



➤ New measures to elicit risk attitudes of farmers

Task 1.2.2 Risk aversion and pesticide use

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What?

Accurate measure of the risk aversion of farmers

Why?

- pesticides -> **lower risk of loss** from farming
- pesticides applied **before** pests arrive
- if farming is a lottery, pesticides reduce its downside risk
- the higher the risk (loss) aversion, the higher the pesticide use



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What can we learn?

with a precise risk aversion measure...

1. estimation of **subjective costs** to farmers of cutting or eliminating pesticides;
2. amount of pesticides that could be cut by **imposing the risk-neutral** pesticide use;
3. potential adjustment of **policy** to individual (or sector) risk attitudes.



How?

State of the art in risk literature is **far from optimal**

- Despite experimental and empirical efforts, there are problems with the very *concept* of risk attitudes
- Experimental methods currently used have shown low external validity
- low correlation with questionnaires & field behavior

Aim: **developing new risk elicitation measure**

- takes into account **noise & cognitive abilities**
- takes into account risk **perception**
- theory and lab experiments in progress (ANR RETRISK)
- **FAST: application to the field and farmers**



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