Summary of the 1st e-conversation, 2nd series

e-conversation #1: Independent evidence of D4Ag impact is needed. Who would be in the best position to provide it?

E-conversation framework:

Many studies on digitalisation for agriculture (D4Ag) and smart farming solutions addressing small-scale producers, acknowledge that there is lack of independent evidence about the varied impacts (changes in farming practices, costs and benefits, producers' income, livelihoods, employment, inequalities, etc.) in real production environments.

Where are the challenges and bottlenecks in assessing such impacts? Should solution providers approach independent organisations to assess these? And who could play this role effectively?

Some stats	Z	$\overline{\underline{X}}$	<u> </u>
	Starting date	Closing date	Geographic spread of contributors
	26 June 2023	3 July 2023	 Sub-Saharan Africa Europe North America Caribbean South Asia
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Number of posts	Unique contributors	New members	
24	18	38	

Some takeaways

- The importance of finding evidence for the broader impact of digitalisation to benefit small-scale producers is widely acknowledged. However, different views exist about who should take up a role when it comes to determining impact and if it should be self-assessed or independently assessed.
- Many start-ups may have problems in accessing the knowledge, skills and resources needed to conduct rigorous impact assessments by their own.
- Impact takes time to materialize and be measurable on a representative scale.
 Impacts of digital transformation in agriculture encompass several dimensions



which may include but are not limited to changes in behaviour, production practices, income, operation efficiency, inclusiveness, employment, quality of life and more.

- Several contributors have noted and confirmed that the (commercial) market for digitalisation for small-scale producers might not be relevant enough to attract the resources required to scale out and achieve substantial impact. In turn, this then also affects the motivation and the available resources to assess impacts.
- Digital services or solutions helping the identification of problems my have a positive outcome (and impact) only if the inputs and skills needed to combat the identified problem are available to the small-scale producer.

Way forward

 Many valuable suggestions have been made that might help getting around currently existing barriers. Some examples mentioned are (i) to integrate the development of D4Ag solutions into the broader agricultural and rural development initiatives, (ii) merging the learning perspective, (iii) making better and more efficient use of the (fragmented) data that is available, and (iv) working with independently verifiable stories of impact.

- Documenting failures or negative impacts is as important as assessing positive impacts and success stories.
- Start-ups should consider partnering with the academia, government agencies and eventually mobilise donor funding to collaboratively engage in the practice. Adopting a well-defined, light approach would represent an additional asset.
- Further consider enabling small-scale producers to digitally gather and crossvalidate data which feed systems (e.g. blockchain as mentioned by Om Goekermann or specific applications, as described by Ashish Gupta) offering the opportunities for (self) assessing impacts of innovations.

Rob Lokers, who initiated the e-conversation concluded:

For me this is an encouraging message, and I'm sure that as a community we can propagate these ideas and have them taken up in existing and new programmes and interventions to make them more 'impactaware.'"

Shared Resources

and local innovations.

Burns, S., Dittmer K.M., Shelton S.W., Wollenberg E. (2022) Global digital tool review for agroecological transitions. Agroecological transitions: Inclusive Digital Tools to Enable **Climate-informed Agroecological Transitions** (ATDT). Cali, Colombia: Alliance of Bioversity & CIAT. # 36 p. Stone G.D. (2021) Surveillance agriculture and peasant autonomy #24 p. Bentley, J., Boa, E. and Salm, M. 2016. A Passion for Video. 25 stories about making, translating, sharing and using videos on farmer innovation. Access Agriculture, Nairobi and CTA, Wageningen, 56 pp. Salm M., Jeffery Bentley J. and Okry F. (2018) Learning Through The Eyes Of Others. Access Agriculture's experiences with farmer-training videos in agricultural extension and education. CTA and its co-publishers Access Agriculture and ICRA, 48 pp. GSMA (2023) Emerging Trends in Climate Tech Innovations # 18 p. Chandel RS, Gupta M. and Gupta A. (2022) Certified Evaluation Tool for Agriculture Resource Analysis-Natural Farming (CETARA-NF); (SuSPNF(PK3Y) Digital Farmer Self Assessed Certified-Evaluation System). A Handbook: Vision, Approach and Methodology . Department of Agriculture, Government of Himachal Pradesh. 26 pp. Lawani A. (2023) Drones and Artificial Intelligence for Precision Agriculture. <u>http://</u> www.gblpartner.com/drones-and-artificialintelligence-for-precision-agriculture/ (accessed on 30 June 2023) EcoAqtube is a new video-sharing platform for all those with an interest in sustainable agriculture and sustaining the environment around the world to showcase their experience



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