

Towards sustainable synergy between water, energy
and food

Implementing WEF in agriculture: Learning by Doing

*Seminar EKN hosted by International Energy Forum Riyadh Saudi Arabia
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What hampers synergy at farm level?

- Lack of information (e.g. soil fertility, energy consumption, water)
- Lack of awareness, education and weak extension services
- Complexity problems to tackle; combination of biotic and abiotic aspects

Dutch partners are ready to establish 'hands-on' solutions

Netherlands Water Partnership unites forces Public and Private Partners

Way forward: no single solution

Improving water efficiency in agriculture means:

- Optimizing farm management:
Lot of measures available => **prevent tunnel vision!**
- Optimizing integrated water management at river basin level
Requires public partners => **governance**

Coherent and holistic approach needed: smart, based on the right information

Practical solutions for abstract terms WEF

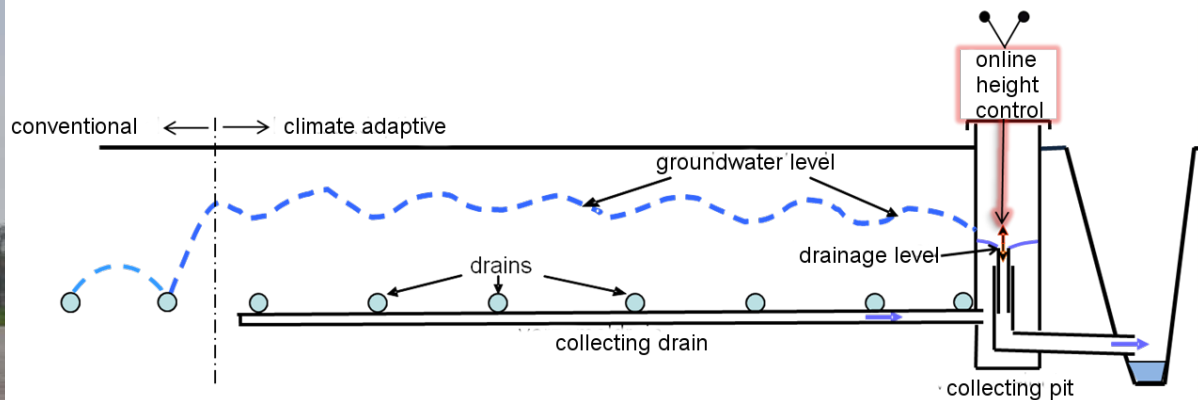
Where could Dutch partners play a role?

- Information tools for smart water management
 - Geodata / Water productivity
 - Innovative soil tests (NIRS-scan)
 - Soil moisture sensors
 - Remote Control by applying Internet of Things
- Innovative techniques water buffering (underground)
- Training / Capacity building / Virtual support
- Integrated water resource management
- Specific farming systems (greenhouse, hydroponics, ...)

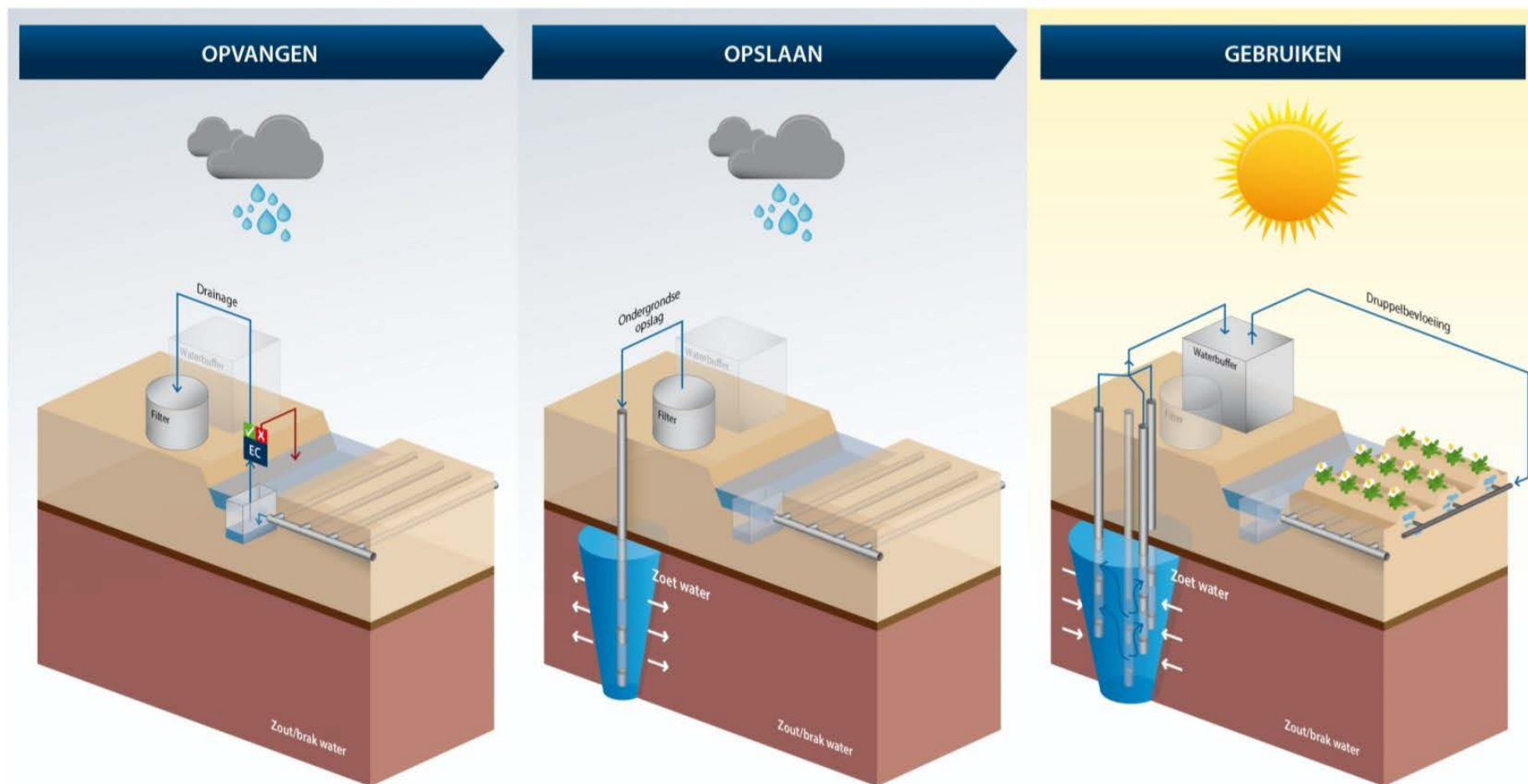
Smart Water Management for Date Palms (KSA)



Re Use Treated Sewage Water via Climate Adaptive Drainage Systems (sub irrigation)



Aquifer Storage and Recovery / Subsurface Drip



www.dutchwatersector.com/agrifood



WATER AND AGRICULTURE

An integrated approach to water and agriculture

Thanks for your attention

