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Perceived Competencies of Agricultural Extension and Advisory Services Providers in Building Rural Farmer Capability in Imo State Nigeria

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ABSTRACT

The study seeks to outline competencies relevant to the needs of agriculture extension workers in carrying out their assigned duties to the satisfaction and joy of farmers. Purposive sampling technique was used to select 120 Agricultural Extension as Advisory Services Providers (AEASP) of the Imo State Agricultural Development Programme (ADP). Structured questionnaire was used to elicit information from the respondents and data were analyzed descriptively using tables, percentages, mean and standard deviation. Results showed the current roles of extension and advisory services providers includes - dissemination of research results (100%), evaluating local extension programmes (100%), homes and field visit to famers (100%) among other roles. The following core competencies were needed - teaching skills (M=3.54), program planning (M=3.42), program implementation (M=3.77), education/information (M=3.88), program evaluation (M=3.34), knowledge management (M=3.34) among others. Again competent extension officers would accomplish the following: dissemination of technologies (M=3.39) harnessing local knowledge (M=2.80), conveying extension messages (M=2.56) and maintaining relationship with farmers (M=3.32). Therefore extension providers should be clear of their roles and duties from the on set, be aware of their expected competencies as developed on the job through regular training, seminar and workshop attendance.

Keywords: Competencies, extension, advisory services, capability, farmers;

INTRODUCTION

The increasing changes in and demand for high quality and quantity of farm produce made on agricultural based institutions and farmers in the 21st century have had a considerable impact on roles and job performance of extension workers. As a result, the traditional subsistence agriculture is gradually been replaced by market-oriented or commercial agriculture.

This is probably due to factors including rapid economic growth in both developing and developed countries, introduction of new technologies, market expansion, market liberalization, increased demand for food, decreasing farming population as result of urbanization, liberalized and open economic policies, bilateral and multilateral economic agreements, developed infrastructure facilities in farming areas and government agricultural policies (Mahaliyanaarachchi and Bandara,

2006). Improvement in general agricultural production, productivity and sustainability will depend on farmers' willingness and access to new technology.

Agricultural extension and advisory services play an important role in addressing this challenge. Agricultural extension services play a pivotal role in ensuring that the farmers have access to improved and proven technologies and that their concerns and needs are properly addressed by relevant service providers. Agricultural extension contributes to improving the welfare of farmers and other people living in rural areas as extension advisory services and programmes forges to strengthen the farmer's capacity to innovate by providing access to knowledge and information. However, the role of extension today goes beyond technology transfer to facilitation; beyond training to learning, and includes assisting farmer to form groups, dealing with marketing issues, addressing public

interest issues in rural areas such as resource conservation, health, monitoring of food security and agricultural production, food safety, nutrition, family education, and youth development and partnering with a broad range of service providers and other agencies (USAID, 2002).

This has led to increasing emphasis on the development of core competencies necessary for the extension workers to perform at maximum. Competent extension professionals are the assets of agricultural extension services. Diverse and dynamic agricultural systems, advancing science and technologies, changing socio-demographics. increasing globalization and growing competition for resources demand agricultural extension professionals to be proficient in the technical aspects of their areas of expertise, as well as in the processes and delivery of the services (Cochran, Ferrari, & Chen, 2012; Gibson & Brown, 2003; Maguire, 2012; Melak & Negatu, 2012; Rivera, Blum, & Sulaiman, 2009; Swanson & Rajalahti, 2010). In other words, the need and demand for extension professionals to demonstrate a higher level of professionalism in their services are growing.

The scope of agricultural extension services (AES) has been widening, and the need to adapt to changing contexts is also growing. AES work should in sustainable agricultural development and play coordinating and leadership roles among agricultural stakeholders (Rajalahti, 2012; Swanson, 2008). The challenges include offering new services, ensuring the quality of services, and strengthening collaboration and synergy among extension service providers (Sulaiman & Davis, 2012). Furthermore, AES should become more participatory, demanddriven and pluralistic (Rivera et al., 2009). This means that, in order 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).

Therefore, the effectiveness of an Extension organization is determined by the ability of extension agents to design, deliver, and evaluate effective educational programs, because they are directly serving the needs of the people. Their ability to perform extension tasks is a function of their job competencies. To Severs et al (2007), future extension professionals need to be more skillful and futuristic to serve the needs of

diverse audience. Extension staff must learn new knowledge and skills, since it is only knowledgeable and skillful individual who can play a vital role in the success of an organisation todav's technological environment. According to Swanson (1996), high value should be placed on core competencies in business and industry, primarily referring to their knowledge and expertise in these fields. To be a successful extension staff today, one must be competent not only in technical matters, but also in areas such as management, programming communication, human relations, and leadership (Graham, 2009; Stone and Coppernoll, 2004; Reynolds, 1993; Gonzalez, 1982). As a result, it is necessary to investigate competencies of extension staff and how that leads to better delivery of extension services for a sustainable rural development.

