



FAIRshare

DIGITAL TOOLS FOR FARM ADVISORS



2018-2023



31 partners



6,99M

Findable, Available, Interoperable,
Reusable and Shareable

FAIRShare aims to improve farmer engagement with digital technologies through sharing, adapting and enabling more use of digital advisory tools and services (DATS)

Practice abstract n°12

Estimating crop water requirements using sensors and soil modeling



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Estimating crop water requirements using sensors and soil modeling

Context

Inside greenhouses, the water needs of vegetables are not the same as outside. A good option for saving water is to have a tool that can estimate the water needs of crops using water status sensors. Such a tool helps farmers to make good decisions about how much water to supply to their crops through irrigation. Soil sensors are already used by farmers, but they do not always take into account soil heterogeneity.

Advantages of a crop water requirement estimation tool using sensors and soil modeling are:

- eco-friendly, because it saves water, especially in arid areas
- economically beneficial, because farmers have lower water costs
- transferable, thanks to the parameters that can be changed to suit the appropriate climate.

➤ An example of such a tool is STEP-water: Healthy Crops, Clean Water. Check the FAIRshare DATS Inventory for more details:



Recommendations

- The ideal tool should combine soil sensors with soil models to ensure that the required quantity of water is applied through irrigation. In this way the amount of water needed is easily calculated.



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Consortium

