

TACKLING DROUGHT ON HIGH SANDY GROUND

Drought can be combatted by improving water retention. WUR is going to lead the way with the Klimap project.

This is the third consecutive year that the Netherlands has experienced extremely dry conditions. It is impossible to control rainfall, but once rain has fallen, the water could be put to much better use. WUR and 23 other parties will join forces to achieve this through a project called Klimap (short for 'climate adaptation in practice'). The project leader is Myriam de Graaf of the Soil, Water and Land Use chair group. De Graaf won't be able to solve the whole drought problem at one go. 'But Klimap does map the route towards more climate-proof land use.' The approach targets the sandy soils on higher ground in the Netherlands, where the drought is worst. In essence, the method is simple. 'We must fend for ourselves,' De Graaf states. 'We must use as much of the water as we can, rather than letting it just flow into the sea.' Various water authorities, provincial governments and research institutes are collaborating in Klimap, designing 'development paths' to get everyone on the same page. 'These are descriptions of the pro-

cess, meant to ensure everyone is aware of their particular role,' De Graaf clarifies. 'What path does your role require you to take? What should water authorities do and how can you motivate farmers and nature managers?'

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In addition to these development paths, the project also addresses the measures needed in order to protect the country from drought. The measures and methods will be test-

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ed in living labs and trial plots. 'We don't have to start from scratch,' De Graaf stresses. 'Much has already been developed in this area.' She gives the example of the Lumbricus project (*lumbricus* is Latin for worm), which maps and analyses climate adaptation measures in the field. 'Consider, for example, research on the effect of worms on the soil's infiltration capacity,' De Graaf ex-



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plains, 'or the use of sub-irrigation.' Sub-irrigation is a type of reversed drainage, where the tubes that normally serve to drain excess water are used to supply water instead. 'This research could be extended to include a study on the effects of sub-irrigation on the quality of groundwater, or other information that has been lacking to date.' A third branch of the project is calculating the potential effect of local

measures on the water system on a larger scale. In other words: how would a measure help combat climate change if it was upscaled? The Klimap project spans four years and will cost six million euros. Its financiers include the Top Sectors, water authorities and provincial governments. Nature organizations and other water users will provide a sounding board for the project. **IK**

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