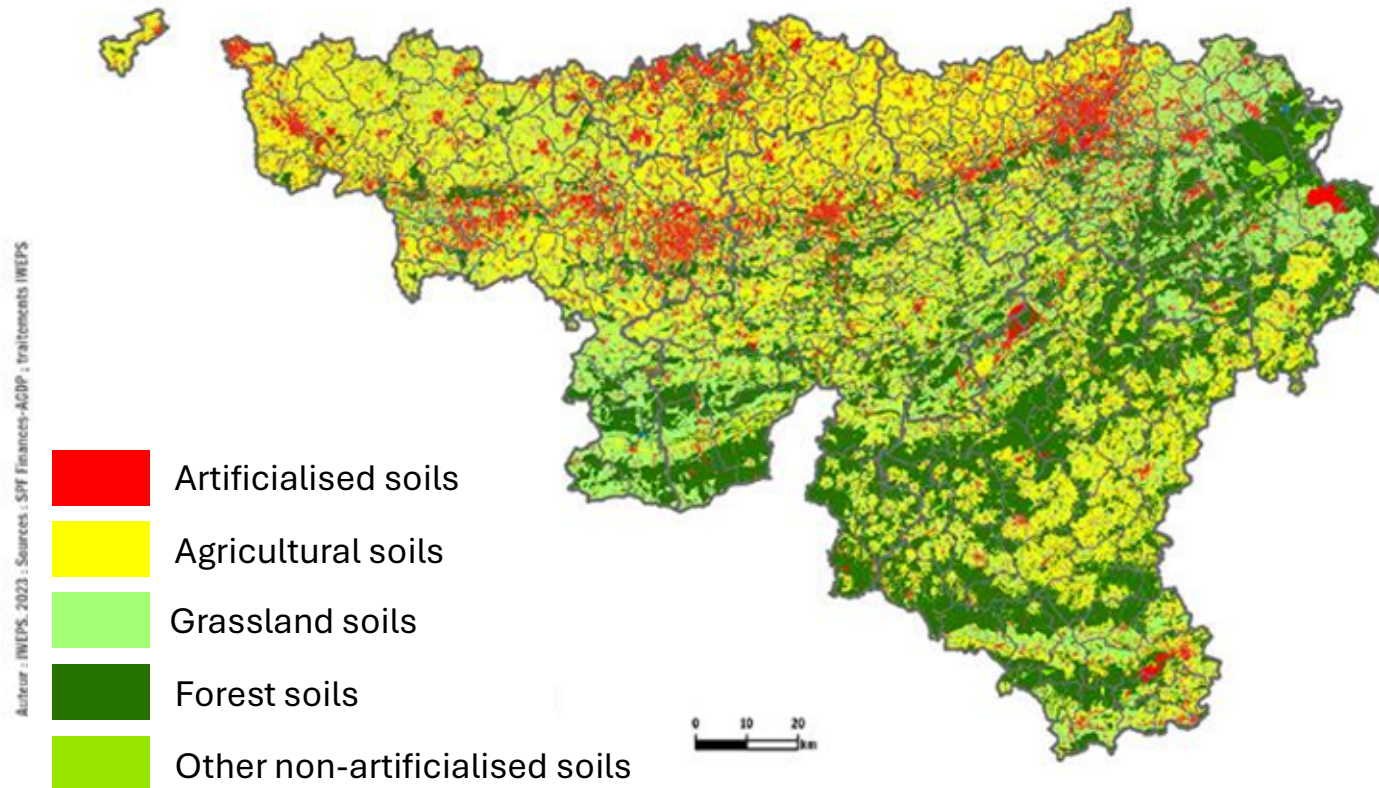


IQSW: a tool for objectifying soil ecosystem services

Walloon Soil Quality Index

IQSW, IQSB : two different indices for one small country ?

