



# Precision Agriculture / Smart Farming

## What's in it for me?

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24 September 2015

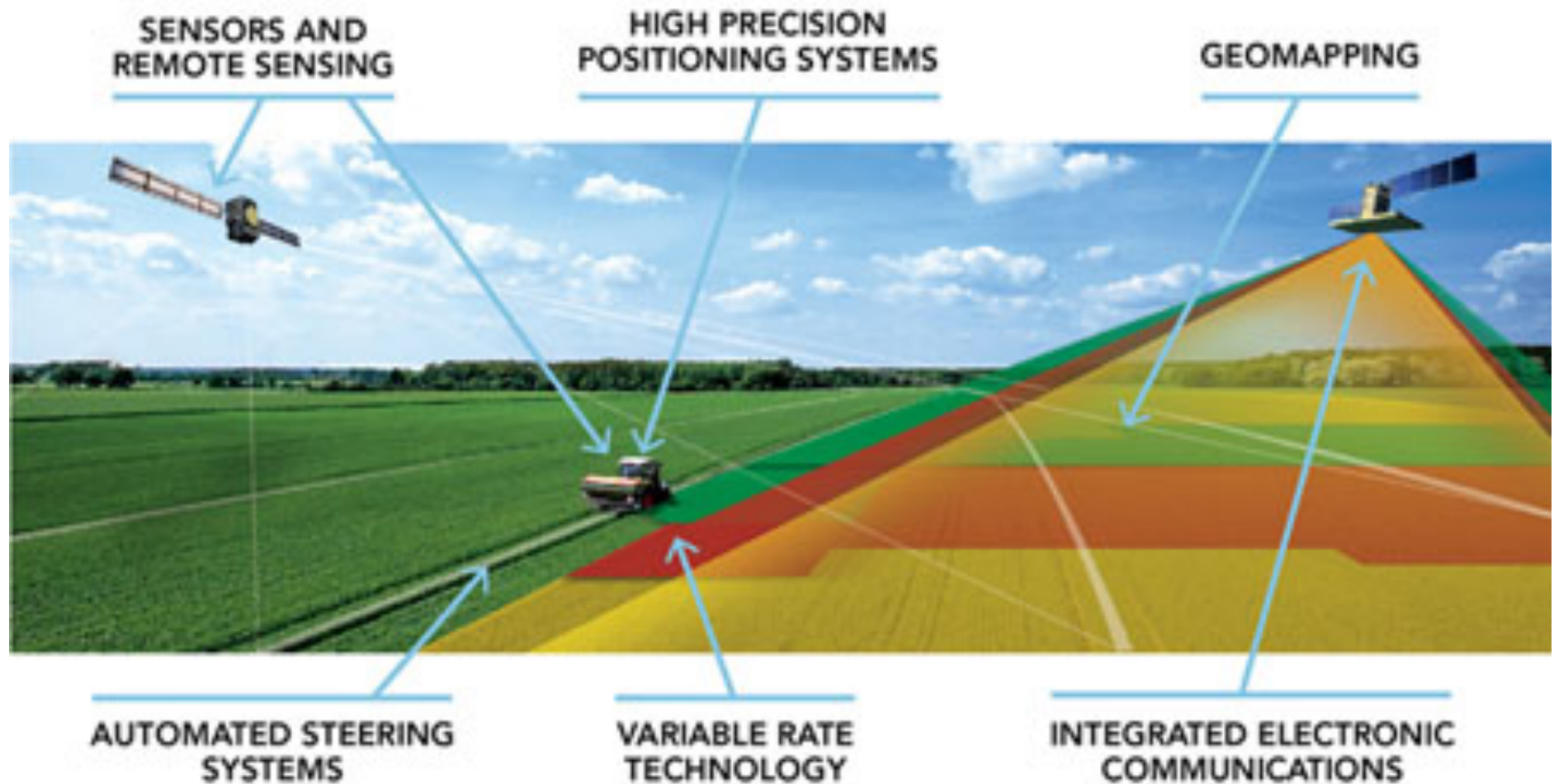
Precision Agriculture for Food Security and smallholder farms

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# Precision Agriculture

Doing the right thing, at the right place and the right moment





# What is precision agriculture?

## Technology

- Machine guidance - implement guidance;
- Time- and location specific activities / VRA;
- Integration of data, systems, knowledge.



