# Different strategies to implement IPM in practice - about incentives and impact -

#### Frank Wijnands

#### Wageningen University and Research Centre





## Road map

### IPM strategy

- The adoption challenge
- Incentives for adoption
- Stakeholder involvement
- Outlook / Perspectives



# IPM strategy

- Strategic approach to crop protection
  - Based on prevention justification of control diversified control options
  - IPM integral part of farming system:
  - Taking into account and optimizing interactions

#### Agro-ecological intelligence

• To meet economic, ecological, environmental objectives

### Contributes to

- Minimal use and impact of pesticides
- Robust cropping systems



# The adoption challenge

- Excellent IPM methods and tools available
  - Still always more, better and different needed

### Adoption rate often low – exceptions

- Knowledge intensive
- Labour (monitoring)
- Risk (perception)

- lack of incentives
- lack of added value

What are the incentives – when is added value created?

- Actual developments
- What can we learn?



# Incentives for adoption / added value

Financial – technical

individual famers

- Commodity community
  - agribusiness community
- Market options and demands
  - individual farmers /cooperatives
- Policy regulation/stimulation
  - individual famers, general or region specific
- 4 tracks to implementation



## Financial technical incentives

### New techniques

- Lower costs
- Better performance, more robust, safeguarding quality and quantity
- Introduction relative easy
  - Sells itself
  - Comfortable message
- Fast track, short cut to successful adoption



## Financial technical incentives

### Examples

- Introduction of biological control when resistance development is occuring (spanish protected vegetable culture)
- Mating disruption fruit orchards
- Forecasting systems (DSS)
- Mechanical weed control as option when less and less herbicides are approved in the so called small crops



## Commodity – community incentive

Regions where dependency on a crop or commodity is high

- Crop protection problems affects quality or quantity,
- Or create environmental problems, water quality for instance
- Problem is relevant for the whole agribusiness

Strong incentive to find and implement together solutions

- Everybody got something at stake
- Often then communication and support to implement solutions by the partners in the chain (field man etc)



# Commodity – community incentive

### Examples

- Brazil: sugarcane borer Diatrea Saccharalides
- Sugar mills in Brazil (cane) promote biological control with *Cotesia Flavipes: 2 milion ha*
- 1980-2005: 65 million euro savings and 1.38 million liter of pesticide (product)
- Rice: Ebro delta 32.000 ha
- Chilo suppressalis (butterfly), insecticide use
- Ebro is fisheries, nature and agriculture
- Communities needed other solutions: pheromone mass trapping
- 65% reduction pesticide use



## Market possibilities and demands

### Market options

- (Cooperatives) produce under label
- Specific demands for IPM possible
- Niche markets?
- LIVE Oregon example

### Market demands

- Increasing demands from retailers and global sourcers (more issues and themes - sustainability related)
- Protocols and increasingly also certified production
- Specific demands for IPM possible
- Tesco UK, Unilver, Albert Heijn NL, Coop Italy



# EU Policy regulation & stimulation

### Crop protection policy - SUD

- Basic level of IPM For all farmers
- Mix of incentives

### CAP

- Greening Pillar I direct payments
- Ecological infrastructures, rotation, soil cover, pasture maintenance
- Agri-environmental measures Pillar II paymemts
- Specific regions/crops more advanced levels of IPM.



## Work with variety - There is not one solution

- Still more IPM technology needed
  - Preferably with lower costs and better results (Track 1)
- Stakeholders should stimulate and communicate IPM
  - Track 2 shows that it can be done
- Markets can have a large influence
  - Open and continue the dialogue on the public challenges, role for NGO's (Track 3)
- Policy support
  - Minimum levels of IPM
  - and well chosen greening and additional options (track 4)
  - Increase basic level / create options and incentives



# Stakeholder participation and involvement

- Stakeholders together constitute the agricultural network
- They play a role in all tracks
- Link interest of stakeholders to the sustainable use issues (see below)
- Work together on innovation

- Farmers (union)
- Producers of pesticides
- Traders
- Water boards,
- Drinking water companies
- Retailers
- Sourcers
- NGO's
- Government

#### Ecological, environmental, health and economic issues



### Communication uses these links

### Stakeholders crucial as communicators

- Have many contacts, networks, and opportunities
- Their communication puts new knowledge in a business perspective

Communication more effective when stakeholder addresses

- Interests –what is at stake urgency necessity
- Direction vision strategy
- New approaches and methods
- Successes

### More convergence in messages

• Effective and efficient



## <u>Outlook</u>

- Excellent technology needed
- Developed and tested in practice
- Stakeholder participation in all phasesTaking responsibility for the future
- Mix of instruments and incentives will always be needed



### Critical succes factors – from experience

- Excellent knowledge
  - technology
- Road tested technology
  - in practice
- Linking (with) interests (of st.holders)
  - Whats to gain?
- Communication
  - By stakeholders network
- Involvement of stakeholders
  - In all phases