IQSW → Diversity of land uses

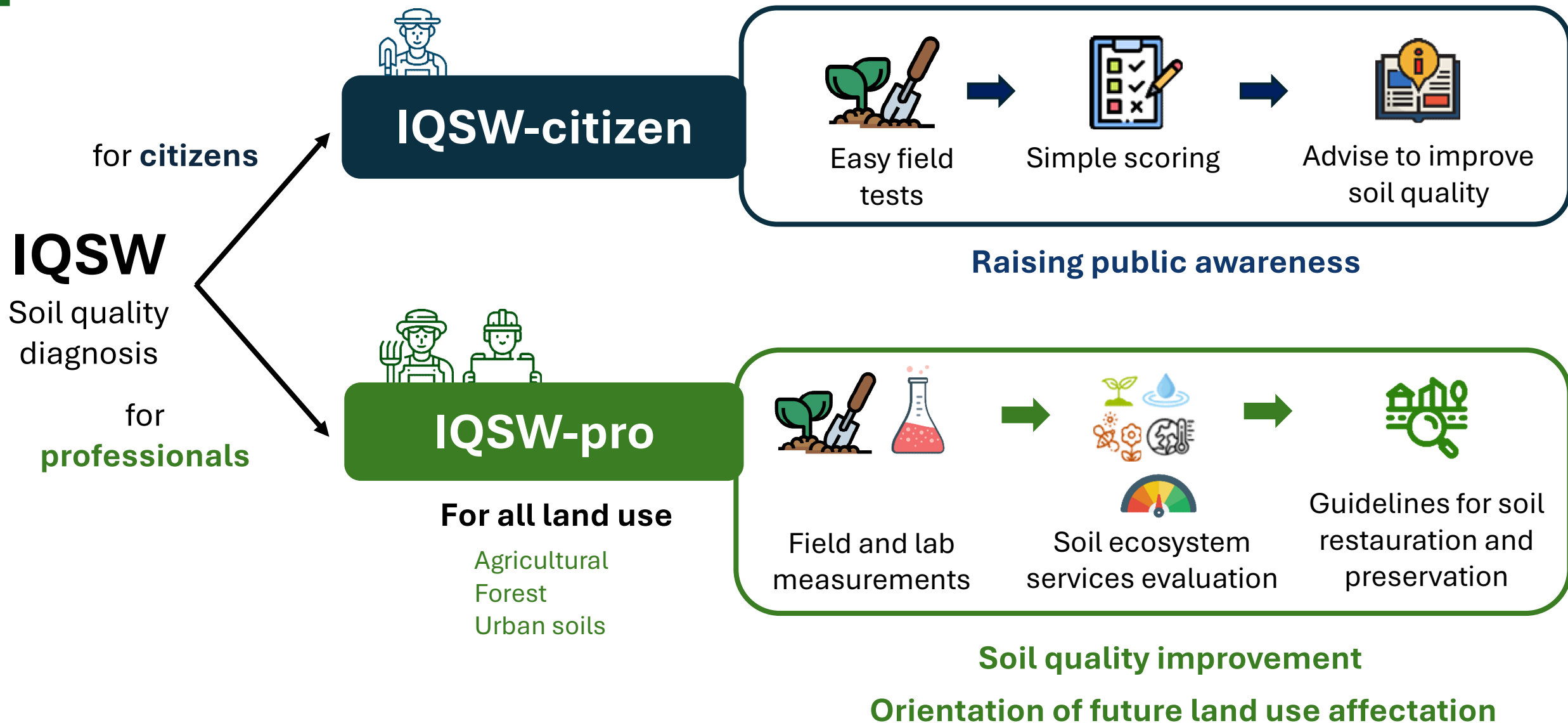


Link with management objectives



Soil ecosystem
services evaluation

Many stakeholders → Co-design



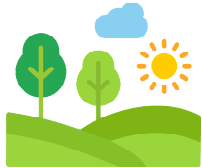
IQSW-citizen

A tool to raise public awareness



Getting to know your soil...
so you can use it better, improve it and protect it!