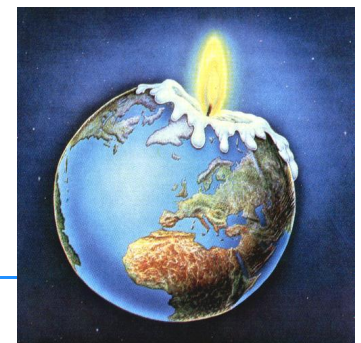
## Management style

- Total Quality Management: Plan-Do-Check-Act;
- Make smarter decisions;
- Systems thinking.



## Transition instrument

- Stimulate co-innovation involving (all) stakeholders;
- Strengthen competitiveness + export opportunity for solution providers;
- “Greening” agriculture!



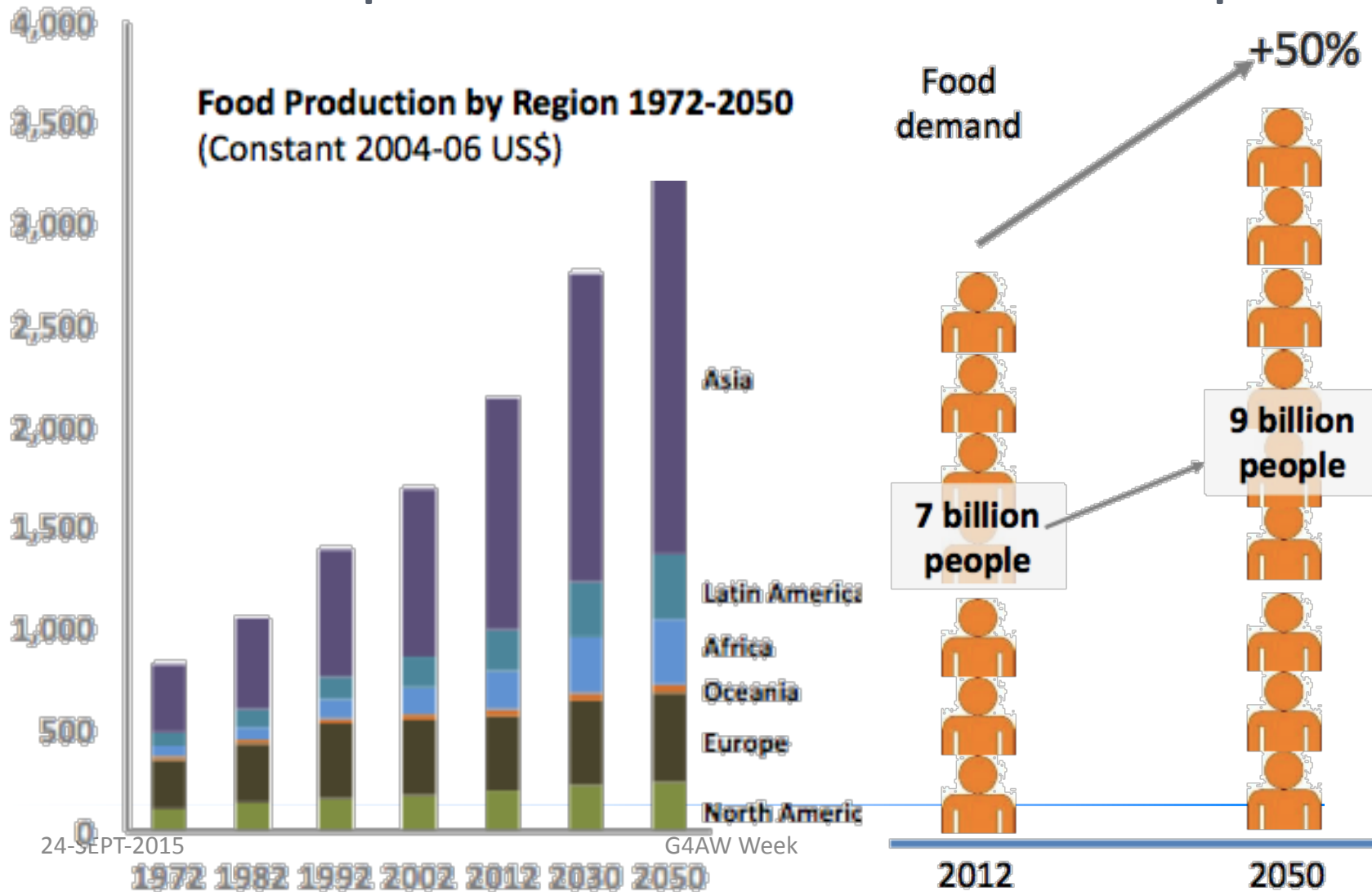


# Precision Agriculture as Transition Tool

- Stimulate the uptake of technology ...
- ... in order to benefit from the benefits of the technology
- What are the targets that Precision Agriculture can address?
  - Increased productivity (4 times more productive)
  - Managing risks (cope with climate change)
  - Responsible farming (adhere societal demands)



