

MIRBAP: USING MODELS TO IMPLEMENT RESULT-BASED AGRI-ENVIRONMENTAL PAYMENTS

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Benefits of action-based payments

- Low costs of monitoring
- Payment certainty

Benefits of result-based payments

- High-effectiveness rather than least-cost sites
- Incentives to innovate
- Autonomy & local knowledge
- Cost-effective

Model informed result-based payments

- Combine the benefits of action-based and result-based payments
- Exploit advances in data availability, system understanding and computational capacities
- Use internet, mobile applications etc.

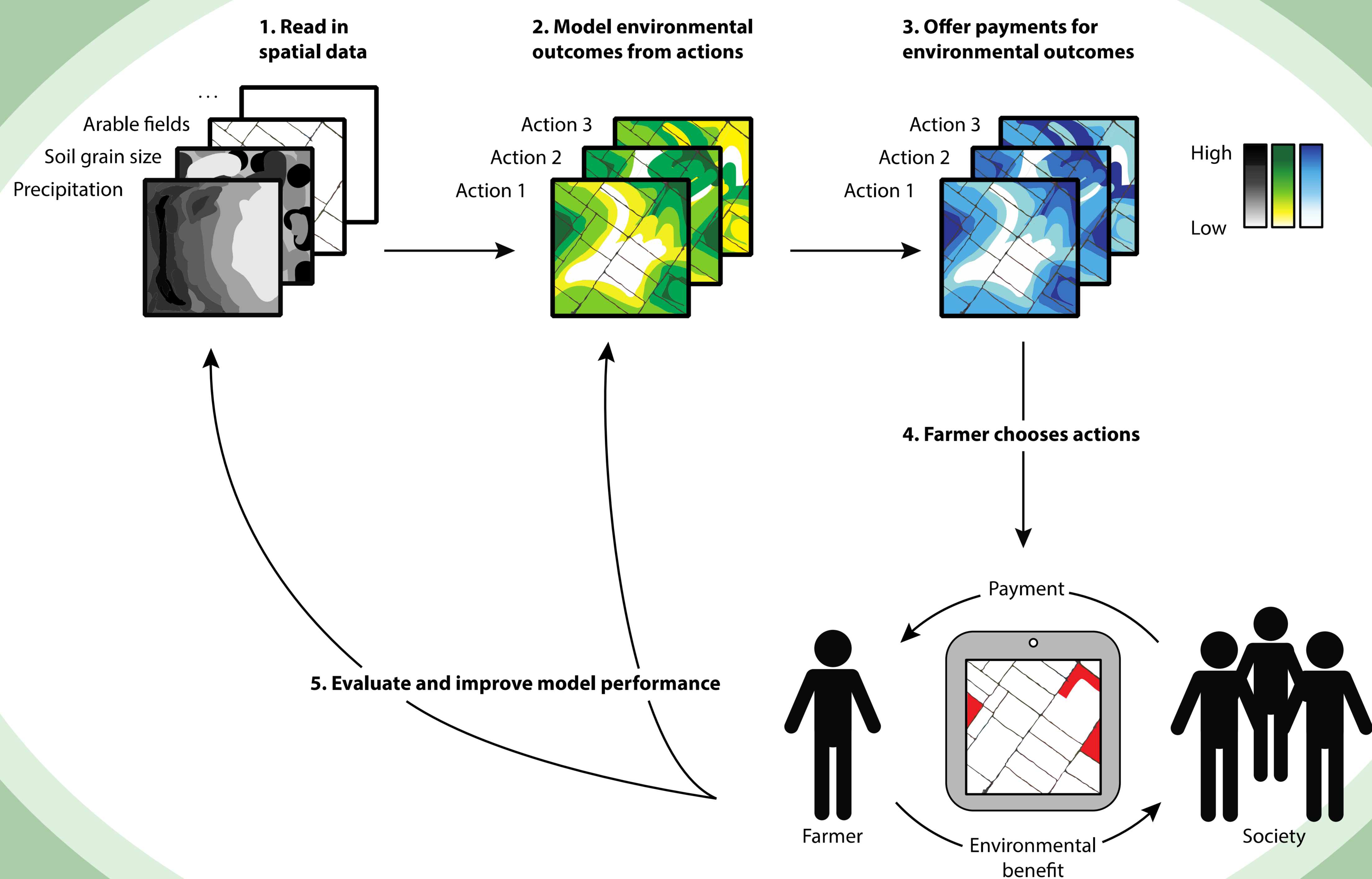


Fig. Model-informed result-based agri-environmental payments: MIRBAP

Criterion

Outcome certainty
Payment certainty
Additionality
Cost-effectiveness
Dynamic efficiency
Farmer autonomy
Multiple objectives
Long-term objectives

	Action-based	Result-based	MIRBAP
Outcome certainty	Orange	Green	Yellow
Payment certainty	Green	Yellow	Green
Additionality	Orange	Yellow	Green
Cost-effectiveness	Yellow	Green	Green
Dynamic efficiency	Orange	Green	Yellow
Farmer autonomy	Yellow	Green	Green
Multiple objectives	Yellow	Yellow	Green
Long-term objectives	Yellow	Yellow	Green

Orange < Yellow < Green

Open questions

- Acceptance by farmers and other stakeholders
- Predictive reliability of models
- Model flexibility & capacity to adopt new information
- User friendly design of software application