1 Homogeneous area identification



2 Observation of surface condition



3 Soil quality diagnosis



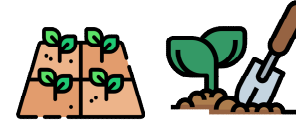
4 Interpretation Encoding results



Diagnosis

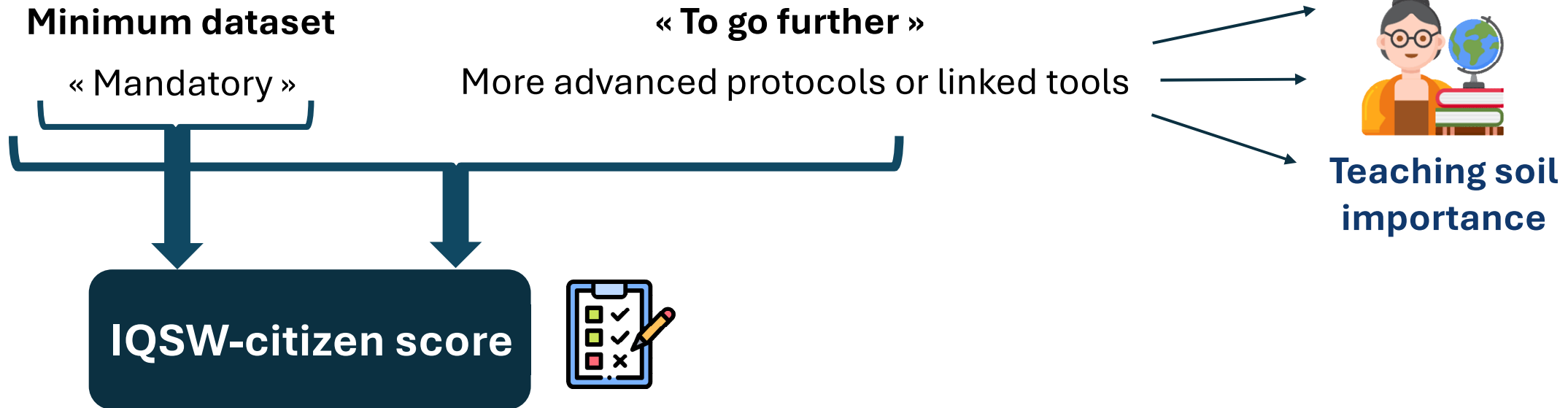


Diagnosis : a tiered approach



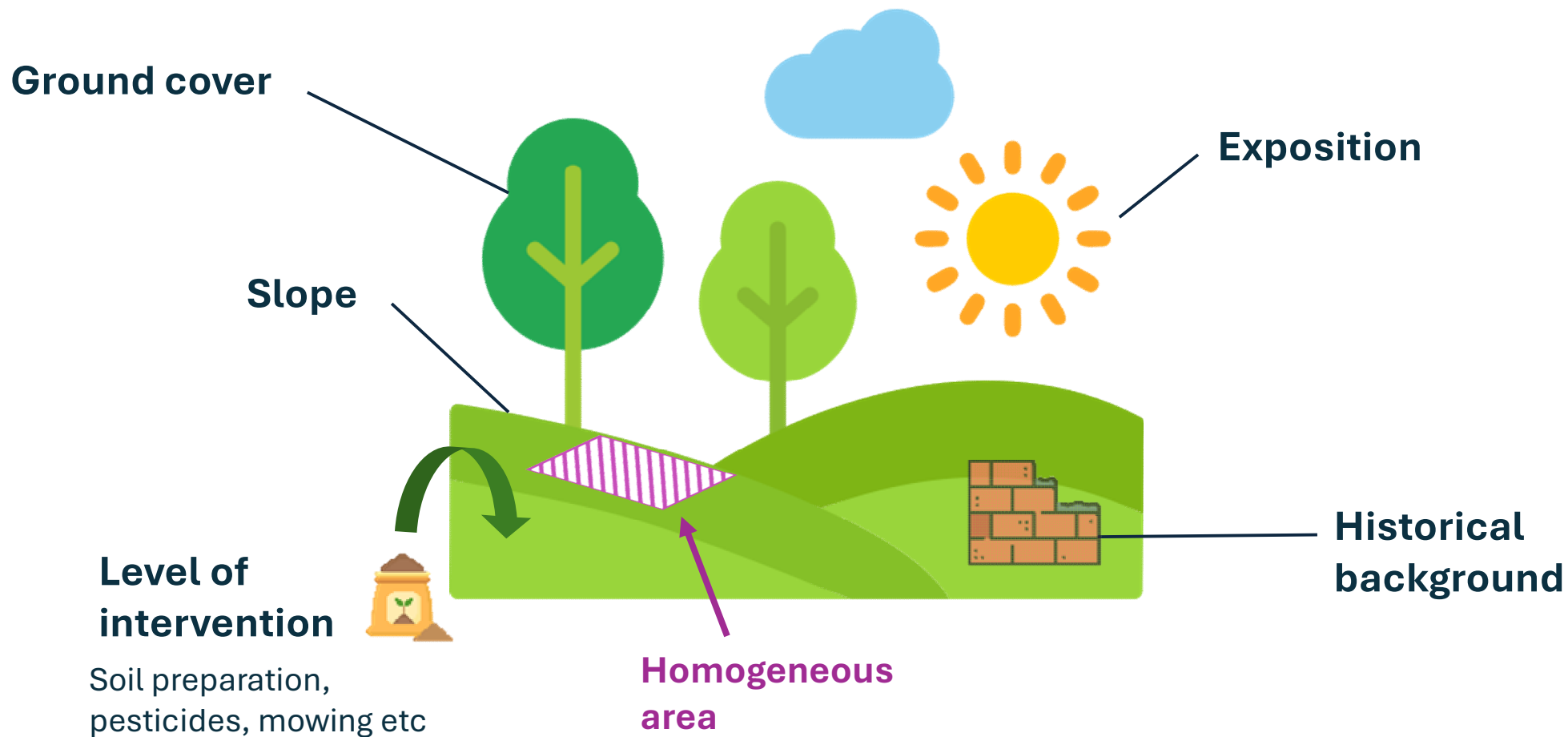
Protocols can be applied altogether to calculate a score...

