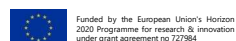


## FAIRWAY Introduction

Gerard Velthof

Wageningen Environmental Research



1

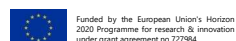
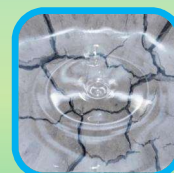
## FAIRWAY

H2020 project: Water farms – improving farming and its impact on the supply of drinking water (RUR-04-2016)

Objective: To contribute to a more effective protection of drinking water resources against nitrate and pesticide pollution from agriculture

- Indicators, measures, decision support tools, governance approaches
- together with relevant actors

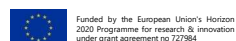
Period 1 June 2017 – 30 November 2021



2

## 22 Partners in 11 countries

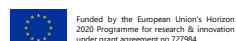
Partner	Acronym	Country
Wageningen Research	WUR	NL
RoyalHaskoning-DHV	RHDHV	NL
Wageningen University	WU	NL
BRGM	BRGM	FR
Landbrug/SEGES	SEGES	DK
NIVA	NIVA	NO
Univerza v Ljubljani	UL	SI
Fondazione per lo Sviluppo Sostenibile del Mediterraneo	MEDES	IT
CLM	CLM	NL
Thünen Institute	Thuenen	DE
Coimbra Polytechnic Agri. School	IPC/ESAC	PT
University Lincoln	UoL	UK
ICPA	ICPA	RO
Aristotle University of Thessaloniki	AUTH	EL
Agri-Food & Biosciences Institute	AFBI	UK
Aarhus University	AU	DK
GEUS	GEUS	DK
RIVM	RIVM	NL
Kmetijsko gozdarski zavod Maribor	KGZ Maribor	SI
ADAS	ADAS	UK
LWK (Chamber of Agriculture)	LWK	DE
Scienceview Media B.V.	Scienceview	NL



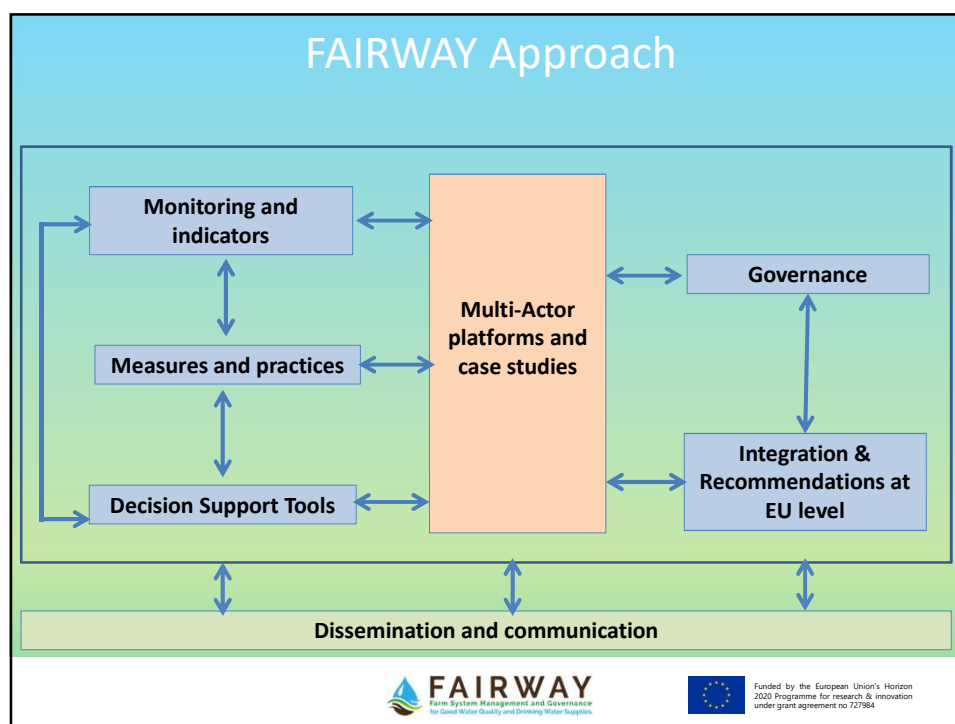
3

## 13 case studies in 11 countries

- 1 Island Tunø, Denmark
- 2 Aalborg, Denmark
- 3 Anglian Region, England
- 4 La Voulzie, France
- 5 Lower Saxony, Germany
- 6 Axios river, Greece
- 7 Derg catchment, Northern Ireland
- 8 Overijssel, Netherlands
- 9 Noord-Brabant, Netherlands
- 10 Vansjø, Norway
- 11 Baixo Mondego, Portugal
- 12 Arges-Videa, Romania
- 13 Dravsko Polje, Slovenia




4



5

### Key messages: Multi actor platforms

- Function well as platforms for exchange of opinions and ideas
- Sharing of perspectives and trust between key actors is a necessary condition for common understanding
- They do not necessarily lead to desired impacts on water quality
- There is no generic formulation



**FAIRWAY**  
Farm System Management and Governance  
for Good Water Quality and Drinking Water Supplies

Funded by the European Union's Horizon 2020 Programme for research & innovation under grant agreement no 727984

6

## Key messages: Indicators

Agri-drinking water quality indicators are useful at all spatial levels (from farm to EU)

The agricultural N surplus indicator is identified as most effective and easy to use indicator regarding nitrate contamination of water  
→ but differences in calculation of N budgets

For pesticides, there is not a similar indicator, because of the many compounds that are used.

The time lag between agricultural pressure and effect on water quality is an important indicator to be used in drinking water protection



7

## Some key messages: Measures

Reduction of pesticide pollution of water demands a combination of input reduction, farm system redesign, and point source mitigation

Balanced N fertilization and cover crops are most promising measures to reduce nitrate leaching

Implementation of nitrate measures should not only consider the effectiveness and costs, but also the risk on pollution swapping to other emissions



8

## Some key messages: DSS tools

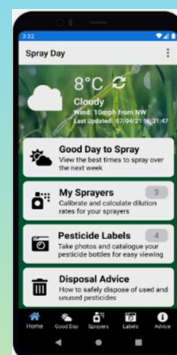
Decision support tools are helpful in advising farmers of best practice and planning in the application of fertilizers and pesticides

Many management tools are available:

<https://www.dstframework.com/>

Only a few tools explicitly consider the impact on water quality

Key obstacles to exchange tools between countries include differences in legislation, advisory frameworks, country-specific and geo-climate data and language issues



Funded by the European Union's Horizon 2020 Programme for research & innovation under grant agreement no 727984

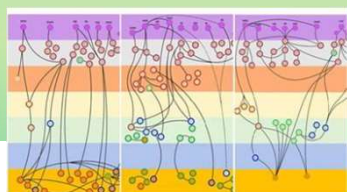
9

## Some key messages: Governance

The legal framework for protection of drinking water resources against pesticides and nitrates is very comprehensive and fragmented

Complexities and inconsistencies in EU legislation become most explicit at the local level where measures have to be taken and effects monitored

Improving correlations between directives, policies, objectives and requirements will strengthen the overall policy framework towards protection of drinking water resources from agricultural pressures



Funded by the European Union's Horizon 2020 Programme for research & innovation under grant agreement no 727984

10



# Thank you!

<https://www.fairway-is.eu/>



facebook  
Groups





**FAIRWAY**  
Farm System Management and Governance  
for Good Water Quality and Drinking Water Supplies



Funded by the European Union's Horizon  
2020 Programme for research & innovation  
under grant agreement no 727984