# Quality management in the horticultural sector

Ir. Herman Schoorlemmer Visit Thai delegation 2006 April 25





## Content of presentation

#### General developments

- Project Qualiman: Quality Management in Central Europe
- Project Hortin-Quality: GAP in Indonesia



consumer expects good quality and safe food
citizen wants clean and healthy environment
worker wants safe working conditions
farmer needs good soil and water



#### safe food: examples of potential risks

residue of illegal pesticides

- residue because of harvest before end safety interval
- residue on crop because of bad quality irrigation water
- microbiological contamination because of use of organic manure
- leaking of oil on crop

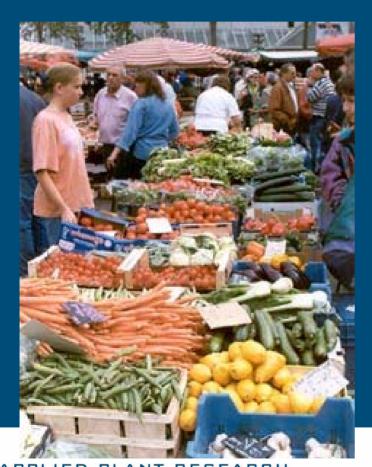


- FAO and WHO: Codex Alimentarius, HACCP
- EU: General Food Law
- FAO, National Government: Maximum Residue levels



### More welfare: increase market share supermarkets

#### more international trade





 need for standards to make international trade more efficient

WAGENINGEN UR

## supermarkets in developing countries

# bottlenecks in vegetable supply chain (1)

- unstable supply
- high handling costs with too many suppliers
- uncertainty of product quality





## supermarkets in developing countries

# bottlenecks in vegetable supply chain (2)

- lack of quality control
- limited insight into production methods
- no tracking and tracing ability





#### dozens of quality systems in food industry

#### • Eurep-GAP

- BRC British Retail Consortium
- SQF Safe Quality Food
- Q&S Qualität und Sicherheid
- Several other labels



### Common ground in these systems (1)

#### always comply with legal requirements

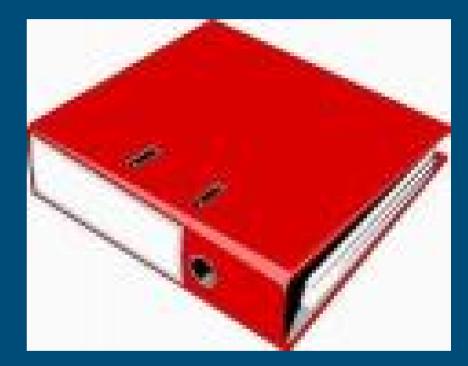






### Common ground in these systems (2)

# traceability: plots and recordkeeping

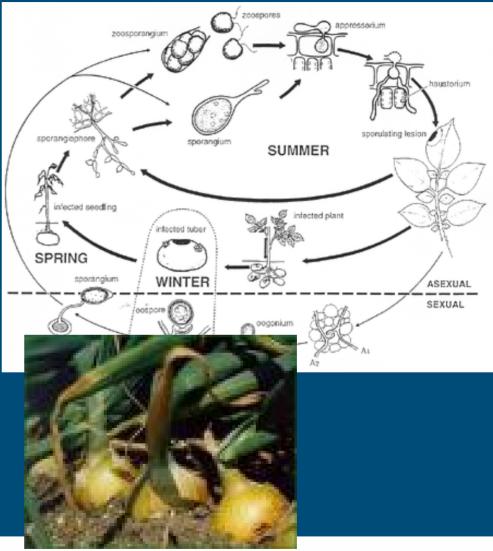




## Common ground in these systems (3)

 knowledge of integrated farming: pesticides, fertilizer, water







### Common ground in these systems (4)

#### hygiene rules for buildings, equipment and personnel







### Common ground in these systems (5)

 several consultants are doing implementation
 only recognized institutes can do the certification





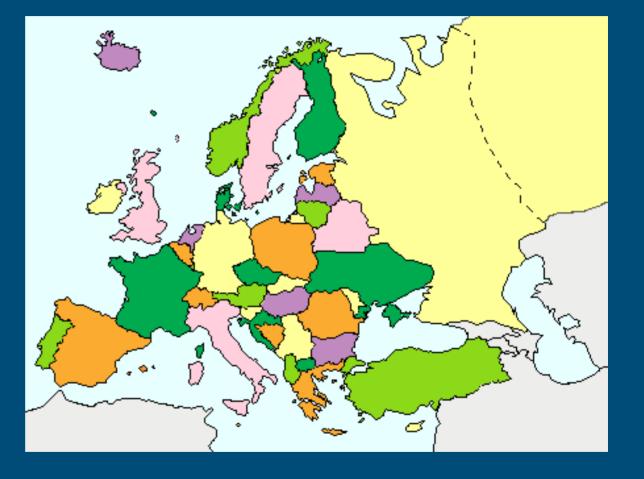
#### And now for growers in Thailand?

 if you want to deliver product to supermarkets, export market or international hotels this will be reality for all growers
 if not, foreign growers will do!!



## Project Quality management in Central Europe

Poland,Slovak,Hungary





## Situation fruit and vegetable Central Europe

some very large growers

- focused at production for processing (frozen, canned, juice)
- lower demands for product quality
- many very small growers
  - selling at open market
- fast increase market share supermarkets
  - certainty in supplies, safety, uniform quality, T&T, insight in production methods



## Analysis bottlenecks: product quality

- lack of knowledge about quality standards EU
   bad handling fruit and vegetables
  - machinery
  - personnel
- lacking storage and sorting capacity





# Analysis bottlenecks: quality management

- improving quality demands of supermarkets
- lack of information about quality management systems (Eurep-GAP, HACCP)
- no awareness / motivation about food safety and quality management
- no guarantee about origin / history product
- infrastructure for residue analysis, tests, samples



## Analysis bottlenecks: chain management

- lack of communication in chain
- producers have no market orientation and strategy
- insufficient organization and cooperation in the supply chain





## 4 directions for improvement in Qualiman

- improvement of implementation of EU quality standards at farm level
- awareness, motivation and implementation of quality management systems
- supporting integrated pest management with help of quality management systems
- improvement of chain management



# Pilot 1 Training manual quality standards

Awareness growers and practical interpretation

- development manual for trainers (exercises, information about standards, developments)
  - pilot with 'average' growers (Poland)



## Pilot 2 implementation of quality management systems

- training to improve awareness of growers towards the need to work with quality management systems (Slovak and Hungary)
- interview experienced growers
- discuss implementation Eurep-GAP with 'average' growers
- find solutions or address bottlenecks



#### Project developing GAP in Indonesia

#### Programme HORTIN

 Horticultural research cooperation between Indonesia and the Netherlands 2003-2006

#### Project QUALITY:

 development GAP to improve product quality and food safety in the supply chain of vegetables



# Approach Qualtiy

#### Development GAP based on

- Interviews in supply chain
- Hazard analysis at farm level conform HACC
- Eurep-GAP
- Test in practice
  - growers
  - traders
  - government
- Capacity building
  - Training/workshops
  - Institutional embedding





## Involvement of traders and growers





## Training, discussion and improvement





## **Result Hortin-Quality**

a GAP for Indonesian circumstances

- Motivated growers and traders
- Involvement of government (GAP as part of Si Sakti programme)
- Recommendations
  - organization of independent audits, residue checks,
  - think about incentives (with GAP: market acces, higher prices?)
  - improve product quality (compared to imported products)



# Comments, suggestions and information Herman.Schoorlemmer@wur.nl

