



Actionable knowledge for precautionary risk governance

Prof. Dr. Jeroen P. van der Sluijs

Twitter: @Jeroen_vdSluijs



Center for vitenskapsteori

PP = **evidence-informed action** on uncertain risks

- Requires **scientifically underpinned grounds for concern**, not certainty, nor an exhaustive risk assessment

(PP ≠ principle of prevention!)

- Who or what gets the **benefit of the doubt** is a policy choice:
should be made explicitly

PP not only in risk management!

Risk assessment needs to be well-informed by the PP

- **Detect situations that require precautionary action** more adequately and timely
- Well-organised and timely collection of ***actionable knowledge*** is key for dealing prudently with uncertain risks
- Pluralization of expert knowledge in scientific assessment:

engage wider range of knowledge holders

Actionable knowledge



- Fit for **informing** decision-making and action
- Helps actors **implement** their **intentions** and realise their aspirations
- Resonates with the **concerns** for which it is raised
- Requires propositions that make explicit **the causal processes required to produce action** and identification of the **circumstances favourable for desirable outcome** or for **averting an undesirable outcome**.

Actionable knowledge for the PP

Explicit and transparent **problem scoping**

- What are relevant aspects of the problem?
- Set problem boundaries wide enough to **include** the **concerns** of those affected

Includes knowledge on:

- severity and nature** of potential adverse effects
- nature of the **uncertainties** on risks and proclaimed benefits
- knowledge **gaps**, known and unknown **unknowns**
- alternatives**

Risk assessment must be open to 'non-standard' knowledge

RECIPES cases showed:

- Blind spots in **overly reductionist** risk assessment protocols.
- Knowledge that do not fit in such protocols (e.g. end-points not covered by the protocols) is often downplayed, marginalised or ignored.
- Too often, coalitions of concerned scientists and societal actors need to **step in and 'break the script'** of routinised assessment and management processes to recognise key uncertainties and potential harm.

Further reading

- RECIPES Guidance:

<https://recipes-project.eu/results/guidance-future-application-precautionary-principle>

- Pollinator conservation requires a stronger and broader application of the precautionary principle

<https://doi.org/10.1016/j.cois.2021.04.005>

- Halting the pollinator crisis requires entomologists to step up and assume their societal responsibilities

<https://doi.org/10.1016/j.cois.2021.08.004>

- The science of actionable knowledge

<https://doi.org/10.1016/j.cosust.2020.03.007>