

Water@WUR



WAGENINGEN UR
For quality of life

More info: www.wur.nl
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Food: Challenges/Trends/Issues

- Food security (geo-political)
- Nutrition security (health)
 - > proteins: plants – animals (fish)?
 - > individualised diets (infants, old people, sports, ...)
- Food safety (health, trade and economy)
- Land, sea, cities, ..., Mars?
- Climate change: water, temperature, pests, diseases, ...?
- Sustainability: People, Profit, Planet?

Water: Challenges/Trends/Issues

- Quantity (availability: place and time)
 - Climate Change -> Droughts -> Migration -> Refugees?
 - Water storage and irrigation -> Ecology?
 - Heavy rainfall -> flooding -> damage?
- Quality
 - Agriculture, drinking water, industry, nature, tourism, ...
 - Salinity, nutrients, new pollutants, ...
- Sustainability: People, Profit, Planet?

Water @ Wageningen



Water @ Wur: Our strengths

To perform an:

- integrated transdisciplinary (= together with stakeholders) system approach,
- combining fundamental and applied expertise from the social, natural and technological sciences.
- we combine expertise in many temporal and spatial scales, i.e. ranging from field to global level.



Wageningen University & Research: a World-class profile

*"Great scores for
Wageningen University"*



#1

ShanghaiRanking's Global Ranking of Academic Subjects 2016 - Environmental Science &

Engineering

CheE CivE EleE EnrE EnvE MatE MecE Methodology Statistics				
World Rank	Institution	Country	Total Score	Score on PUB
1	Stanford University		737	67
2	University of Wageningen		730	93
3	University of California, Berkeley		723	80
4	Harvard University		674	68

#2

*Teacher of the Year 2016:
Roel Dijkma, ESG*



Water@Wageningen:



1. Water-Food-Energy-Biodiversity NEXUS



- Global to Field modelling
- Delta – Hinterland: River Basins
- Water stress – Yield (drought – floods – quality effects)
- Water Nexus, Lumbricus
- Cross Sectoral Solutions



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2. Water in an Urbanizing World



- Climate Change: Floods, Droughts, Urban Heat Islands
- Water Safety, Provision, & Quality
- Resource Efficiency
- Nature Based Metropolitan Solutions



3. Sustainable use marine environment

- Blue Growth
- Coastal Eco Productivity
- Corridor North
- Integrated Solutions, Protection biodiversity, sustainable seafood provision, responsible maritime activities





4. Water Quality



- Macro > Micro > Nano..
- Ecology & Technology
- River Basin to Coast to Ocean
- Climate & Circular Economy Induced
- Delta plan Knowledge impulse for Waterquality and freshwater



Water Facilities @ Wageningen

- Kraaijenhoff van den Leur Lab for Water and Sediment Dynamics
- Sinderhoeve
- AgriFarm
- AlgaePark
- MoDuTech Lab



