
Anticipating the future: scenarios for resilient institutions in agricultural research and innovation

Foresight study EU SCAR SWG AKIS 3

Floor Geerling-Eiff, Krijn Poppe & Trond Selnes, LEI Wageningen UR



Back to the Future...



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Methodology and approach

- Scenario Planning Shell (Van der Heijden, 2004)
- Horizon Scan (STT, 2015): societal challenges and signals for change
- **Scope:** 2030 for AKIS, based on signals for change towards 2050
- Workshop Bari, Italy with AKIS experts ->59 drivers for AKIS
- Internet survey: 120 experts scored drivers on impact and relevance
- Workshop SCAR-AKIS, 30 experts: mini-scenario's were built based on the results. Developed into 3 scenarios
- Analysis, including interaction with the Foresight Expert Group (SCAR) on the bio economy

Societal challenges: 59 drivers for change

1. Societal signals, for instance:

- Emergence of 3D printers, also for food
- Reduction of solidarity and welfare state

2. Technological signals, for instance:

- Robots outperforming humans
- Food and Pharma integrate

3. Ecological signals, for instance:

- Desertification due to sudden climate change

4. Economic signals, for instance:

- Growth of the experience economy

5. Political signals, for instance: falling apart of the EU

Scenario 1: High Tech

multinationals, advanced technology, strong EU, industry driven



Scenario 2: Self organisation

new business models, diversification, regions and cities rule



Scenario 3: Collapse

climate change, migration, political tension, falling apart of EU



AKIS in the scenarios: economic and political

■ High Tech:

- International, specialized technological orientation, large private R&D, IPR
- AKIS centralised, privatised, minor role for governments

■ Self organisation:

- Regional, generic orientation food and non-food, diverse business models, mix public-private + regional finances
- AKIS decentralised, dynamic regional agri-food policies

■ Collapse:

- Individualistic, local, holistic orientation, food is a basic priority, small private R&D, rising community thinking
- AKIS fragmented but influential, agri-food societal challenge 1

AKIS - technology, knowledge and innovation

■ High Tech:

- 'Up-skilling', product oriented, JPI + KIC survive, no ERA-nets
- 3d generation university, no public extension, gap between academic and basic education job opportunities

■ Self organisation:

- 'Multi-skilling', agro system oriented, differentiated landscape of subsidies and instruments, role EU is to connect dots
- 2nd generation university, mix public-private extension /advice, exchange programmes and minors between schools

■ Collapse:

- Basic skills, farming oriented, Asian donors 'Orient-ation 2060'
- 1st generation university, farmers + teachers for extension and advice, much attention to higher and basic level education

Ten recommendations for more robust AKIS

1. Research on ICT and particularly its governance
2. Big Data are expected to have much influence on AKIS
3. Cross-over collaboration agri-food and other sectors
4. Social sciences, economics, M&E for reflection and learning
5. Stimulate interactive, transdisciplinary innovation
6. Public-private partnerships, triple helix
7. Involve regional authorities and cities with agri-food related agendas
8. Focus on excellent research infrastructures
9. International collaboration
10. A real European Research Area is a prerequisite

Some final remarks

- Scenarios are not predictions,
- But a tool for strategic conversation: how can we make our world more resilient?
- Over the last 20 years many countries have decided to make changes in their AKIS,
- Scenario studies like this one could help to be prepared for future changes.

Thank you for
your attention



floor.geerling-eiff@wur.nl

krijn.poppe@wur.nl

LinkedIn 



www.lei.wur.nl