

# FAIRWAY

FARMERS, AGRICULTURAL ADVISORS, WATER QUALITY MANAGERS, POLITICAL DECISION-MAKERS, MODEL DEVELOPERS, RESEARCHERS

Many decision support tools, with a high numbers of users, give advice on smart use of nutrient and pesticides. However, very few consider water quality directly or include mitigation measures to reduce water contamination.

# CONTACT

WEBSITE: <u>www.fairway-is.eu</u> EMAIL: fairway@wur.nl

#### **FURTHER DETAILS**

Nicholson, F.A. et al. (2018) Survey and Review of Decision Supports Tools. FAIRWAY Project Deliverable 5.1 166 pp

Nicholson, F et al. (2020) How Can Decision Support Tools Help Reduce Nitrate and Pesticide Pollution from Agriculture? A Literature Review and Practical Insights from the EU FAIRWAY Project. Water 2, 768.

#### ACKNOWLEDGEMENT



FAIRWAY received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 727984

# KEY MESSAGE

Many farm management tools promoting smart nutrient and/or pesticide use are available, but only a few explicitly consider the impact of mitigation methods on water quality.

## **EXPLANATION**

Decision Support Tools (DST) are used to improve decisionmaking on management practices. Of the many that are used in Europe to make effective decisions about use of fertilizers and pesticides, only few include specific mitigation measures to reduce losses to water. Instead, in most cases the tools take a holistic approach aimed at improving the efficiency of the resources used through sophisticated management.

## **EVIDENCE**

FAIRWAY conducted a literature survey and review of DSTs currently used by farmers, advisers, water managers and policy makers in the <u>FAIRWAY case studies</u> and countries. Of the 36 DSTs that were identified as most relevant to managing nitrate and pesticide usage to prevent water contamination, only three tools were explicitly developed to consider the impact of mitigation methods on water quality:

- FARMSCOPER (UK) 100 mitigation methods can be tested individually or in combination
- ENVIRONMENTAL YARDSTICK FOR PESTICIDES (NL) 4 mitigation methods
- CATCHMENT LAKE MODELLING NEWTORK 5 mitigation methods



Increased use of clover is one of the mitigation measures considered by FARMSCOPER.