

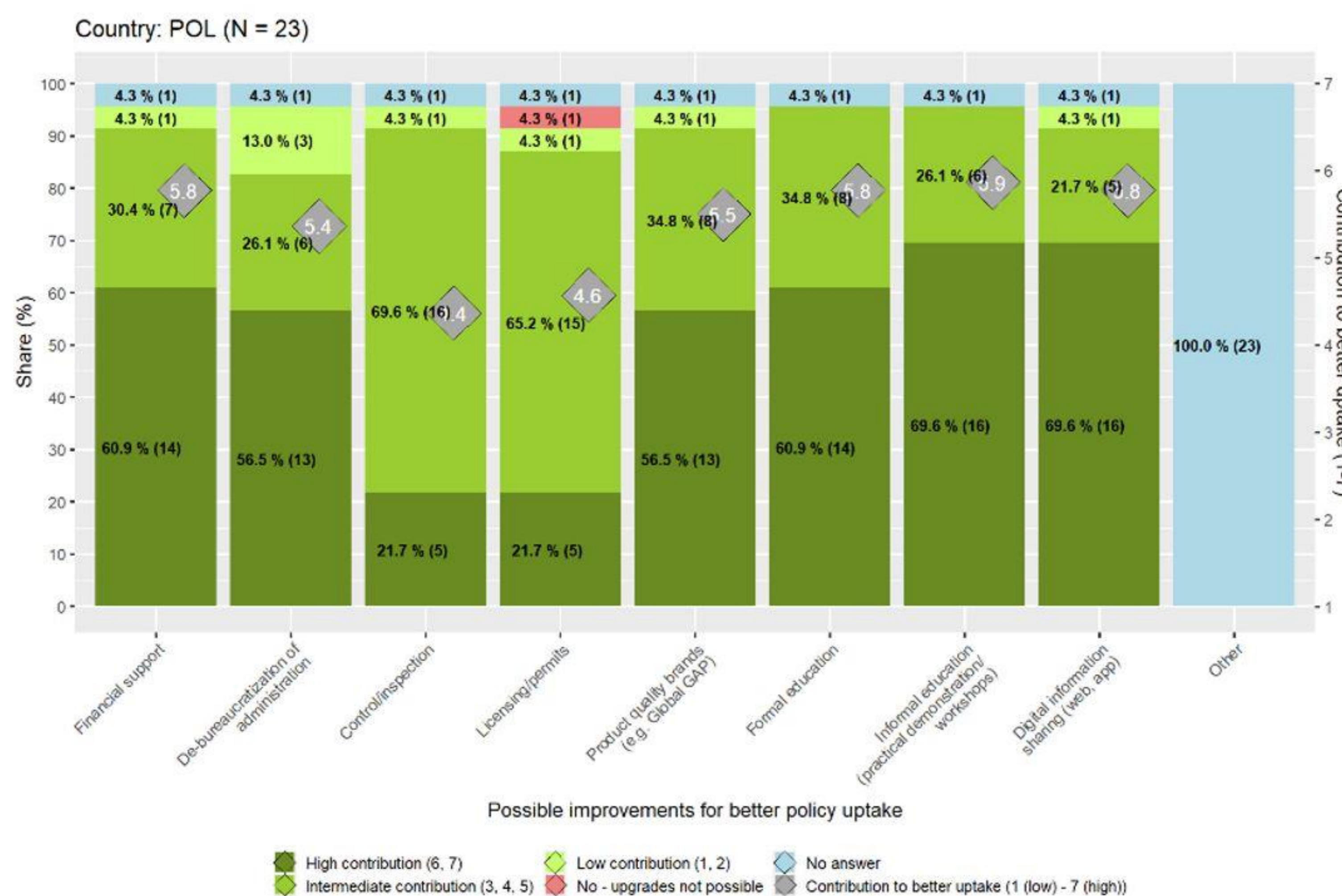
WULS/ITP-PIB STUDY SITE: Upper Zgłowiączka (Poland)

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POLICY SURVEY – key findings

- 23 informants filled in the survey
- In general, **ALL informants** agreed that the policy mechanisms are **NOT adequate**, for most of the environmental concerns with some exception for water quantity
- Barriers for implementing NSWRM: **administrative barriers** (5.3;5.4), **voluntary measures** (5.3;4.9), **low benefit-cost** (4.8; 4.8), **complicated implementation** (4.1;4.9), **control/inspection system** (4.6;4.4), **communication aspects** (4.6;4.3), **land-ownership** (3.7;4.1)
- Needs to improve: education, information and money!!! But many fields of improvement were indicated as nearly equally important