... or picked-up individually
for pedagogic purposes





1 Homogeneous area identification



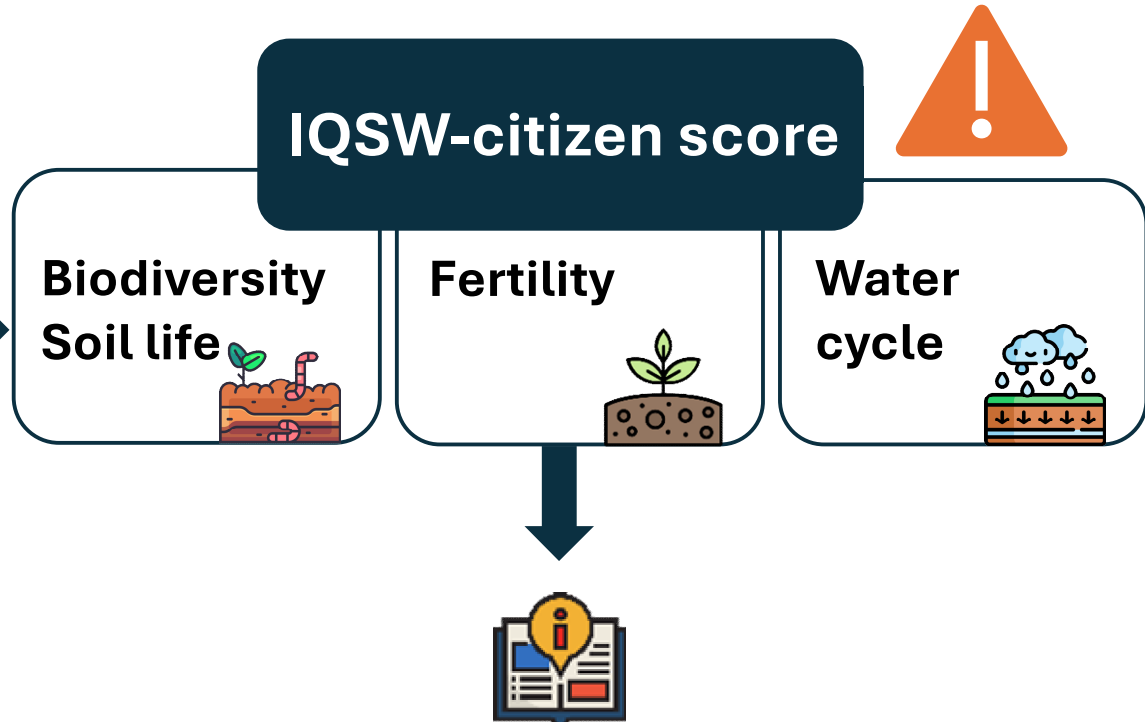


(+) Favourable and (-) declassifying parameters identification

Fertility	Biodiversity	Water	Pollution
2	2	2	0
0	0	0	0
-1	-1	-1	0
-2	-1	-2	0
2	2	0	0
0	0	-2	0
0	0	0	-1