## “Double production with half the inputs”







## COPE WITH CLIMATE CHANGE

- Low-Carbon economy (less energy consuming; less GHG emission)
- Dealing with droughts and floods (higher risks)





## GREEN, CLEAN, LEAN (societal demand)

- Green: Maximise use of renewables
- Clean: zero emissions, minimised CP
- Lean: optimised to need (no spill)

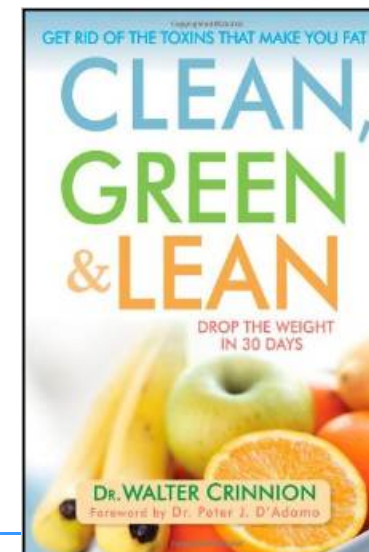
The Common  
Agricultural Policy  
after 2013



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G4Aw week

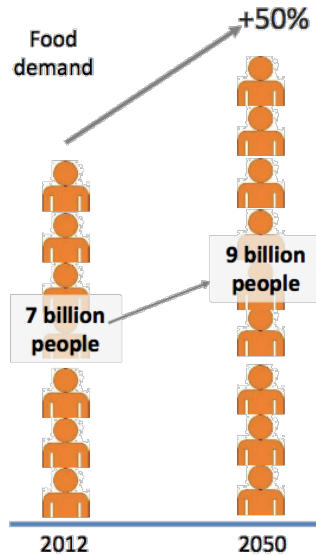


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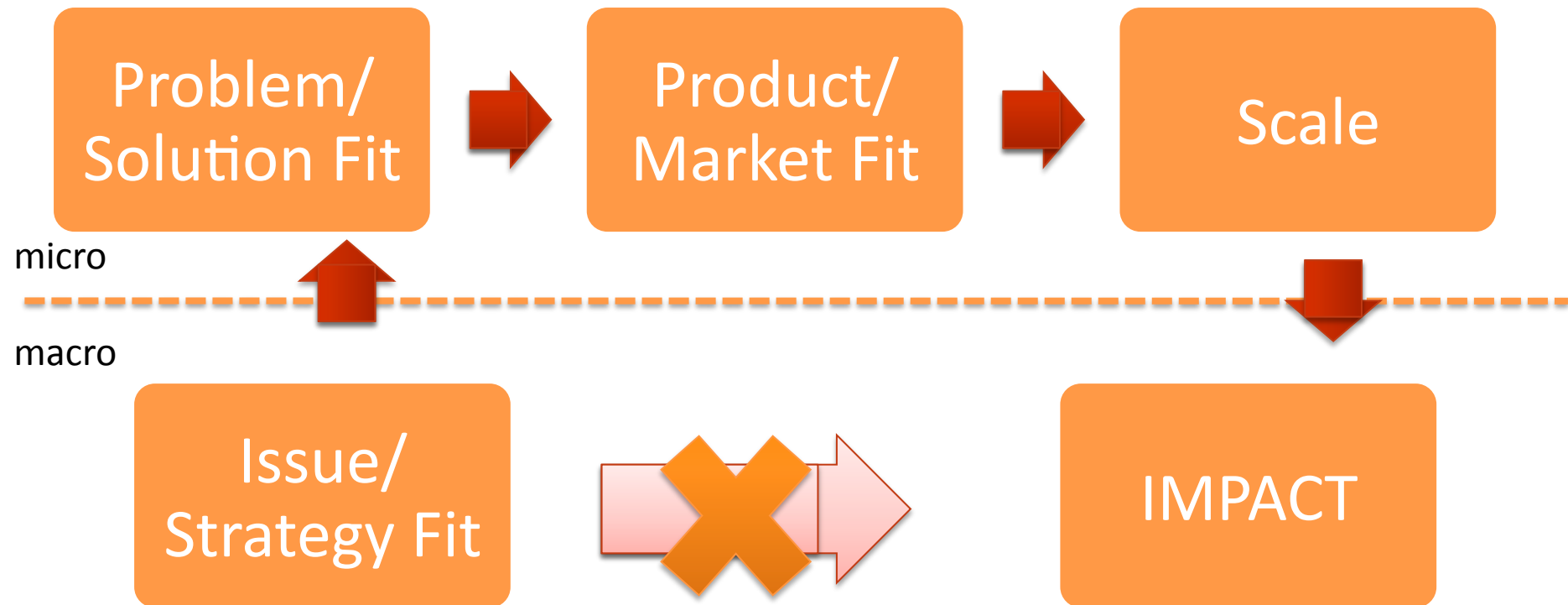


