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Creating a testing field where delta technology and water innovations are tested and demonstrated with the help of citizen science methods

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In highly populated deltas, much work is to be done. Complex problems ask for new and knowledge driven solutions. Innovations in delta technology and water can bring relief to managing the water rich urban areas. Testing fields form a fundamental part of the knowledge valorisation for such innovations. In such testing fields, product development by start-ups is coupled with researchers, thus supplying new scientific insights. With the help of tests, demonstrations and large-scale applications by the end-users, these innovations find their way to the daily practices of delta management.
More and more cities embrace the concept of Smart Cities to tackle the ongoing complexity of urban problems and to manage the city's assets – such as its water supply networks and other water management infrastructure. Through the use of new technologies and innovative systems, data are collected from and with citizens and devices – then processed and analysed. The information and knowledge gathered are keys to enabling a better quality of life. By testing water innovations together with citizens in order to find solutions for water management problems, not only highly spatial amounts of data are provided by and/or about these innovations, they are also improved and demonstrated to the public.
A consortium consisting of a water authority, a science centre, a valorisation program and two universities have joined forces to create a testing field for delta technology and water innovations using citizen science methods. In this testing field, the use of citizen science for water technologies is researched and validated by facilitating pilot projects. In these projects, researchers, start-ups and citizens work together to find the answer to present-day water management problems.
The above mentioned testing field tests the use of crowd-sourcing data as for example hydrological model inputs, or to validate remote sensing applications, or improve water management decisions. Currently the testing field starts two pilot projects concerning (1) the validation of green measures used for water storage in order to better quantify their worth, and (2) the collection of water quality data in a polder polluted by horticulture in such manner that water management and awareness are improved.