

A Brief 2020 Vision of Agricultural Advisory Services Policy

Jock R. Anderson, Rutgers University Feed the Future Policy Consortium

“Agricultural extension services, after a period of neglect, are now back on the development agenda, with a sense of excitement about many of the emerging institutional innovations. Clearly there still is much to do in bringing needed extension services to smallholders around the world, especially the poorest groups. Understanding what works well in the diverse circumstances of the developing world remains a challenge...” So declared the World Bank in its *2008 Agriculture for Development: World Development Report* (2007, p. 175) and the message remains true moving forward in troubled 2020.

Agricultural advisory services are still an important element within the array of market and non-market entities and agents that provide human capital-enhancing inputs, as well as flows of information that can improve farmers’ and other rural peoples’ welfare. The goals of extension include the transferring of knowledge from good sources such as research organizations and universities to farmers, advising farmers in their decision making and educating farmers on how to make better decisions, enabling farmers to clarify their own goals and possibilities, and stimulating desirable agricultural adaptation and development. Those laudable goals are now more readily achieved through use of digital technologies, and implications of this rapidly developing reality are explored here briefly. While extension agents often also provide services that are not directly related to farm activities (e.g., health, non-farm business management, home economics and, increasingly, nutrition), the focus here is on agricultural and farm management knowledge dissemination (which will often include financial and marketing information).

Taken together, the information delivery systems supporting farming should constitute something of a growth industry if, as is regularly argued by agricultural analysts, farming is becoming more information-intensive. How the demands are met by suppliers surely varies greatly around the world, depending as it does on market and institutional conditions but, almost everywhere, digitally-enabled methods are becoming more prevalent. The experience of recent years, especially with emerging digitalized technologies, and as recently and imperatively propelled by a pandemic, has thrown much light on and brought insight to better understanding these issues; it is the purpose here to draw from that experience* (such as assembled by USAID at AgriLinks), and pertinent reviews of it.

Given that much of the information delivered through advisory services is largely of a public-good nature, it is not surprising that most of the extension effort around the world is financed and delivered by public entities. Governments also have, however, a major role in establishing policies and programs to encourage development of private extension services, along with continued sustenance of public provision, especially in cases such as for remote areas underserved by private providers, and extension systems need to be designed with the understanding that they will be useful investments only

if the public role is defined so as to sensibly complement what the private sector can and will fund and deliver. Contracting schemes are another popular private-sector mechanism for providing services to small-scale farmers. The potential for conflict of interest in any private arrangements may warrant a public regulatory and monitoring function backed up by “public” information, for instance, for quality-checking on information supplied.

Whether delivery is public or private, improving cost-effectiveness is important and this can be achieved through improvements in program management, targeting and priority setting, and choice of appropriate extension delivery methods (e.g., greater use of mass media, social networking and increasingly diverse digital linkage mechanisms). Most recent reviewers* are generally enthusiastic and largely positive about the digital prospects. But just how much this can make the future better than the past depends on the extent of access to digital services in historically remote areas, and that in turn depends on investment in technologies, from solar and other sources of electric power at farm level, to networks supported by terrestrial towers or satellites. Such infrastructural matters depend on policies and investments well beyond what might be regarded as “agricultural” per se.

Evaluative studies based on the “big data” that will be available in the digital footprints of modernized extension services have yet to be conducted. Some degree of optimism seems reasonable, however, even though the difficulties inherent in untangling the complex interaction of information flows and farm outcomes will surely persist. Solid evaluative findings should underpin strengthened future political support for well targeted investment in provision of advisory services.

Private-sector participation can overcome many of the deficiencies that have traditionally characterized the services provided by public extension systems, but there are many challenges to be faced as policy makers consider how private elements can best function in extension provision.

Digitalization of agriculture offers far-reaching opportunities for accelerating agricultural development and transformation. A myriad of digital “solutions” will help crop and livestock production to become more efficient and environmentally friendly, although there are many risks to be faced by all actors, particularly concerning intellectual property ownership and privacy. Extension will surely play many important roles in helping farmers come to grips with new digital technologies and availing themselves of the benefits of exploiting them, from drones to robots and beyond. For brevity and focus, attention here is limited just to the digitalization of extension-related aspects (where risks are likely fewer but still prevalent), what some have termed “digitally-enabled advisory services”. Unresolved governance issues include those related to the growing connectivity and transparency of digital innovations, particularly regarding privacy and safety.

For digitalized extension the biggest “risk” relates to socially equitable access to extension services. Investment in enabling policies for telecommunications infrastructure in rural and remote areas to enable good quality and predictable rural connectivity will be fundamental. Access to connectivity for smallholder farmers and service providers will enable better access to services and digital solutions. Investments related to development of digital skills will be critical in all sectors, including within public agricultural extension services and their clients.

To realize the full potential of digital extension, it is vital to avoid deepening a “Digital Divide” by means of adopting some targeted investment policies. In particular:

1. Invest in [telecommunications infrastructure for rural and remote areas](#), perhaps in part through making greater use of long-standing but seemingly much underused institutional innovations such as Universal Service and Access Funds.
2. Invest in [digital skills development](#) for most people but especially for those engaged in enhancing agricultural knowledge platforms, including research organizations, extension managers and agents, would-be rural entrepreneurs, traders and farmers, and, of course, the young who in due course will move into these roles.
3. Invest in oversight mechanisms that can monitor digital developments in the food and agriculture sectors with an eye to [ensuring authenticity of information](#) in digital systems (especially those used by farmers and extension services, public and private) and the privacy and safety of all engaged in such systems. Development of such mechanisms requires novel thinking and careful analysis.

Digitalization of agricultural advisory services is happening rapidly in much of the world but agricultural policymakers must devote imagination and effort to ensure that **all** rural residents can benefit from emerging digital technologies and farmers everywhere can be better served by digitally-enabled extension work.

There is clearly much yet to be done in bringing needed extension services to the poor around the world. Investors still need to be cautious in designing and improving public extension systems. But they also need to be innovative in employing modern technologies in designs that can be more cost-effective, and wider and more inclusive in reach. The private sector can lead the way if ICT infrastructure is in place and there is freedom to operate, both depending on government policy being set favorably. When private initiatives are unlikely to fill needs of some farming and farm-supply communities, public provision will be necessary. Governments should be able to design and create any required public advisory systems in such a way that their investment successfully assists farmers to boost their productivity and income, and thereby contribute more strongly to broad-based and environment-friendly economic growth. This will be easier to do in the digital era but will continue to be challenging.

*Reviewed references a more detailed perspective are at Anderson, J.R. (2020), *Agricultural Extension Policy: A 2020 Re-Vision*. [Working Paper](#) Rutgers University Feed the Future Policy Research Consortium.

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