

AgriLink / FAO Webinar and E-Discussion (11th November, 2021)

BACKGROUND DOCUMENT

‘Addressing the digital challenge: extension and advisory services (EAS) for the empowerment of small and family farmers’

Welcome to the background document for our forthcoming webinar entitled “*Addressing the digital challenge: extension and advisory services for the empowerment of small and family farmers*” which will be held on **Thursday, 11th November 2021 from 14:00 – 16:00 Central European Time (CET)**.

The webinar is organised jointly by the European Union (EU) funded ‘AgriLink’ project [1] and the Research and Extension Unit (OINR) of the United Nations (UN) Food and Agriculture Organisation (FAO). It aims to **explore the opportunities, challenges and potential pitfalls** associated with the current trends in the **digital delivery of extension and advisory services (EAS) to farmers** – with a specific focus upon the empowerment of small and family farmers.

The webinar is accompanied by an online E-Discussion using the Google Docs platform (see below). Together the webinar and E-discussion aim to draw upon the rich diversity of perspectives and expertise of colleagues working with agricultural EAS in *both* Europe and the Global South who are concerned with maximising the dividends of digital EAS for small and family farmers whilst minimising the risk of deepening digital divides.

Context and Current Trends

Agricultural EAS encompass all the different activities that provide the information and services needed and demanded by farmers and other actors in rural settings to assist them in developing their own technical, organisational, and management skills and practices to improve their livelihoods and well-being [2].

Over the years, these services have tended to focus primarily upon increased productivity and governments have increasingly taken the view that giving advice to farmers is essentially a private rather than public good and should be provided by the market on a commercial and competitive basis. In most parts of the world, EAS have therefore experienced a severe decline in public investments due to the switch from the direct provision of EAS to farmers via government-funded organisations to using various combinations of public and privately funded services delivered by a diversity of for-profit and not-for-profit organisations.

As the provision / delivery of agricultural EAS has changed, so has the need for all EAS to place an increasing emphasis upon accelerating agricultural development towards more sustainable and resilient food and farming systems, including the achievement of the UN’s Sustainable

Development Goals (SDGs) and the ambitious policy objectives of the EU's 'European Green Deal' [3] and 'Farm-to-Fork Strategy' [4].

This transition has taken place in different countries in different ways and at different times, but the result is the same – the existence of a complex EAS landscape with a multiplicity of sources of information and advice for farmers to navigate, negotiate and potentially act upon in response to the rapidly changing economic, social and environmental contexts they encounter day-to-day.

Agricultural EAS providers (and systems) around the world face the same basic need to rapidly reform in order to increase access to knowledge and services; improve governance and coordination; facilitate innovation processes through intermediation and brokering; develop synergies with multiple actors; and overall, become more efficient and impactful whilst maintaining their perceived position as an irreplaceable partner of farmers and rural communities, governments, industries and academia [5].

Digital Dividends or Divides?

In the current times of unprecedented challenges affecting agriculture, food and rural livelihoods, it is clear that digital technologies (including electronic data generation, analytics and communication technologies, etc.) have a potentially huge role to play in reforming agricultural EAS by enabling more accurate, faster and better knowledge exchange and decision-making on farms.

Most recently, the COVID-19 pandemic has challenged agricultural EAS around the world to rapidly innovate and adopt remote and digital tools to allow them to continue supporting farmers whilst complying with the necessary COVID-19 control measures. However, digital agricultural EAS have been the focus of considerable interest and development for many years prior to the COVID-19 crisis with many benefits including (amongst others):

- providing direct access to large amounts of data (big and open data) and actionable information on the use of inputs for pest and disease control (IoT, drones, cloud computing);
- delivering timely expertise and two-way communication with remote clients (mobile phones, online front-office),
- facilitating unprecedented access to market and weather information (remote sensing, satellite imaging, knowledge management platforms);
- addressing funding through mobile banking and FINTECH services;
- empowering producers to make better decisions in the wider agri-food sector (data-driven analytics), including greater transparency along the value chain (distributed ledgers);
- fostering networking and synergies between diverse advisory providers (e-extension platforms); and
- increasing access to multiple job opportunities.

As the digital revolution accelerates, attention needs to be focused upon ensuring that digital innovation in agricultural EAS keeps pace with the rest of the food production sector. However, the 'dividends' from the use of digital technologies are not automatic. Small and family farmers face a myriad of challenges and capacity gaps in access to digital EAS. Recent studies, for example, have revealed that smallholder farmers' digital literacy along with insufficient digital human capital development and infrastructure investments in rural areas have become the paramount barriers and constraints for them access to and effectively realizing the potentials of digital EAS. There is also a substantial risk that the potential of digital EAS (including future innovations) will be hindered by the 'digital divides' that already exist across multiple dimensions, including horizontally between farmers, between advisors and between farmers and advisors [7], and vertically within and between different regions.

