Competent extension professionals are the assets of agricultural extension services. Diverse and dynamic agricultural systems, advancing science and technologies, changing sociodemographics, increasing globalization and growing competition for resources demand that agricultural extension professionals be proficient in the technical aspects of their areas of expertise as well as in the processes and delivery of the services. In other words, the need and demand for extension professionals to demonstrate a higher level of professionalism in their services are growing. “Extension employees should possess the necessary competencies to anticipate and deliver quality educational programs of relevance and importance to our publics” (Maddy et al., 2002).

The scope of agricultural extension services (AES) has been widening, and the need to adapt to changing contexts is also growing. The challenges include offering new services, ensuring the quality of services, and strengthening collaboration and synergy among extension service providers (Sulaiman & Davis, 2012). AES should become more participatory, demand-driven and pluralistic (Rivera et al., 2009). This means that, to thrive, extension must understand and adjust to rapid changes and emerging challenges (ECOP, 2002). These calls for organizational changes and new tasks indicate the need for multi-skilled human resources in extension services (Cochran, 2009). Extension workers work in harsh field conditions with limited facilities and with less than well-educated clients (Qamar, 2005). Only trained, motivated and competent staff members can work and succeed in such difficult conditions. Competency of agricultural extension workers is therefore an important issue in both academia and the development sector.

Contexts are changing, competition for resources is increasing, clients are more aware of their need for than before, and they are demanding quality, reliable and performance-based services. Extension professionals have to be prepared with the knowledge, skills and behaviors to help meet these demands and needs of clients. The need for active participation of farmers in extension processes, including decision making, so that farmers can voice their needs and can demand and get programs that they deem appropriate, is ever high. Swanson and Samy (2002) emphasized participation, collaboration and cooperation among extension service providers and service seekers in various aspects of extension services, such as in knowledge, information and resource sharing.

“Extension” means to extend education or to educate people with the aim of bringing positive behavioral changes and improving the quality of life among those targeted (Qamar, 2005). Dwarakinath (2006) said that communication and adult education are two facets of extension education. Extension professionals need to have knowledge of andragogy—how adults learn. Suvedi and McNamara (2012) underscored that communication and coordination between extension and research are crucial in agricultural services. Extension professionals should know about ongoing research and research findings, and researchers must know what field-researchable problems are. Moreover, demand for information and communication technologies (ICTs) in agricultural extension services is ever growing (Aker, 2011). The use of ICTs makes information dissemination quicker, easier and cheaper. Extension professionals should be cognizant of the new ICTs and should use them in their work.

Extension professionals are now asked to facilitate marketing of agricultural products, and to educate and prepare communities to mitigate risks and uncertainties associated with climate changes, disease epidemics, etc. Extension professionals may find it difficult to accomplish these tasks on their own. They need support from and need to work with partners and beneficiaries for these jobs.
Extension services will be sustainable if they:

- follow a farmer-centered approach (demand-driven),
- encourage participation of farmers and other stakeholders in extension processes (participatory),
- and involve NGOs and farmer cooperatives as extension service providers (pluralistic).

Extension professionals should be proactive to these approaches.

Swanson (2008) argued that, in most developing countries, AET courses are focused on technical specialization such as crops, livestock and veterinary science. Students do not get adequate orientation on communication, leadership, adult learning and social mobilization. College education is focused more on theory than applied learning and process skills.

Today extension professionals are judged on how they serve their clients, whether they listen to their clients, how their rapport is with their clients, and how familiar they are with their clients’ contexts and issues. Therefore, extension professionals should have mastery of several non-technical or process skills, such as “soft skills (communication skills, critical thinking, teamwork, entrepreneurship and leadership) as well as practical capacities” (Moore, 2015).

Core Competencies for Extension Professionals

The core competencies listed below are those that developing countries may consider adapting for their extension professionals. They are subject to change as new situations unfold.

**Program Planning & Implementation**
Program planning and implementation are important skills that extension professionals need. Extension professionals not only have to understand planning and do planning within their organizations -- they also have to facilitate their clients to do the same.

**Communication Skills**
Communication is one of the pillars of extension because extension professionals have to communicate effectively with their clients and stakeholders. Extension professionals have to understand the process for diffusion of innovation.

**Leadership**
A large number of stakeholders are involved in and/or associated with agricultural services. Extension professionals have the challenge to lead, coordinate and facilitate these diverse stakeholders. Extension professionals should uphold stakeholders’ participation and ownership in the programs.

**Education & Information Technology**
The use of appropriate methods, messages and tools of education and information is of paramount importance in extension. Competency of extension professionals will be evaluated on the basis of how familiar they are with various and emerging ICTs and other communication tools and methods, and how effectively they use these tools and methods in their routine work.

**Diversity, Pluralism, & Multiculturalism**
Most developing countries are home to many races, cultures, religions and ethnicities. Gender-related issues such as gender disparities in access to services are frequently raised in these countries. Extension professionals need to be familiar with the diversities of the communities they serve.

**Professionalism**
Extension professionals should practice integrity, honesty, transparency and inclusiveness to demonstrate their competency.

**Extension & Organizational Management**
To deliver extension programs effectively, extension organizations should function efficiently. Extension professionals should, therefore, be able to mobilize and monitor their resources, and lead change to obtain extension outcomes effectively (Maddy et al., 2002).

**Program Evaluation & Research**
Monitoring and evaluation of programs are as important as program planning. Funders and stakeholders are eager to know whether the extension programs yield expected outcomes. Program evaluation is the most studied among the core competencies for extension professionals, and it is one of the important competencies required for extension professionals. Extension professionals should have information about what, where, how and when extension programs are delivered and how successful these programs are.

**Technical Expertise**
Together with the process skills, extension professionals should have basic knowledge of the subject matter of their discipline.
Conclusions

Given the significant contribution of agriculture to national economies and the important role of extension services in agricultural development, the need for competent agricultural extension professionals in developing countries is ever high. Core competency assessment is needed because contexts have changed since previous studies were conducted. Technologies have advanced, farmers have new needs and problems, and workers need new skills to address them. Agricultural education and training (AET) curricula will be updated accordingly. As explained by Moore (2015) in Agricultural Value Chain Demand and Supply of Human Capital, the updated AET will help to produce competent human resources. This will ultimately help bridge the gap between agricultural extension services and agricultural education and training.

References


