WORKSHOP – May 23rd, 2017

Mainstreaming Precision Farming: Policy cohesion and partnership

Summary of round table discussions

Thankful to all participants for their rich discussions and reflections, Yara facilitated round table discussions for a broad spectrum of agricultural supply chain stakeholders at their workshop in Duelmen on May 23rd, 2017.

As promised during the workshop, please find here after a summary of the main answers provided by the participants to the questions asked.

Question 1 : Do you agree that precision farming is key in the evolution of European agriculture?

- All 7 round tables answered with a clear YES.
- Whilst some still struggle to fully grasp the whole new precision farming concept, others recognize its contributions to both farming profitability and environment.
- Whilst precision farming was identified as part of a sustainable strategy for European agriculture, it is one element in a wider policy solution with clear links towards the environment, soil, air quality and a game changing appeal for the new generation of farmers.
- Whilst investment costs was seen by most as an important element, other factors such as education/formation, data management, the internet of things and other farming techniques [plant breeding, waste management, etc] are seen as keys to success.
- The role of cooperatives and contractors was mentioned as important to lower the thresholds for small[er] farmers to also benefit from precision farming. Common Agricultural Policy (CAP) support would also enable smallholders to benefit from the precision farming.
- The diversity of European farming and divers local realities seem to necessitate a flexible, adaptive approach to precision farming.

Question 2 : What measures do you suggest for fast implementation and mainstreaming of precision farming?

- First the infrastructure enabling precision farming technology, such as broadband in rural areas, needs to be put in order. This refers to the title of the workshop which calls for policy cohesion as agricultural Directorate Generals or Ministries cannot realize implementation all alone. They also depend on policy achievements in other DGs or ministries. The need for a coherent and predictable European policy framework ensuring competitiveness of the farming sector and thus its capacity to engage in precision farming, was repeated.

- More demonstrations, knowledge transfers, farm advisory services, business models and ability to choose, all more directed towards the farmer, seem to be required and provide them the "hands on " feeling. Help farmers share costs and experiences.
- Next to a good return on investment, financial support is needed.
- Whilst the recognition of the "social and environmental benefits" of precision farming seem difficult to agree, promotion of precision farming also among consumers and getting their societal buy-in could change the perception of traditional farming into a more modern one.
- As farmers are often seen as entrepreneurs and thus natural risk-takers, some questioned whether taxpayer's money out of the CAP-funds should be paid for farmers' investments. Nonetheless, others do appreciate the environmental benefits of precision farming and investments and believe they should be rewarded and the risks connected to these investments mitigated.
- Precision farming is not a tool from or for the agri-input industry only and should also be promoted in organic farming.
- Data collection and harmonization into farm management information and decision support at or within field level is suggested.
- Create a pull effect for precision farming with the food processing industry. Continuously build partnerships.

Question 3 : Today, most environmental regulations focus on generic limitation of farm inputs e.g. quotas on N-application. What do you suggest to support the flexible concept behind precision farming practices?

- Precision farming enables legislation to be more precise on expectations, environmental indicators [GHG[i] emissions, leaching, water use efficiency], uptake indicators [Nutrient use efficiency[ii] per volume of crop, differences in soil type and crop] and good agricultural practices.
- Whilst current CAP conditions are perceived generic and bureaucratic, precision farming can help the CAP to move away from stricter limitations and thresholds. Farmers should do better, not less, in pursuit of optimizing farm processes and practices. Such leading to more flexibility in adapting to the local farm circumstances, much looked for by farmers.

Question 4 : What measurements do you suggest to quantify the benefits of precision farming?

- Indicators such as
  - Nutrient use efficiency
  - Water quality at relevant measurement points
  - Cool farm tool Carbon footprint[iii]
  - Biodiversity
  - Benchmarking with other farms, peer to peer learning
  - Yield data with and without precision farming tools [e.g. sensors]
- Depending on the existing interest, different policy priorities can lead to measurements with bigger priority. All these to be balanced, precise and specific instead of blanket restrictions across a whole landscape. Blanket approaches do not work at EU-level, they need to be at least national or even at regional level.

As the workshop was a much appreciated attempt to start the discussion and thought generation from the bottom up with many stakeholders involved, we are always looking forward to any further ideas or comments you might have in order to further the dialogue.

i Greenhouse gas (GHG)

ii Nutrient use efficiency (NUE) is an indicator to measure the economic and environmental performance of crop production, expressed as percentage of applied nutrient that is contained in the harvested crop

iii The carbon footprint is the total amount of greenhouse gases released during the life cycle of a good or service. It is usually expressed in equivalent tons of carbon dioxide (CO_2) per unit of product. GHGs include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4) and other gases, which all have varying weight (ex: 1 kg N_2O = 298 kg CO_2e / 1 kg CH_4 = 25 kg CO_2e). Usually the carbon footprint is based on calculations, not on actual measurements of GHG emissions.