Crop protection in horticulture.

How to rescue growers from punishment for shortfall of control agents?

26 November 2013, Jan Buurma and Volkert Beekman



My passion

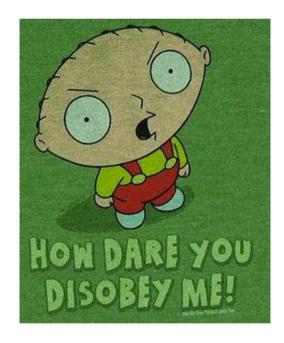
- Born on arable farm
- Educated in Wageningen
 - Agronomy
 - Business Economics
- 25 years in crop protection
 - Indonesia (1987-1992)
 - Netherlands (1995-date)
- Management of change
 - Reflection in 2002
 - Social relations





Shortfall of control options

- EU Directive 91/414
- EU Regulation 1107/2009
- Major decline in authorisations
- Shift to selective pesticides
- Outbreaks of emerging pests
- Unlawful use of pesticides
- Exceeding of residue limits
- Fines by Food Inspection Authorities
- Rejections by retail companies





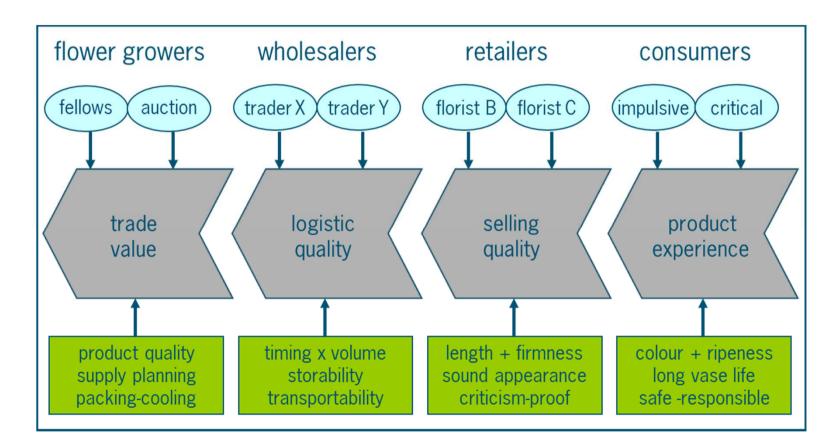
Process to progress

- Understanding mechanism
- Power relations and interests
 - Value chain
 - Knowledge chain
- Appraisal of current situation
- Challenges to be taken up
- Options for improvement





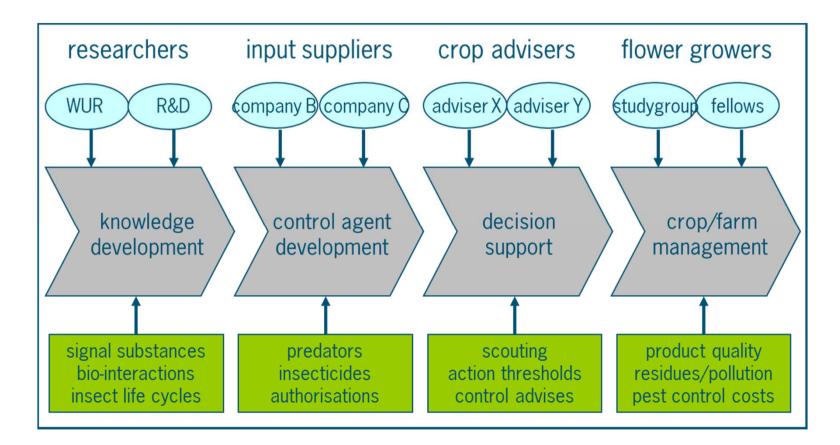
Power relations in value chain of flowers



Value chain partners impose "license to deliver" on flower growers



Power relations in knowledge chain



Flower growers depend on knowledge chain for new control options



Appraisal of current situation

- Fast increase product requirements
- Slow release new control options
- Shortfall = difference in dynamics
 - Knowledge chain lagging behind
- Challenge = align the dynamics
- Coordination among parties
- Starting from framings of pesticides

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Framings of pesticides and pest control

Source: action research on preparation of National Action Plan on crop protection

Development of biological control takes more time (Researchers) Chemicals are disturbing biological control (Predator suppliers) Authorisation of pesticides is too expensive (Pesticide suppliers) Growers ignore decision support systems (Crop advisors)

EXCUSES

Pesticides imply a threat for biodiversity (NGOs) Surface water quality is below standards (Water boards) Pesticides are dangerous for labour safety (Labour unions) Pesticide residues endanger consumer trust (Retailers)

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Options for coordination among parties

- Public-private partnership for research on plant health, under coordination of national growers' organisation
- National agreement (growers, value chain, knowledge) for collective action on sustainable crop protection
- Good farming certificates awarded by NGOs for distinct levels of biological control in flower production
- Collective action of retailers and growers to supply higher market segments with pesticide free flowers



Thanks you for your attention

Social innovation needs attention in governance of sustainable crop protection







Process to progress revisited

Dimensions of crop protection:

- Biology plants, pests, predators
- Technics equipment, applications
- Economics costs and benefits
- Sociology power and interests
- Ethics rights and duties

