A) Digitalisation in CAP SP SWOT and needs assessment

Do you have a national sectoral or cross-sectoral digital strategy? If yes, what are the main priorities of the strategy in the field of agriculture and/ or rural areas?

The Ministry of Agriculture, Nature and Food Quality focuses on the development of a digitalization strategy specifically for the agricultural and horticultural sectors, in line with the Dutch Digitization Strategy with the specific elements:

- Dissemination of knowledge within the AKIS; among other things by digitizing all data flows in the agricultural and food system
- Nutrient management;
- Precision agriculture; including the more efficient use of inputs and the reduction of emissions/waste/residual flows;
- Monitoring and accountability (CAP Rural development programmes for biodiversity -POP; EIP-AGRI)

A) Digitalisation in CAP SP SWOT and needs assessment

• What are your main CAP SWOT elements in your CAP Strategic Plan which are directly or indirectly linked to digitalization

<u>Strengths</u> of the Dutch AKIS

- It is well developed and diverse, with short lines between research and business;
- There is a wide variety of information officers, intermediaries and information officers, from individual entrepreneurs to institutions at system level;
- The average pre-education of the Dutch farmer is higher than the EU average;
- A lot of peer-to-peer knowledge development, as in the practice networks.

A) Digitalisation in CAP SP SWOT and needs assessment

• What are your main CAP SWOT elements in your CAP Strategic Plan which are directly or indirectly linked to digitalization

Weaknesses of the Dutch AKIS system

- The multitude of information from a multitude of sources that is available to the farmer generates an 'information fog' that has not been sufficiently translated into practical level, i.e. the farmyard;
- Market competition in advisory services linked to suppliers leads to potentially conflicting advice;
- There is a limited overview of innovation initiatives that come from practice (bottomup);
- Limited upscaling of the communities of practices at farm level.

Positioning AKIS digitalisation in national CAP

National and regional policy

Innovation on the farmyard (Dutch program)

- Independent advisors and coaches.
- Promote innovation and Communities of Practice
- Improve accessibility to measures on innovation and knowledge

Innovation policy			Digital strategy		
•	Topsectors (sectortheme specific PPPs)	•	In progress		
•	Strenghtening innovations (mission-driven)				
•	Knowledge and Innovation agenda's; regional specialization plans				
•	Greenports				

Needs formulated for Dutch AKIS

Knowledge

- Recognition and support of impartial advisors and coaches
- Better access (for farmers) to advice and coaching
- Better flow of knowledge in AKIS system Innovation:
- Better access to innovation measures
- More coherence in innovation projects Network:
- Wider and more intensive national CAP supporting network

Digital strategy:

• Clear digital strategy with starting points for National Strategic Plan (knowledge dissemination, data and precision agriculture)



Five priorities for AKIS:

- Stimulate knowledge
- Acknowledgement of independent advisors and coaches: certification system
- Improve innovation
- More ambitious (collaboative) national CAP network: social interfaces
- Set up and execute digital strategy: technological AND social interfaces (fitness to farm practice)

B) Digitalisation interventions in CAP SP

Opportunities for digitalization:

- Facilitates dealing with the amount of information flows
- Allows for more attention to bottom-up knowledge development
- Education / training on (digital) skills will facilitate the use of mobile applications and internet of things.

Improved data exchange support key elements of Dutch agricultural policy:

- Precision (circular) agriculture, including the more efficient use of inputs and the reduction of emissions/waste/residual flows (circularity);
- Digital apps for nutrient management (FaST);
- Transparency (and certification) in the chain, e.g. by means of certification of independent agricultural advisors and involvement of chain partners in digitalization

Farmers' feedback on SWOT

- Research is still too little focused on practical impact;
- Seek more involvement of farmers in scientific knowledge development and innovation;
- Seek better connection with all actors within the AKIS, including the chain parties.
- Stress importance of a pool of measures per province
- Use quality driven selection criteria
- Importance of social innovation as an integral part of the AKIS.