



New challenges for IPM research in horticulture

Jan Buurma
Poznań, 14 January 2015



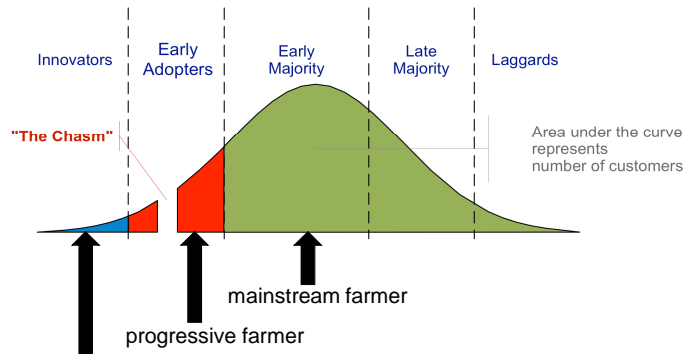
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Technology Adoption Lifecycle

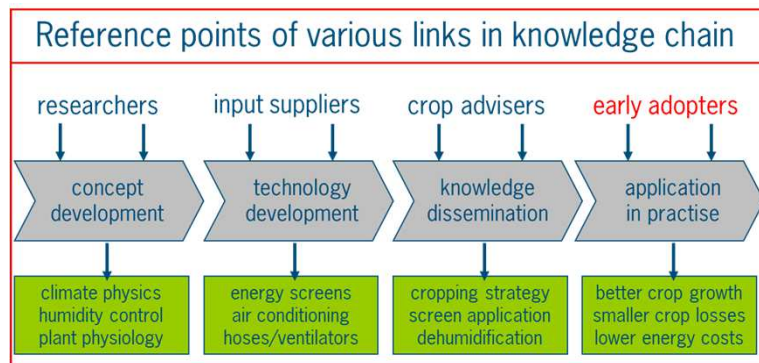
Geoffrey A. Moore (1991) Crossing the chasm



Message: farmers on right-hand side of "The Chasm" have other interests

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Findings New Cultivation



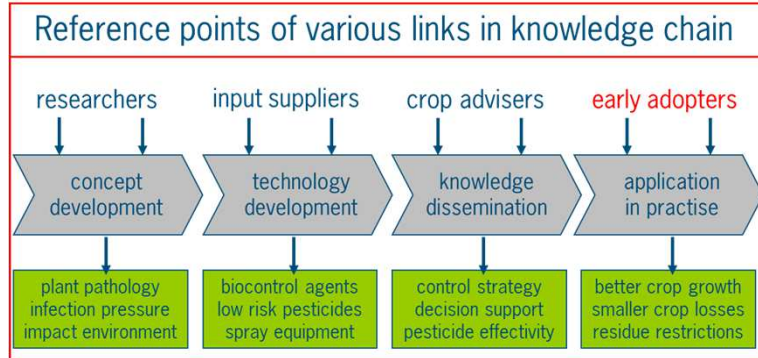
Lesson: each link in knowledge chain has his own reference points.

Message: Knowledge still needs to be adjusted to farmers' interests.

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Extrapolation to IPM context

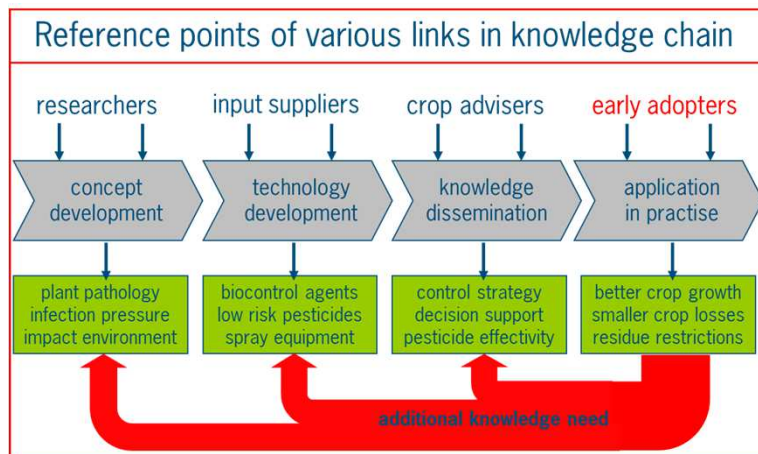


Lesson: end-users of IPM have other reference points than research.
Technology push strategy may incite aversion of farmers/growers.

