

Stakeholder attitudes towards pesticide risk assessment

WP6 – Tasks 6.1 and 6.3

Partners: Freshfel, RIVM, PSD and UGent

Wim Verbeke

Ghent University, Belgium

Department of Agricultural Economics

wim.verbeke@UGent.be





Stakeholder attitude assessment

Stakeholders / representatives

- Pesticide industry
- Food industry, manufacturers, traders
- Food retailers, catering sector
- Regulators
- Non-governmental and consumer organizations
- Food authorities

Methods

- Exploratory in-depth interviews (task 6.1)
- Conclusive quantitative survey (task 6.3)



Acropolis

Aggregate and Cumulative Risk of Pesticides: an on-line integrated Strategy



Task 6.1 Qualitative assessment of stakeholder attitudes

- Exploratory in-depth interviews (n=15)
- Different stakeholder group represented
- Completed during May-November 2011
- Informed about project objectives and concept of aggregate and cumulative exposure assessment
 - Standardized information sheet or leaflet
 - Information poster



Task 6.1 Qualitative assessment of stakeholder attitudes

■ Topics:

- Overall reaction towards the objectives, concept and tool, including the concepts of aggregate, cumulative, variability, uncertainty, probabilistic
- Understanding and information needs
- SWOT and challenges

	Inputs	Tools	Outputs	...
Strengths				
Weaknesses				
Opportunities				
Threats				
Challenges				

Task 6.3 Quantitative assessment of stakeholder attitudes

- Quantitative survey, relative questions, benchmark
- Target n=80
- Timing: during first stakeholder conference
- Assessment of informed response through the use of a real-time online voting system
 - Participants are informed about the ACROPOLIS approach, its expected outcomes and specificities
 - After receiving information, participants are questioned and respond in real-time through on-line voting



Task 6.3 Quantitative assessment of stakeholder attitudes

- 7-point interval measurement scales
- Attitude, Perception, Liking, Understanding, Intention, Expectations
- Perceived institutional / societal benefits
- Perceived institutional / societal risks
- Perceived regulatory challenges
- Perceived usefulness and practical applicability
- Subjective and objective understanding
- Information needs



Acropolis

Aggregate and Cumulative Risk of Pesticides: an on-line integrated Strategy



Task 6.3 Quantitative assessment of stakeholder attitudes

- Quantitative descriptive analysis
- Software SPSS 19.0
- Reporting as Deliverable 6.8 "Stakeholder attitudes towards cumulative and aggregate exposure levels and their level of understanding of the concept (findings from T6.1 and T6.3)"
- Publication as journal paper



Aggregate and Cumulative Risk of Pesticides: an on-line integrated Strategy



Task 6.3 Quantitative assessment of stakeholder attitudes

Stakeholder identification

Q1. My organisation :

1. Non-governmental or consumer organisation
2. Retailer, retail organisation or association, or catering sector
3. Regulator
4. Food authority
5. Agriculture, farmers, farmers' association (primary production)
6. Pesticide industry
7. Food processing industry, food manufacturer
8. Trader or trade association
9. Other (e.g. science, ...)

Stakeholder identification

Q2. I have years of experience in the field of pesticides

1.< 5 years

2.5 - 10 years

3.11 - 15 years

4.16 - 20 years

5.> 20 years

Q3. Attitude towards the use of pesticides

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7
Strongly disagree		Neither agree nor disagree				Strongly agree

Q3.1 The use of pesticides in agriculture is a necessity.

Q3.2 The use of pesticides in agriculture is necessary if one wants to feed the growing world population with good quality food.

Q3.3 The use of pesticides in agriculture is necessary for economic reasons (farm income, food affordability, industry competitiveness).

Q4. Attitudes towards pesticide residue

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7
Strongly disagree		Neither agree nor disagree				Strongly agree

Q4.1 Current pesticide residues in food do not cause major food safety risks for consumers.

Q4.2 The threat of pesticide residues is overestimated.

Q4.3 Media exaggerate the problem of pesticide residues.

Q5. Current monitoring of pesticide residues

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7
Strongly disagree		Neither agree nor disagree				Strongly agree

Q5.1 The current monitoring of pesticides residues in food is adequate.

Q5.2 The current monitoring of pesticides residues in food is timely (analysis and reporting happen fast enough).

Q5.3 The current monitoring of pesticides residues is consistent across Europe.

