

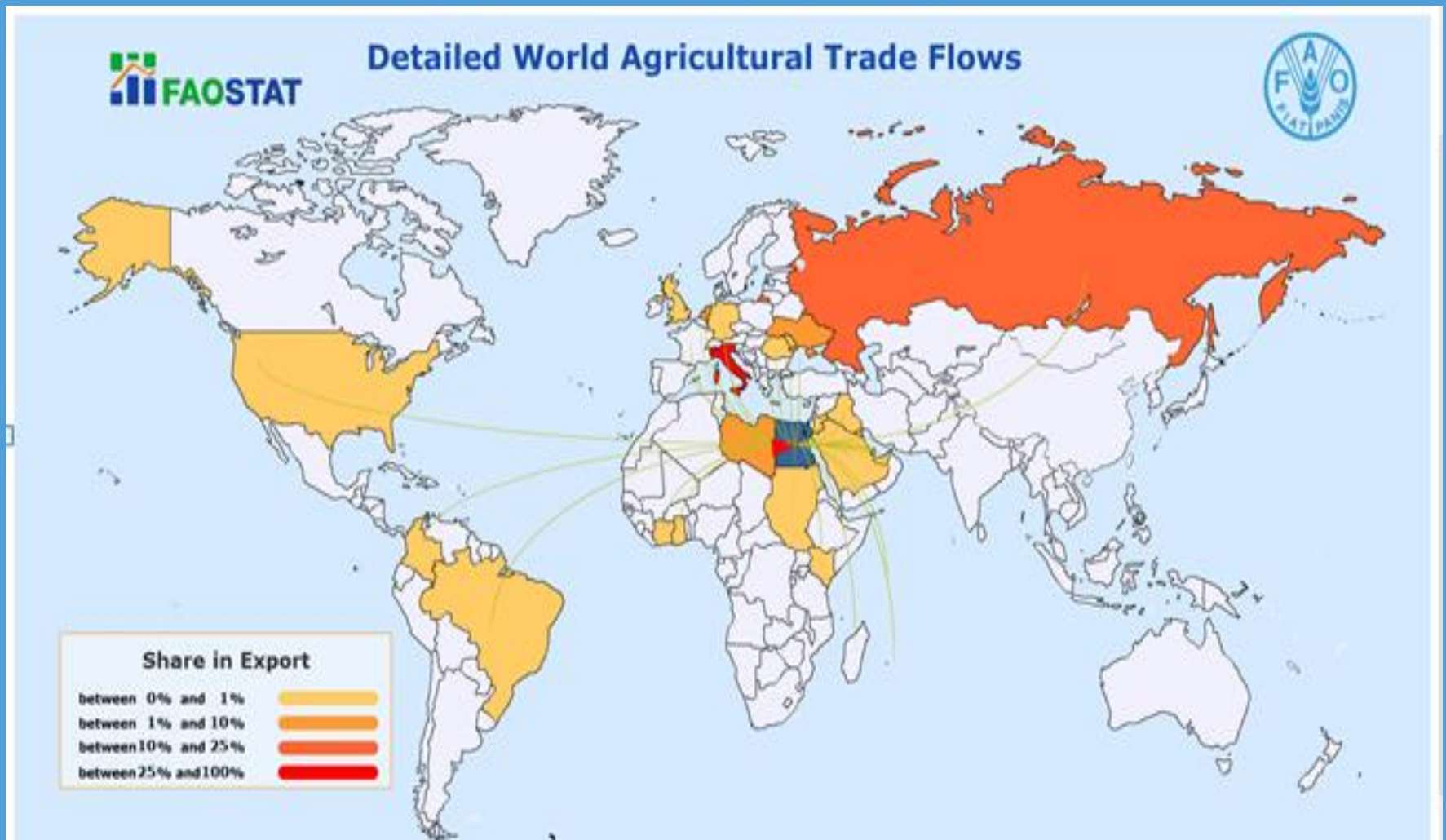
Towards lower use of resources in Egyptian Horticulture

Egyptian – Netherlands collaboration

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Wageningen UR Greenhouse Horticulture



Egyptian exports of fresh vegetables



'Egyptian greenhouse cultivation at a higher level with Dutch technology'

- EG NL project dealing with 2 major concerns
 - Water
 - Plant Protection Products (PPPs)

