

Water for food

The global population and the demand for food are sharply on the rise. The agri-sector will therefore need to produce more food, but at the same time, water is becoming more scarce. The Netherlands is only a small area. Nonetheless, we are one of Europe's largest exporters of agricultural products. Our secret involves the efficient use of land and water and effective responses to natural conditions. Now, the Dutch Water and Agricultural Sector have teamed up to develop new solutions for water re-use and better irrigation.



The Dutch water sector
has committed itself to
excel globally in three
vital areas: Enabling delta
life, Water for food and
Water for all.

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GO-FRESH: Geohydrological Opportunities FRESH water supply

In the SW delta of the Netherlands, the agricultural sector is confronted with growing impacts of water shortage and salinization. Farmers and government are aware of the negative influence on the development of the agricultural sector.

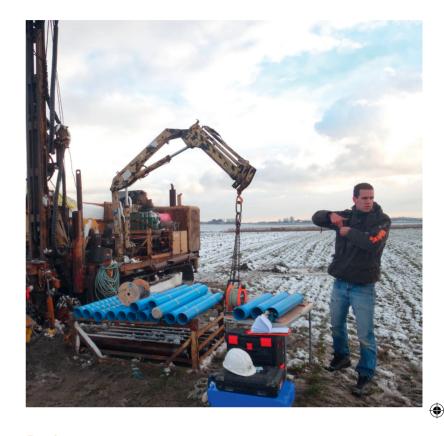
A reliable freshwater supply is considered as one of the key issues for future development and sustainable growth. Improving the use of existing fresh groundwater resources and create new freshwater reserves by several methods is quite innovative and could be promising in other delta's in the world, where fresh water is becoming scarce. If the technology can be proven to be sound, possibilities for upscaling worldwide (Nile, Mekong, vulnerable islands) will be considered.



Main goal within GO-FRESH is to improve the use of existing fresh groundwater resources and create new freshwater reserves, thereby increasing regional self-sufficiency and reducing dependence on external freshwater supply. Research already takes place on theoretical feasibility of possible measures. Building on this knowledge, the research goals are: to investigate which measures actually 'work' in practice, and to analyse whether such measures are economically feasible.

Promising technologies

- Showcase 'The Freshmaker'; aquifer storage and recovery (ASR) utilizing the potential of sandy creek ridges for water storage
- Showcase 'Creek Ridge Infiltration Test'; infiltration via drainage utilizing the potential of sandy creek ridges for water storage
- Showcase 'Drains2Buffer'; optimizing the freshwater volume in shallow rainwater lenses



Project partners

The province of Zeeland, ZLTO, the Water Boards
Scheldestromen and Brabantse Delta, the municipality
Schouwen-Duiveland and STOWA all contribute to the project,
from a financial contribution to inserting local expertise,
arranging permits and taking care of small water management
measures.

Contact

Deltares
Gualbert Oude Essink
Subsurface and Groundwater Systems
3508 AL Utrecht
The Netherlands