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Challenge for future IPM



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Targets product development

Surveys PURE – WP7, tomatoes

- Taste and flavour
- Physical quality
 - Type/cultivar
 - Shelf life
 - Colour
 - Packaging
- Low residue level



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IPM in product development

Germany

- 
 - Maximaal 33% MRL norm
 - Maximaal de ARFD per actieve stof, som < 100%
 - (Kaufland) laagste telt: EU of oudste Duitse norm max 70% ARFD maximale som van 100%
- 
- Maximaal 70% MRL per actieve stof
 - Maximaal de ARFD per actieve stof
- 
 - Maximaal 5 werkzame stoffen
 - Maximaal 80% som MRL's
 - Maximaal 80% som ARFD's
- Maximaal 70% MRL
 - Maximaal 70% som ARFD's
 - Maximaal aant. werkz. st. per gewasgroep (3,4,5)
- 
 - Maximaal aantal werkzame stoffen per gewasgroep (3,4,5)
 - 70% per act. stof en Max. 80% som MRL's
 - Maximaal 80% som ARFD's
- 
 - 70% MRL
 - 50% Gärtners Beste
- 
 - 70% MRL per stof
 - < 100% ARFD per stof
 - Maximaal aantal werkzame stoffen in de toekomst verminderen

Restrictions on:

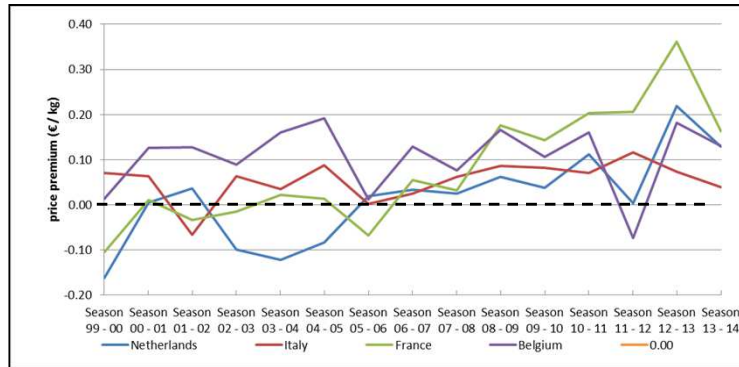
- MRL
- ARFD
- # substances

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Reward: willingness to pay

Price premiums for exports to Germany: apples



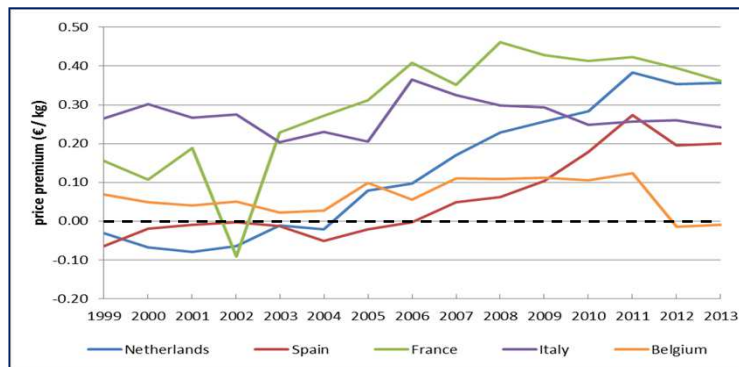
Top-segment pays 10-15% higher prices for top-quality apples.

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Reward: willingness to pay

Price premiums for exports to Germany: tomatoes



Top-segment pays 20-30% higher prices for top-quality tomatoes

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Future IPM = co-innovation

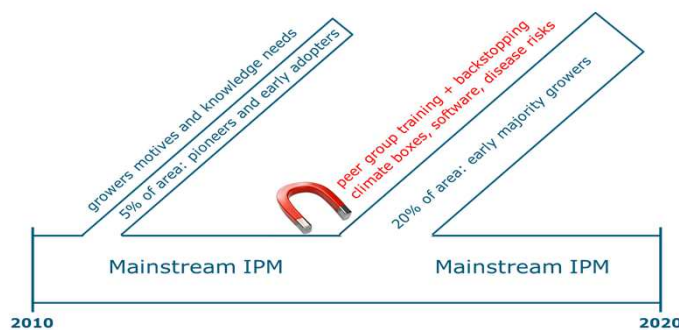
- Economists willingness to pay
- Breeders taste and flavour
- Agronomists growth and colour
- IPM-research low residue
- Post-harvest long shelf life
- Advisers crossing the chasm

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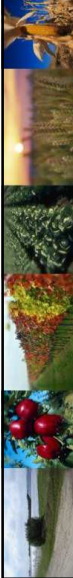
Advisers: crossing the chasm

Magneet voor Het Nieuwe Telen



Message: early majority growers require safe learning environment.
Current practise advisers also need to be trained.

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Summary

- Growers produce for market
- Shift to demand pull strategy
- Start from willingness to pay
- Additional knowledge need
- Interdisciplinary co-innovation
- Safe learning environment

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Thank you for your attention!



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