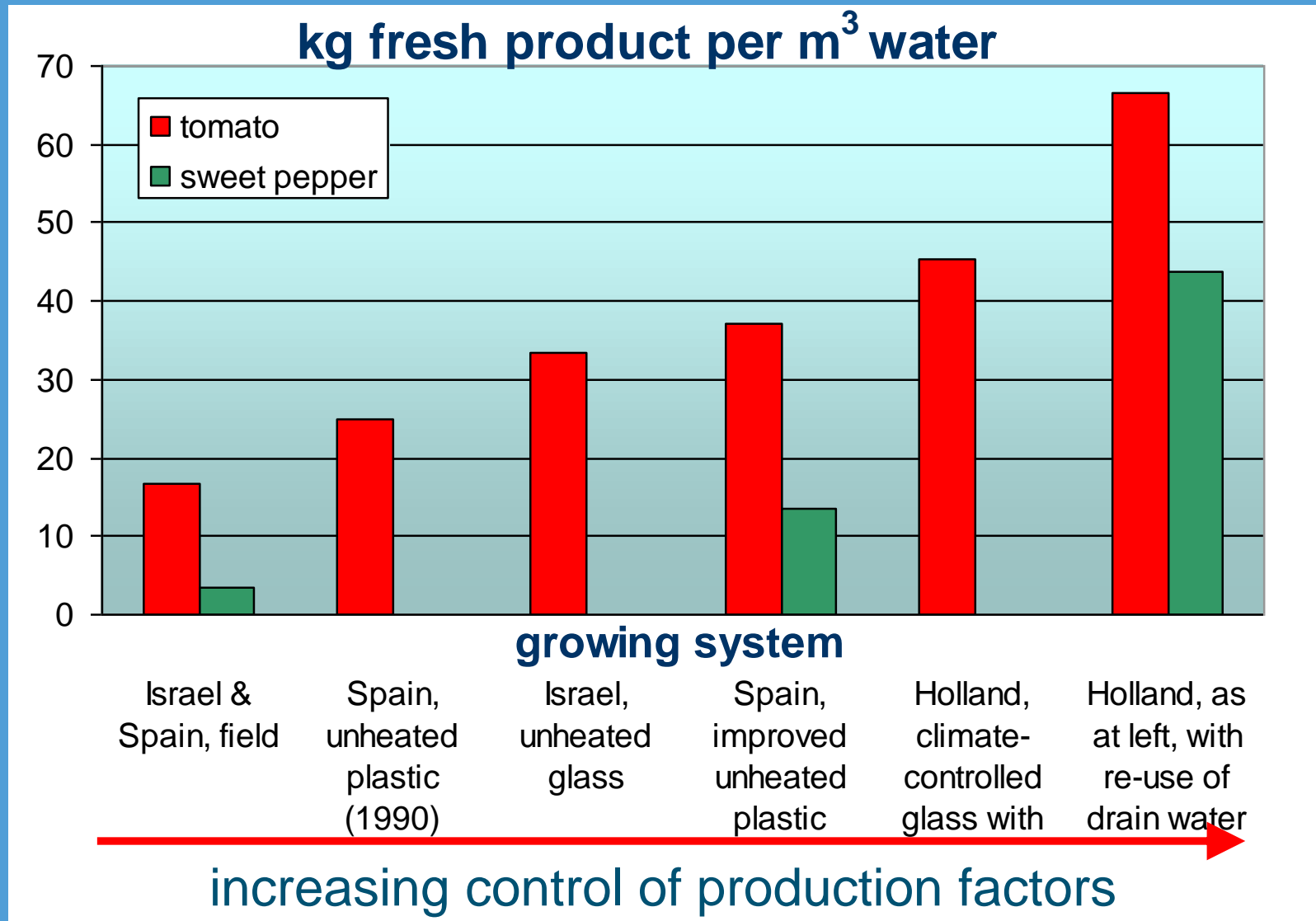


Water in Egypt

- Water is top priority
- Technology can offer
 - High water-use efficiency
 - Increased efficiency of other resources
 - High-quality value chains



Water use efficiency goes up with.....



Project activity: Improved water use

- AllGreen, HortiMaX
- Growth advice (WUR)
 - long-distance & visits
 - Water application
 - Nutrient application
 - Heating, screening
 - Cultivation measures
- Future activities
 - Open days
 - Up-scaling
 - Commercial sustainability