IQSW.citoyen.be

Calculation



Chemical or biological pollution

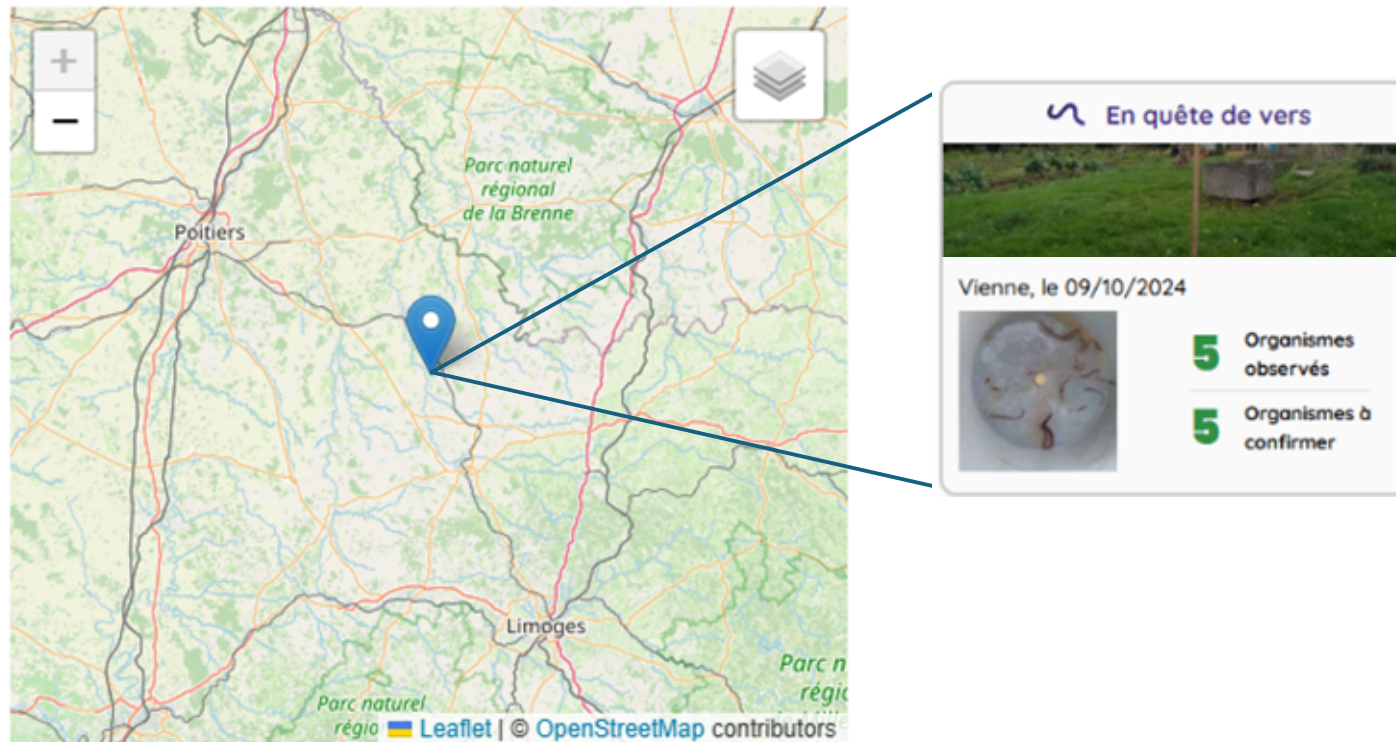




Participative data display