## Targets

- Productivity (4x more efficient)
- Risk Management (measures to protect investments)
- License-to-Operate (green, clean & lean)







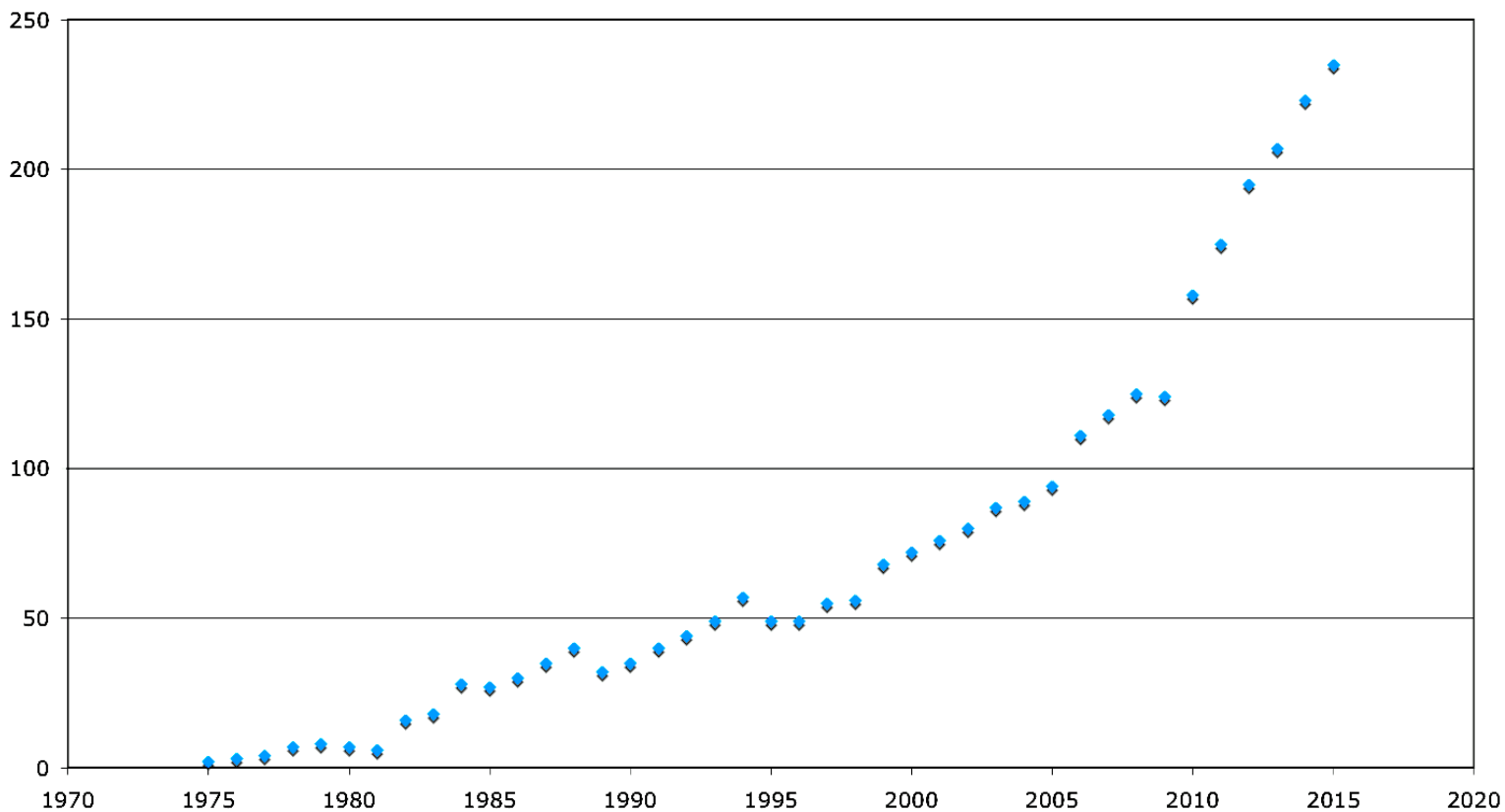


## Technology demands

- What do farmers need to meet those demands:
- Awareness
- Availability
- Accessibility
- Affordability
- Applicability
- Acceptability



