



The future will be like the past ...: Is Agricultural Extension Exceptional?

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using as a point of departure

“The future will be like the past, because, in
the past, the future was like the past.”

(Weinberg, 1975, p. 141)





A quote that still resonates: AgriLinks *August 23, 2018*
[Judy Payne, Kristin Davis and Suprita Makh.](#)

“Today, almost every effort to provide agriculture extension and advisory services involves digitally-enabled tools or services and there is plenty written on the topic. There is even some evidence of what approaches work. **But there are still many questions to answer**, such as which digital tools or services are cost-effective, work best for reaching women and youth, give farmers voice, or can be sustained and scaled organizationally and financially.”(my bolding) **Still holds good!**





Leaving from early century

- **Anderson, J.R. and Feder, G. (2007)**, “[Agricultural extension](#)”, In R.E. Evenson and P. Pingali (eds), *Handbook of Agricultural Economics*. Chapter 44, Volume 3 *Agricultural Development: Farmers, Farm Production and Farm Markets*. Elsevier, Amsterdam, 2343-78. [Herein AF]
- **Feder, G., Willett, A. and Zijp, W. (2001)**, “Agricultural Extension: Generic Challenges and the Ingredients for Solutions”, In S. Wolf and D. Zilberman (eds.), *Knowledge Generation and Technical Change: Institutional Innovation in Agriculture*, Kluwer, Boston, pp. 313-56.





1 Scale and Complexity

- My focus is in the smallholder sector of developing countries where private extension services are scarce
- Clients numerous, dispersed/remote, poorly educated, unreached, ..., unconnected?
- Distancing effectively reduced and coverage increased via mobile and smart phones
 - administrative managers, specialist colleagues and with agents in the private sector





2 Dependence of Extension on the Broader Policy Environment

- Factors such as credit, input and seed supplies, price incentives, marketing channels, human resource constraints, connectivity limit the impact of the information that extension agents convey to farmers
- But provision of appropriate infrastructure serving remote areas can reduce constraints
- Especially accessible ICTs!





3 Interaction with Knowledge Generation

- In national AISs extension too often segregated in many ways from research and education
- But, accessible ICTs can help overcome
- E.g., Sourcebooks: *AIS 2009, ICT in Agriculture 2011* (updated 2017)
 - But digitalization per se is no silver bullet (e.g., Klerkx et al. 2019)





4 Difficulty in Tracing Extension Impact

- Inherently difficult and empirical studies are challenging; IFPRI “best fit” work has helped, useful studies are underway
- With the rise of ICTs in agriculture...
 - “big data” will be available in the digital footprints of modernized extension services
 - So, too early yet, but some optimism seems reasonable





5 Weak Accountability

- Typically reliant on self-reported input indicators
- Complicated by the same impact attribution problems
- Once farmers are digitally connected to service providers
 - should be possible to readily capture their opinions and assessments
 - encouraged by extension managers in Punjab Province of Pakistan





6 Weak Political Commitment and Support

- Extension oft tended to be a less powerful claimant for budgets than flashy infrastructure
 - Perceived ineffectiveness
 - Political payoff /attention
- So, if managers and analysts of extension efforts, public and private, can draw instructive information from the good things already noted as likely in the digital era, maybe the future will not be so much like the past?





7 Encumbrances with Public Duties in Addition to Knowledge Transfer

- Many miscellaneous duties crop up
 - E.g., collecting statistics, regulatory duties, among the overtly non-political
 - Some may involve rent seeking!
- Digital tools can likely help all, so on balance perhaps less distracting from core information exchange and facilitation?





8 Fiscal Sustainability

- Persistent funding difficulties have often been encountered, especially post large donor-supported operations
- Scaling down to sustainable levels has seldom been easy
- Key is if extension is indeed more efficiently and cost-effectively delivered through application of digital technologies?
 - optimistic reviews (e.g., Fielke et al. 2020)





Conclusion

- Investors need to be clever in designing and adjusting ICT provision and public extension systems to exploit the new and emerging digital tools that are becoming available
- So, my tentative answer is that agricultural extension *can* indeed be exceptional
- Here's hoping! Thanks.



Some Other References

- Fielke, S., Taylor, B. and Jakku, E. (2020) Digitalisation of agricultural knowledge and advice networks: A state-of-the-art review. *Agricultural Systems* 180: 102763.
- Klerkx, L., Jakku, E. and Labarthe, P. (2019), "A review of social science on digital agriculture, smart farming and agriculture 4.0: New contributions and a future research agenda". *NJAS - Wageningen Journal of Life Sciences*, 90-91, [100315].
- Anderson, J.R. (2020), *Agricultural Extension Policy: A 2020 Re-Vision*. Working Paper, Rutgers University Policy Research Consortium (in preparation) <http://ru-fff.rutgers.edu/publications.html>