Both the advisory and farming communities need to be mobilised and empowered to take ownership of digital tools and to actively engage with them. This may involve combining available technologies with social and organisational innovations, new infrastructures and an enabling environment of favourable policies, investment, regulations and improvements in capacity. The future role of EAS should include facilitating and supporting farmers to orientate themselves within this digital landscape. For example, the best way to motivate both farmers and advisors to embrace the digital revolution may be to build on tools that are already familiar to them. Rethinking the use of data within regional and national agricultural knowledge and innovation systems might also be a priority. Many existing and new data flows could fulfil multiple uses and be brought to a higher level with improved ICT applications, ideally co-created with advisors and users.

The resultant transition towards digitalised EAS could either be incremental and made by small advances, or it could be disruptive as a game changer. But there are also risks. The latter could lead to positive results by improving effectiveness, efficiency, relevance and inclusiveness but could also bring disturbance in terms of redundant functions, reduced jobs and institutional rearrangements, plus associated interruptions in farmer-advisor relations, etc.

Policy makers clearly have a role to play in enhancing and leveraging the capacities of both farmers and advisors to take advantage of digital EAS. Appropriate interventions can help with closing (or at least, avoiding deepening) existing digital divides and help "cash-in" on the digital dividends.

But how exactly?

To begin answering this question we **invite you to join our online E-Discussion!**

In the E-Discussion we aim to address 5 questions:

1. What successful models for the digital delivery of agricultural extension and advisory services (EAS) to small and family farmers are already existing?

2. Can these models be replicated in all country contexts, including developing countries? Are there any hidden pitfalls to watch out for?
3. What capacities (and at what level) are needed to maximize the dividends of digital EAS and minimize the risk of creating more digital divisions?
4. What specific and targeted policy interventions are needed to foster digital EAS for small and family farmers?
5. How should advisors and advisory organizations play a more active role in shaping the policy and regulatory processes concerning digital EAS? And how?

How is the E-Discussion organised?

The format of the E-Discussion is very simple! Just click on the following link to access the online Google Document:

https://docs.google.com/document/d/1Pu8UFXYojMJr54XH_scrldpVQbPfbrR8XUv4OKTBjOc/e/dit?usp=sharing

The document contains a few words of introduction, a table of participants, and the 5 key questions guiding the E-Discussion. **You are invited to interact actively and creatively with the Google Doc in three ways:**

- a) Firstly, take the opportunity to introduce yourself.
- b) Secondly, please read the questions and respond to them. You are welcome to make as many responses as you wish – furthermore, you can return as often as you like to add to or edit your individual responses. Additional rows are easily added to the tables if necessary (simple press <Tab>);
- c) Thirdly, you may of course respond to other people's responses in order to build an active dialogue around the Discussion statement / questions. Please refer to other contributors as @name in your response.

The E-Discussion will be regularly monitored and moderated. There may also be some editing of the Google Document to enhance readability of responses.

The Google Document will remain open until the webinar on 11th November. If you have any queries or technical issues, please send a message to: agrilink2020@highclere-consulting.com

All the best and enjoy!

Notes:

- [1] The AgriLink **project** (**'Agricultural Knowledge: Linking farmers, advisors and researchers to boost innovation'**) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 727577. See: <http://www.agrilink2020.eu/>
- [2] GFRAS (2012) The "New Extensionist": Roles, Strategies, and Capacities to Strengthen Extension and Advisory Services, Global Forum for Rural Advisory Services <https://www.g-fras.org/en/knowledge/gfras-publications.html?download=126:the-new-extensionist-position-paper>
- [3] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- [4] https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy_en
- [5] FAO and OECD (2019). Background Notes on Sustainable, Productive and Resilient Agro-Food Systems: Value chains, human capital, and the 2030 Agenda <http://www.fao.org/3/ca5385en/ca5385en.pdf>
- [6] FAO (2021) Empowering smallholder farmers to access digital agricultural extension and advisory services <https://www.fao.org/publications/card/en/c/CB5944EN>
- [7] FAO (2018) E-agriculture: the Use of Information and Communication Technologies (ICTs) for the Development of Sustainable and Inclusive Food Systems and Trade Integration In: FAO Regional Conference for Europe and Central Asia, 41 session <https://www.fao.org/3/MW106EN/mw106en.pdf>