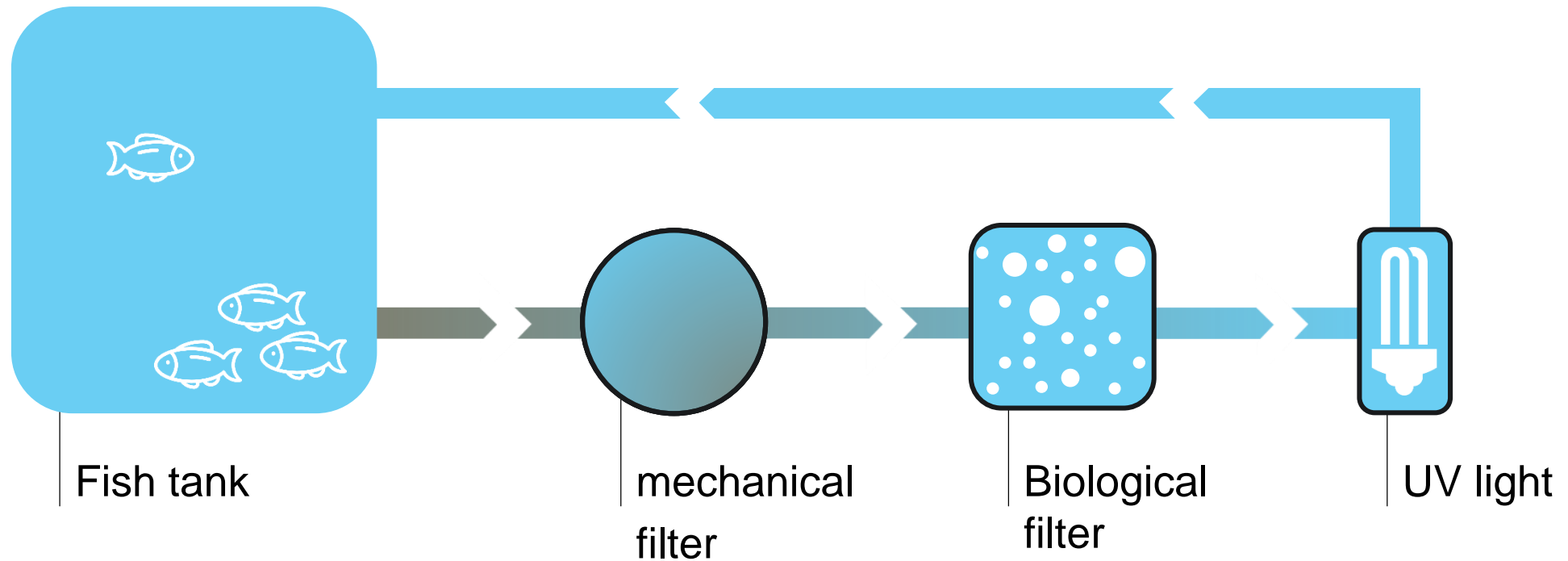
University Rankings		Rankings Indicators		
Agriculture & Forestry				
Agriculture & Forestry		Read more about Agriculture Degrees		
# RANK	UNIVERSITY	LOCATION	COMPARE	QS STARS™
2017	University search	By location	↓	<input type="checkbox"/> Rated only
1	Wageningen University		<input type="checkbox"/>	
2	University of California, Davis		<input type="checkbox"/>	
3	Cornell University		<input type="checkbox"/>	
4	Swedish University of Agricultural Sciences		<input type="checkbox"/>	
5	University of California, Berkeley (UCB)		<input type="checkbox"/>	
6	University of Wisconsin-Madison		<input type="checkbox"/>	
7	Michigan State University		<input type="checkbox"/>	
8	Purdue University		<input type="checkbox"/>	

Aquaculture in The Netherlands

- Wageningen University is 100years old, and the department for aquaculture was founded in 1977.
- The natural waters and the climate are not well suitable for cage or pond farming
- Recirculating Aquaculture Systems (RAS) are the only option
- In the 1980's RAS systems were developed for Eel and African Catfish
- Beginning of this century large RAS systems for tilapia (600tons/y)



Recirculation Aquaculture Systems (RAS)



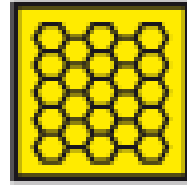
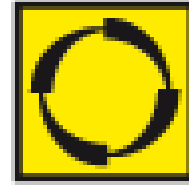
Aquaculture in The Netherlands today

- High value species (Sturgeon (for caviar), Yellowtail kingfish, European Eel, turbot)
- Hatchery's (Catfish, Tilapia, Turbot, Sturgeon)

TIL-AQUA



INTERNATIONAL
YY-Technology



Fleuren
&
Nooijen

AQUACULTURE EQUIPMENT
FISHFARMS CONSULTANCY

HENDRIX GENETICS



Aquaculture in The Netherlands today

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- Urban farming



UrbanFarmers

MUAY-THAI & KICKBOX

UrbanFarmers
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UrbanFarmers



Aquaculture in The Netherlands today

- High value species (Sturgeon (for caviar), Yellowtail kingfish, European Eel, turbot)
- Hatchery's and genetics (Catfish, Tilapia, Turbot, Sturgeon)
- Urban farming
- Construction company's specialised in aquaculture systems



Catvis



Aquaculture in The Netherlands today

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- Urban farming
- Construction company's specialised in aquaculture systems
- Headquarters Feed company's



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- Financing



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- Certification



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- Headquarters Feed company's
- Financing
- Certification
- Suppliers of equipment



WATER TECHNOLOGY











RAS technology

Advantages:

- Low water consumption (200liter/kg fish)
- Water quality control
- Year round production
- Less diseases and mortality
- High productivity with limited space
- Quality control
- Less environmental impact

Disadvantages:

- High investment
- Higher risk
- Higher energy consumption
- Higher education level of workers
- Higher production costs

Opportunity's for Egypt

- RAS technologie for Hatchery's:
 - Higher survival
 - Stronger fry
 - Beter management (grading of fish)
 - Parasite control
- RAS technology for growout at locations where water is limited
- Combine RAS with Horticulture for sustainability

How to go forward

- Dutch organisations can help in the whole chain, from feed ingredients until certification of endproduct, marketing, financing, etc...



- NAFTC (Dutch Agraculture, Food and Technology Centre)
 - Business Development Netherlands – Africa <http://www.naftc.nl/>
- DAE (Dutch Aquaculture Experts)
 - <http://www.dutch-aquaculture-experts.com/>



DUTCH
AQUACULTURE
EXPERTS



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Questions?