Uncertainty and scientific evidence

Laurens Smits
Head of Division Strategy and
Development
Plant Protection Service

Uncertainty?

- Risk as a state of uncertainty
- Risk analysis as a systematic approach to evaluate uncertainties, in order to be more certain on uncertainties
- Uncertainty is more certain than certainty

Uncertainty is part of life and society

- Uncertain about the (un)known future
- Uncertain about (un)known risks
- Interaction of uncertainty and perception of risk

SPS and uncertainty

- Concept of scientific evidence to frame policy makers in "caring" for the health of humans, animals and plants;
- Precautionary principle and protectionism

Uncertainty?



Evidence?

• "risk"



"You are completely free to carry out whatever research you want, so long as you come to these conclusions."

Looking back

- Little experience in producing PRA's
- PRA work is a profession/ art, learning by doing
- Methodology under construction internationally
- Socio economic considerations weak aspect of PRA's; Cost effectiveness and cost benefit analysis need more attention

Our procedure today

- Screening of new potential harmful organisms on the basis of incomplete information, available (scientific) evidence;
- Only if the initial screening strongly indicates a potential harmful organism a full PRA is produced, in the meantime emergency measures may be taken;
- Decision making on regulation on the basis of the PRA, including management options and a cost benefit analysis of the measures;
- Part of the PRA process is a consultation with stakeholders

Some observations

- PRA always on the basis of incomplete information, by definition
- Decision makers want always more scientific evidence regarding the potential risks, more ex-ante economic evaluation of the management options
- The risks of not acting!
- Lack of resources for PRA work
- Frustrations on both sides, risk analysts vs.
 Risk managers

Risk analysis for pesticides

- Admission only after very serious evaluation (inductive and deductive approach)
- Admitted (old) pesticides (active substances) re-evaluated on the basis of new criteria
- Scientific evidence important basis for admission
- Costs of regulation mainly borne by industry
- Precautionary approach

Risk analysis for harmful organisms

- Longer history,
- More gut feelings and tradition,
- Protectionism
- Consensus on risks more important than scientific evidence
- Poor mans world
- Costs borne by governments

Looking forward

- Urgent need for a smooth European process of risk assessment, management and communication;
- With defined roles for EPPO, NPPO's, EFSA, European Commission;
- Systematic evaluation of already regulated organisms and pests using (new) scientific evidence?

Scientific evidence?

- Only search for scientific evidence when challenged?
- Constant search for scientific evidence as part of fytosanitary policy
- Are we prepared to challenge other countries on fytosanitary measures?

Phythophtora ramorum

- Emergency measures in UK;
- PRA in co-production of UK and Netherlands
- Decision in PFC on the basis of management options
- Measures are provisional
- EU financed project to obtain scientific evidence on actual spread and effect measure taken.

Future?

- Things are improving;
- Better international cooperation
- More research undertaken to underpin regulatory work
- Do we need a catastrophe like BSE?

Assessment of risk

- Available scientific evidence
- Relevant economic factors
- Potential damage in terms of loss of production or sales in case of entry, establishment or spread of a disease
- Cost of control or eradication
- Relative cost effectiveness of alternative approaches to limit risks

Risk management

 "Members seek to obtain additional information to review measures within reasonable period of time....." *