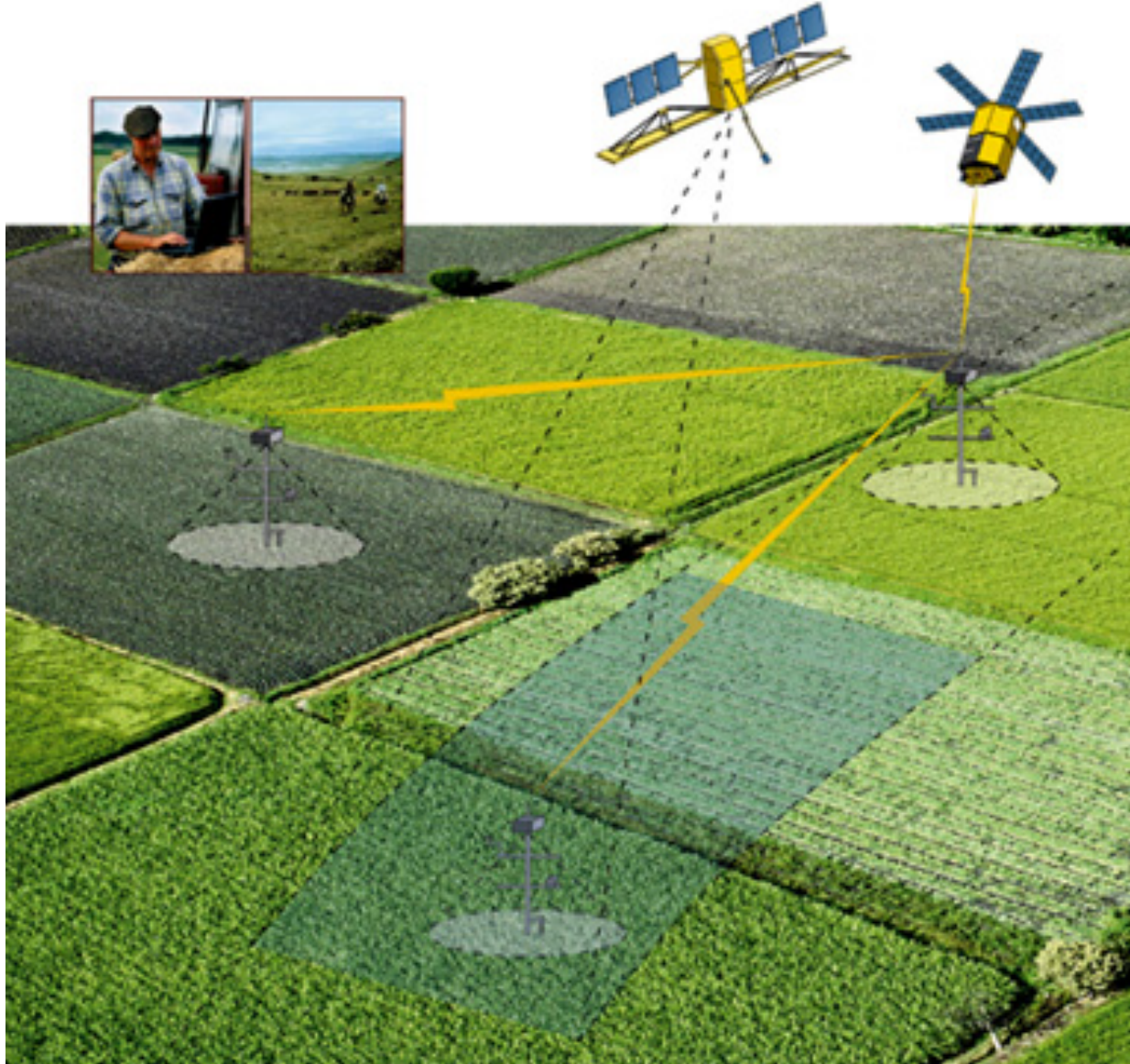
## Number of operational earth observation satellites







## HAYMANA GIDA, TARIM VE HAYVANCILIK MÜDÜRLÜĞÜ





*AeroVision connects*



# Technology uptake to create a transition

- Satellites as part of the technology portfolio
    - Don't forget ground measurements and drones;
  - Focus on conditions for uptake:
    - Awareness
    - (Access to) Knowledge and Investment potential
    - Connectivity (broadband internet)
    - Experimental and Demonstration areas
    - Evidence based! Create proof-of-concept
    - Interactive / co-innovation: let users participate
  - Impact is created by markets, not by subsidies.
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Thank you for your attention

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