WOCAT – status of documentation

- Drafts for 4 measures created
- Most of technologies have been consulted with experts/owners/users
- Complementation of documentation with gained information is still pending

Technology	Description	Completeness
Mulching [Poland]	Mulching is the addition of undecomposed plant materials (commonly shredded), such as straw, hay or processing waste, to the soil under the plants. Sometimes it is practiced that crop residues are shallowly mixed with soil.	80%
Afforestation of reservoir catchments [Poland]	Afforestation of former fallow land to improve water storage and reducing nutrients leaching to nearby Głuszyński lake.	80%
Subsoiling [Poland]	Subsoiling is defined as tillage below a depth of 14 inches which doesn't invert soil. Subsoiling creates larger pores that increase rooting and infiltration.	67%
Wetland restoration and management [Poland]	Building a permanent and regulated outflow through ditches and earth dykes on peatlands located in the Biebrza National Park, to restore optimal feeding conditions for the preservation of the Greater Spotted Eagle population by restoring and extending spring pluvial floods, stopping the degradation of peat soils and shrubs and maintaining...	submitted

ALLOCATING MEASURES – workshop results

We presented our reasoning for allocation of measures and a map with proposed allocation. However, the discussion was rather limited, the stakeholders agreed with our reasoning but didn't discuss much particular measures.

Mulching

- Soils susceptible to drying and others exposed to wind and water erosion; *applied after corn regardless soil type, not applied on poor sandy soils*

Subsoiling

- Easily compacted soils (e.g. loamy-sandy); *common measure applied every 4 years on heavy soils*

Afforestation of reservoir catchments

- Watercourse and reservoir banks, wastelands and poor sandy soils, strongly sloping slopes, outcrops of aquifers, protection zones of intakes

Wetland restoration and management

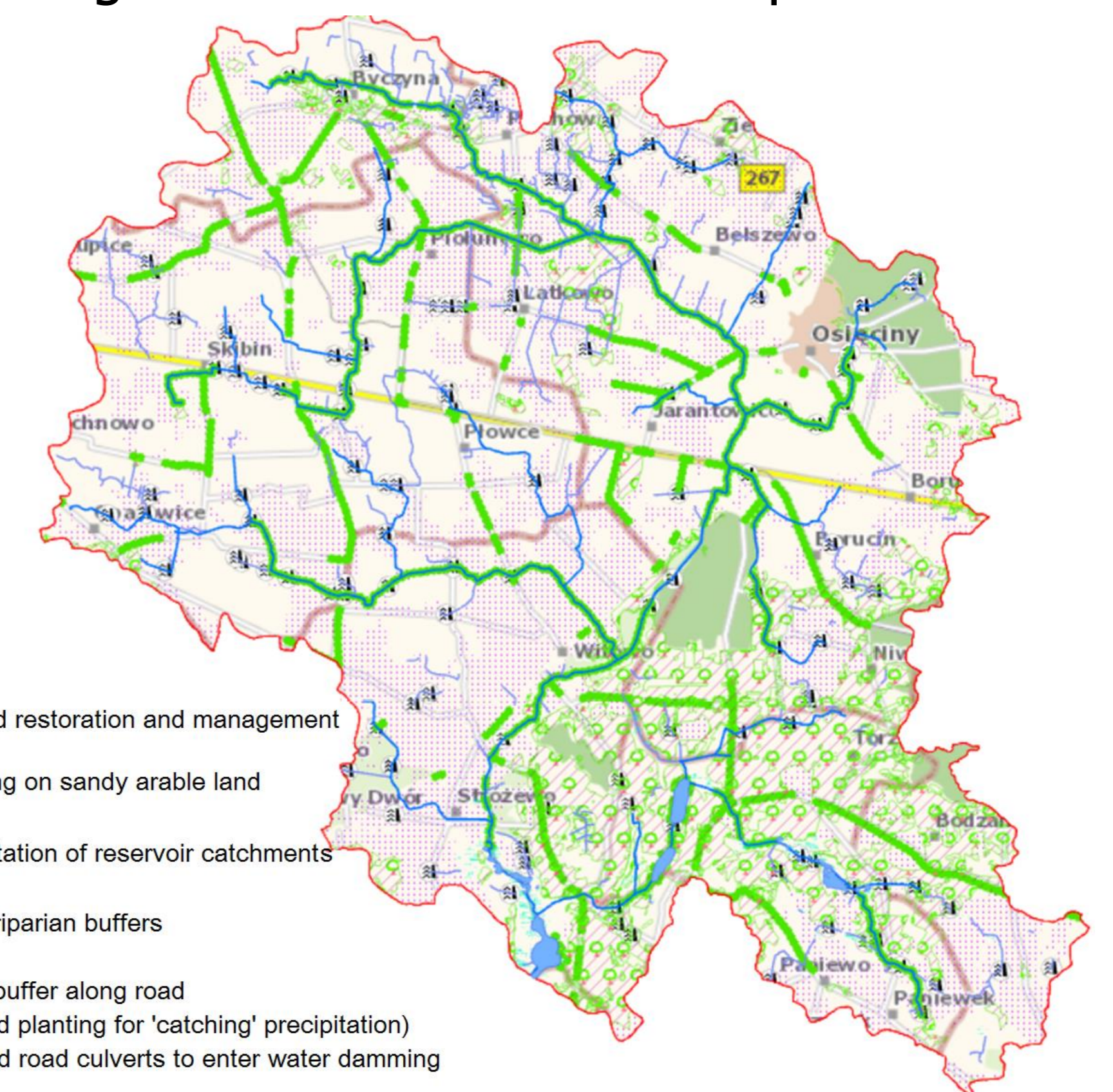
- Primarily degraded wetlands within drainage range of deep ditches; *high pressure from agriculture and recreation in dry years*