To enhance citizen involvement

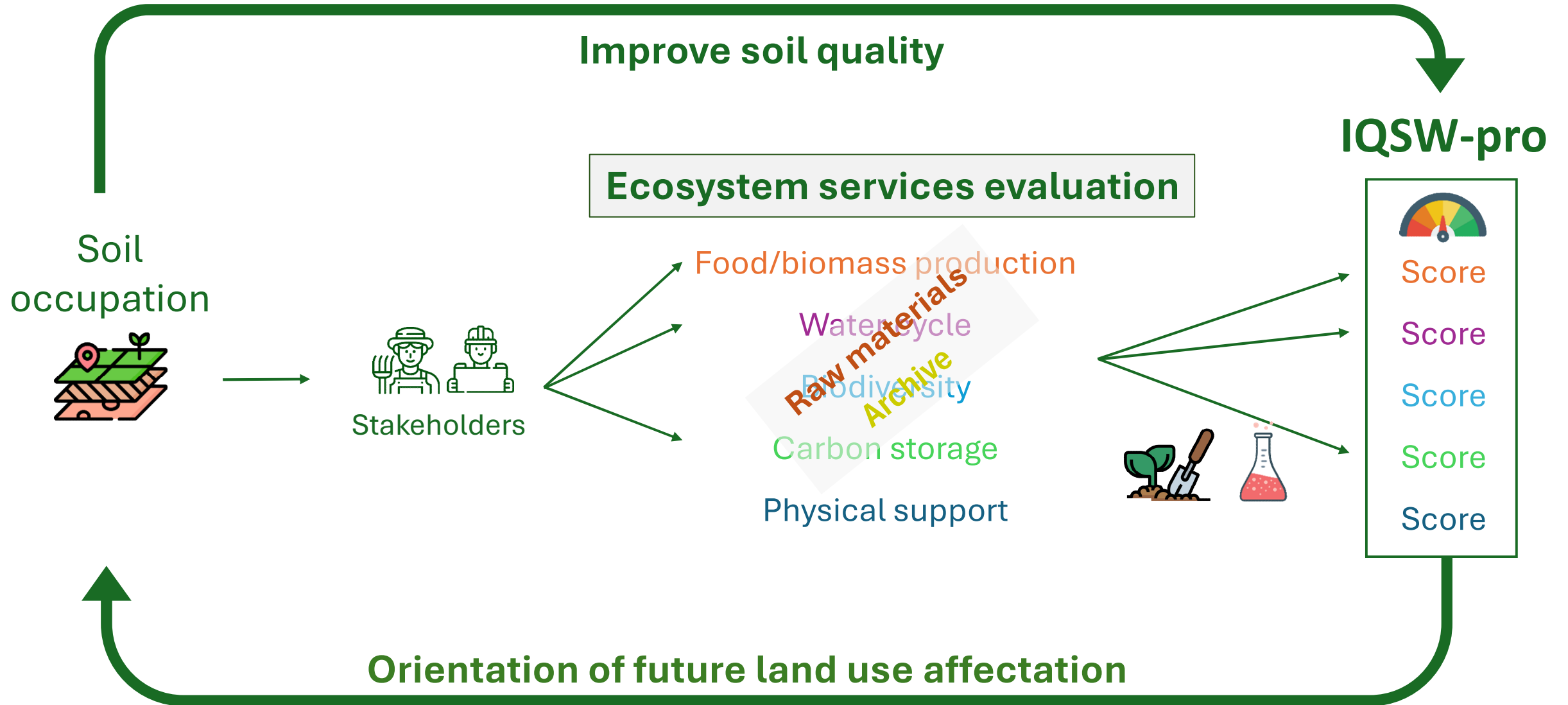
Inspiration from the French program QUBS