Q6. Perceived problem of exposure

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

No problem at all Neutral Big problem

Q6.1 To what extent do you believe **cumulative** exposure is a real problem.

Q6.2 To what extent do you believe **aggregated** exposure is a real problem.

Q6.3 To what extent do you believe **combined cumulative and aggregated** exposure is a real problem.

Q7. To what extent is the concept of ... understandable to you ?



1



2



3



4



5



6



7

Not at all
understandable

Neutral

Perfectly
understandable

Q7.1 ... **cumulative** exposure assessment

Q7.2 ... **aggregated** exposure assessment

Q7.3 ... **variability** in exposure assessment

Q7.4 ... **uncertainty** in exposure assessment

Q8. Liking of Acropolis project

○
1
Do not like
at all

○
2

○
3

○
4
Neutral

○
5

○
6

○
7
Like it very
much

To what extent do you like/dislike ...

Q8.1 The overall aims of Acropolis

Q8.2 The methodological approach followed by Acropolis

Q8.3 The expected online Acropolis tool/model

Q9. To what extent do you believe the overall Acropolis exposure assessment tool / model will be ... ?



1



2



3



4



5



6



7

Q9.1 Useless

Neutral

Useful

Q9.2 Unappealing

Neutral

Appealing

Q9.3 Irrelevant

Neutral

Relevant

Q10. To what extent do you believe the concept of cumulative exposure assessment in Acropolis will be ... ?



1



2



3



4



5



6



7

Q10.1 Useless

Neutral

Useful

Q10.2 Unappealing

Neutral

Appealing

Q10.3 Irrelevant

Neutral

Relevant

Q11. To what extent do you believe the concept of aggregated exposure assessment in Acropolis will be ... ?



1



2



3



4



5



6



7

Q11.1 Useless

Neutral

Useful

Q11.2 Unappealing

Neutral

Appealing

Q11.3 Irrelevant

Neutral

Relevant

Q12. Perceived usefulness of tool for stakeholders



1



2



3



4



5



6



7

Not useful

Neutral

Very useful

To what extent do you expect the Acropolis tool will be **useful** for:

Q12.1 Food authorities

Q12.2 Regulators

Q12.3 Pesticide industry

Q12.4 Food (processing) industry, food manufacturers, traders

Q12.5 Non-governmental or consumer organisations

Q12.6 Retailers, retail organisations, caterers

Q12.7 Myself

Q13. Benefits or barriers of cumulative exposure assessment



1

Strongly disagree



2



3



4

Neither agree nor disagree



5



6



7

Strongly agree

Q13.1 Cumulative exposure can be assessed with a sufficiently low degree of uncertainty.

Q13.2 Cumulative exposure is a public concern that needs to be addressed.

Q13.3 Cumulative exposure assessment is difficult due to limited data available.

Q14. Benefits or barriers of aggregated exposure assessment

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

Strongly disagree Neither agree nor disagree Strongly agree

Q14.1 Aggregate exposure can be assessed with a sufficiently low degree of uncertainty.

Q14.2 Aggregate exposure is a public concern that needs to be addressed.

Q14.3 Aggregate exposure assessment is difficult due to limited data available.

Q15. Communication / Information needs



1

Strongly
disagree



2



3



4

Neither agree
nor disagree



5



6



7

Strongly
agree

Q15.1 The tool/model risks to be too complex to communicate.

Q15.2 The tool/model risks to be too complex to be useful.

Q15.3 The tool/model entails risks of confidentiality.

Stakeholder-targeted training is needed about ...

Q15.4 ... how to use the tool

Q15.5 ... how to interpret the results of the tool/model

Q16. Expected acceptability



1



2



3



4



5



6



7

Not at all acceptable

Neutral

Completely
acceptable

To what extent do you believe the Acropolis tool/model will be **acceptable** for:

Q16.1 Food authorities

Q16.2 Regulators

Q16.3 Pesticide industry

Q16.4 Food (processing) industry, food manufacturers, traders

Q16.5 Non-governmental or consumer organisations

Q16.6 Retailers, retail organisations, caterers

Q16.7 Myself

Stakeholder attitudes towards pesticide risk assessment

WP6 – Tasks 6.1 and 6.3

**THANKS FOR YOUR ATTENTION AND
COLLABORATION**

Wim Verbeke

Ghent University, Belgium

Department of Agricultural Economics

wim.verbeke@UGent.be