Construction of micro reservoirs on ditches

- Detailed drainage network and deep ditches above culverts; *numerous problems*

Infiltration reservoirs and ditches

- Near roads & built-up areas, existing ditches with nutrient rich water

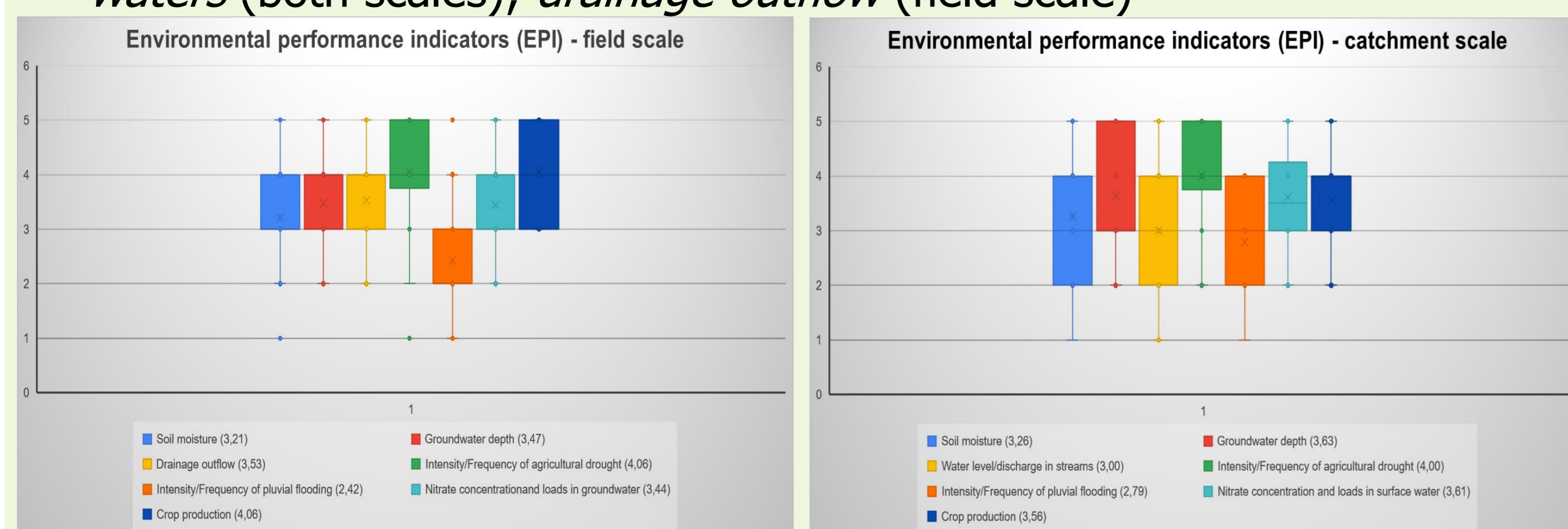


INDICATORS – workshop results

Questionnaire, scale 1 (least important) to 5 (most important), 19 stakeholders

Environmental performance indicators

- The most important: *droughts* (both scales); *crop production* (especially field scale)
- Also important: *groundwater depth*, *nitrate level in ground and surface waters* (both scales); *drainage outflow* (field scale)



Socio-economic performance indicators

- The most important: *implementation and maintenance cost*, *land use intensity* (both scales); *risk of environmental threats* (especially field scale)
- Also important: *total output value* (both scales); *factor productivity* (field scale); *quality of Głuszyńskie lake* (catchment scale)