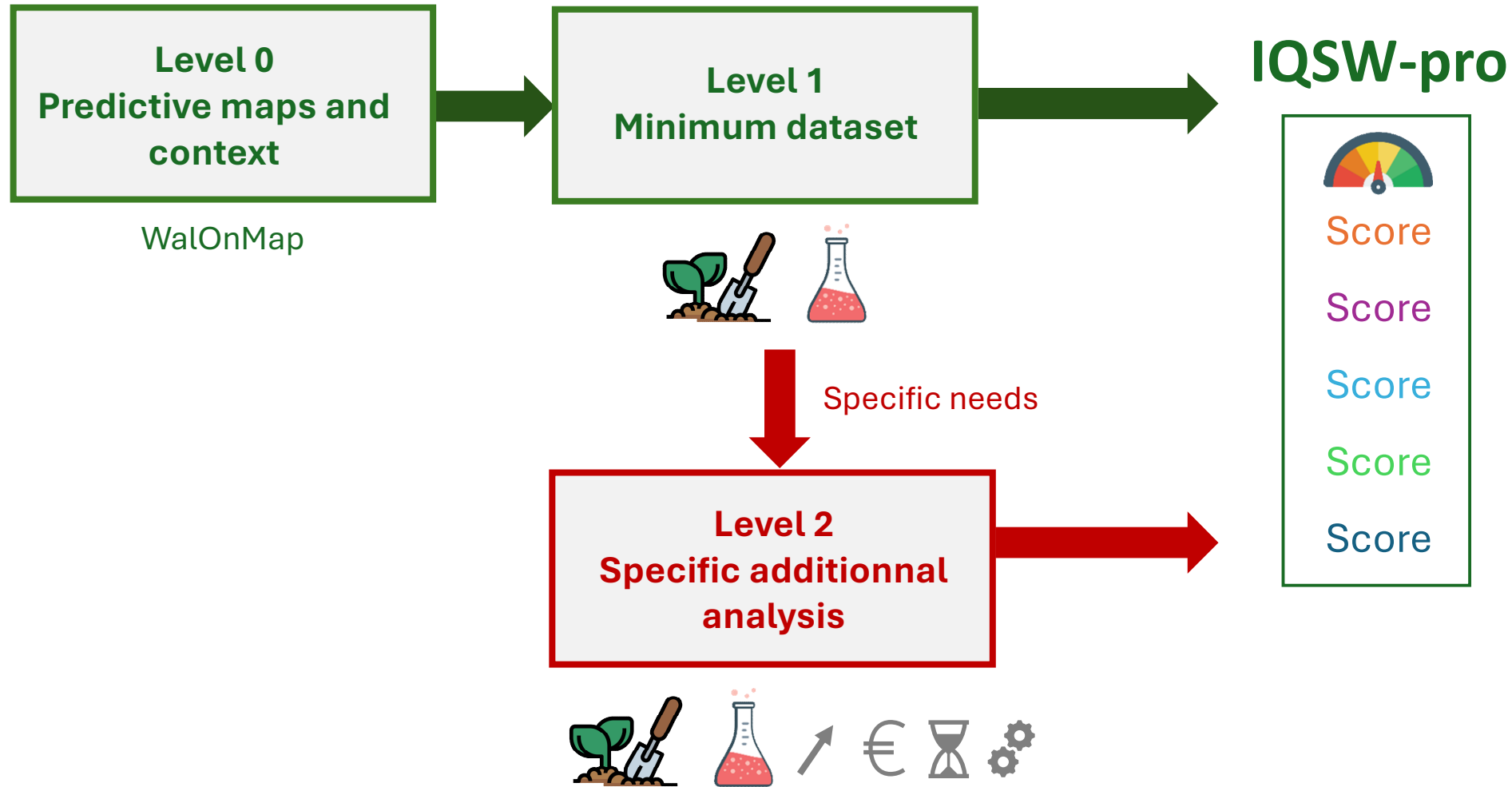
Source : qubs.fr

IQSW-pro

Towards a better integration of soils into land-use planning and management practices



Pro-IQSW : a tiered approach



Soil properties		Ecosystem services						
		Food/biomass production			Water cycle			...
		Food	Biomass	Forest	Infiltration	Purification	Storage	...
Physical	Hydraulic conductivity							
	Bulk density							
	...							
Chemical	Organic carbon							
	Nutrients							
	...							
Biological	Earthworm abundance							
	Bacterial diversity							
	...							