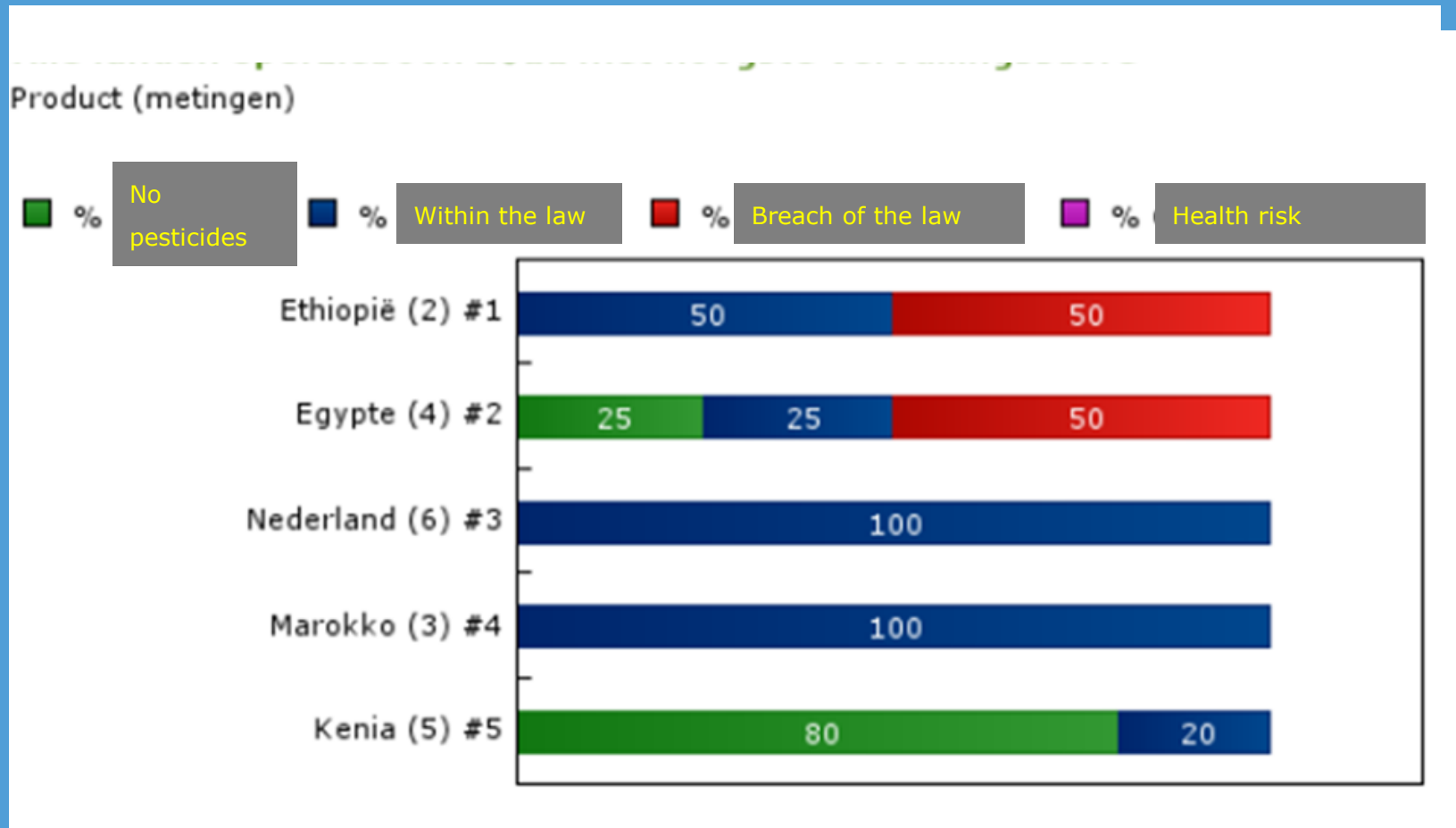


Concerns related to Plant Protection Products (PPPs)

- Higher demands from the export, supermarkets and local market: no or less residues - lower MRL's
- Stricter demands with respect to food safety
- Development of resistance against PPP's
- Environmental effects, e.g. on surface water
- Risk for the workers
- Trend towards less PPPs registered for horticulture



PPPs in samples of green beans exported to NL



Recommendations

- Further decrease and smart use of specific PPPs in horticulture
- Further implementation of IPM (*Integrated Pest and Disease Control*)



IPM and Biological Control as a challenge

Integrated pest management consists of

- *Resistant and less susceptible varieties*
 - *Prevention and hygiene*
 - *Spraying based on monitoring pests and diseases*
-
- Biological control with BCA's : biocontrol agents, natural enemies, beneficials



How to realise IPM in horticulture

- Development of legislation and regulation for production, import and export of BCA's
- Demonstrations with BCA's from the positive list of EPPO
- *Collaboration* for IPM implementation and development
 - Institutional
 - Technical
 - Commercial



Project activity: Introduction of IPM

- Review the Laws of Importation of BioProducts
- Meeting of the Committee to Review the Laws of Importation of BioProducts
- *propose a new Ministerial Decree, concerning the Production, Export and Import of Biological Control Agents for Agricultural Pests*
- Meeting by the Minister of Agriculture and Land Reclamation, Prof. Dr. Ayman Farid Abou Hadid with the Committee



Project activity: Introduction of IPM

- New Ministerial Decree proposed.
Considered for Ministerial approval.
- Future activities
 - On-farm evaluation, in collaboration with ARC, University
 - Up-scaling
 - Continued fine-tuning of IPM strategies and tactics



Project spin-off: Training

- Practical horticultural training centre
- Regional?
- Involvement of private sector, ARC, Universities, WUR
- Funds to be acquired



Summary & Thanks

- Current situation (water, chemicals) can not last
- Alternatives are available
 - high, medium, low tech
- Concerted effort required
 - Various stakeholders
 - Training

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