Review, consortium expertise, ...

Soil properties		Ecosystem services						
		Food/biomass production			Water cycle			...
		Food	Biomass	Forest	Infiltration	Purification	Storage	...
Physical	Hydraulic conductivity							
	Bulk density							
	...							
Chemical	Organic carbon							
	Nutrients							
	...							
Biological	Earthworm abundance							
	Bacterial diversity							
	...							



Walloon stakeholders priorities

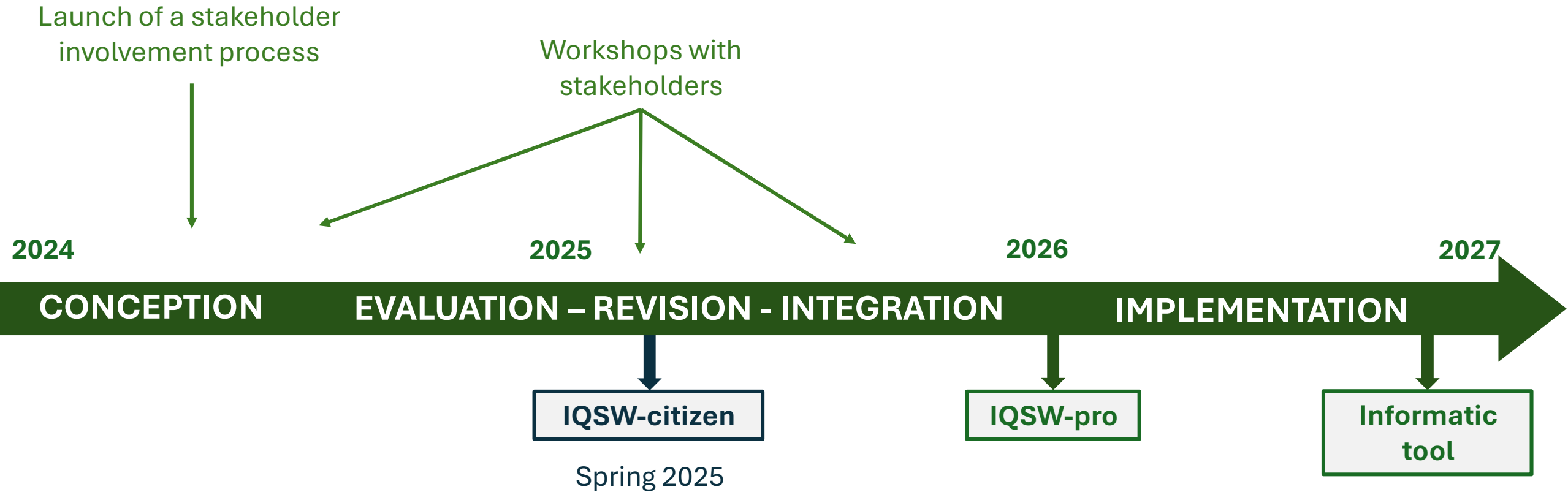
Prioritization

Soil properties		Ecosystem services						
		Food/biomass production			Water cycle			...
		Food	Biomass	Forest	Infiltration	Purification	Storage	...
Physical	Hydraulic conductivity							
	Bulk density							
	...							
Chemical	Organic carbon							
	Nutrients							
	...							
Biological	Earthworm abundance							
	Bacterial diversity							
	...							



Soil ecosystem
services evaluation

Agenda



For more information...



iqsw.be



contact@iqsw.be



**IQSW - Indice de Qualité
des Sols Wallons**