Objective of the Study

The primary objective of this study is to ascertain the current level of perceived competencies possessed by extension staff in the State. Specifically, the study aims at achieving the following objectives;

- Examine the current competencies possessed by the extension staff in the State,
- Identify needed new competencies of extension staff in modern day extension service delivery and,
- Determine how perceived competencies contributes to job performance and satisfaction of the extension staff

Methodology

The study was conducted in Imo State Agricultural Development Programme (IMO ADP). Purposive sampling technique was employed in selecting the respondents. A sample size of 120 extension staff available in Imo State, as obtained from the ADP staff list was used for the study. The two main sources of data collection used were the primary data and the secondary data. The primary data was collected from field survey, using structured questionnaire. The secondary data were collected from books, reports, journals, existing literature review, information from library, ADP etc. Basically, descriptive statistics were used to analyze the data. This involves the use of mean and standard deviation. These were used to achieve objectives 1, 2 and 3. Objective 1 was

analyzed using a 3-point likert-type scale of strongly agree, agree, and disagree.

The responses were assigned weight of 3, 2 and 1 respectively and added to give 6 divided by 3 to give a mean of 2.0. A mean score of 2.0 and above indicated possession of skills currently, while a mean score lower than 2.0 indicated an opposite of the situation. Objectives 2 and 3 were analyzed using a 4-point likert-type scale of strongly agree, agree, disagree and strongly disagree. The responses were assigned weight of 4, 3, 2 and 1 respectively and added to give 10 divided by 4 to give a mean of 2.50. A mean score of 2.50 and above indicated new needed competencies and benefits of being competent, while a mean score lower than 2.50 indicated not needed competencies and not benefit of being competent.

Table1. Current Competencies of AEASPS

RESULTS AND DISCUSSION

Current Competencies of Extension Staff

Table 1 show that livestock extension staff possesses several competencies in the general agriculture area. These included horticulture and gardening with mean score of 2.47, farm management (M = 2.59), designing agricultural project (M = 2.56), farm operations (M = 2.45), agricultural marketing (M = 2.47), weed identification/control (M = 2.36), identifying major pests (M = 2.41), livestock products (M =2.26), fertilizer application (M = 2.09), animal husbandry (M = 2.11), soil testing (M = 2.91). The above skills are pre-requisite for entry into the agricultural/farm sector since numerous activities are involved. Other skills already acquired by AEASPs were teaching skills, use of audio-visuals, conducting group sessions among others.

Current Competencies	Mean	SD
Farming of different crops	2.80	0.741
Horticulture and gardening	2.47	1.061
Farm management	2.59	1.045
Designing agricultural projects	2.56	0.991
Farm operations	2.45	0.970
Agricultural marketing	2.47	1.011
Weed identification and control	2.36	0.894
Identifying major pests	2.41	0.882
Livestock products	2.26	0.941
Fertilizer application	2.09	1.066
Animal husbandry	2.11	0.761
Soil testing	2.43	0.932
Planning demonstrations	2.78	0.841
Writing skills	2.91	1.067
Diffusion of innovations	2.65	0.955
Teaching skills	2.47	1.043
Conducting researches	2.44	0.884
Conducting group sessions	2.69	0.924
Use of audio-visuals	2.39	1.034
Decision making	2.43	1.058

Needed Competencies Based on Specific Work Area

Table 2 showed the competencies as needed by AEASPs to impart on the farmers. The competencies included client orientation/customer focus with a mean response of 3.05. This means that AEASPs must be willing and able to deliver services effectively and efficiently in order to put the spirit of customer service (Batho-Pele) into practice (good inter-personal relations are a requirement). Another needed

competency is communication skills (M = 2.80). Communication is one of the pillars of extension because extension professionals have to communicate effectively with their clients and stakeholders. Extension professionals should: Know various types and styles of communication and be able to use them; Engage in adaptation of new technologies; Demonstrate good speaking skills; Demonstrate effective listening skills; Be able to create concise reports and proposals of their extension programs; Select and practice

communication tools and methods that suit recipients and their needs; Be aware of local dialects and cultures while communicating with clients. They must be able to exchange information and ideas in a clear and concise manner appropriate to the audience in order to explain, persuade, convince and influence others to achieve the desired outcomes. Other skills were project management (M = 3.88).

Table2. Needed Competencies Based on Specific Work Area

Competencies Needed	Mean	SD
Client orientation and customer focus	3.05	0.652
Communication skills	2.80	1.117
Project management	3.88	0.322
Knowledge management	2.69	0.807
Services delivery innovation	3.34	0.393
Problem solving & analysis	3.39	0.490
People management & Empowerment	3.77	0.419
Programme planning & implementation	2.74	0.783
Education & informational technology	3.74	1.399
Leadership skills	3.67	0.470
Diversity, pluralism and multi-culturalism	3.22	0.890
Programme evaluation and research	2.67	1.154
Extension and organizational management	2.86	1.187
Professionalism	3.50	1.256
Technical subject matter expertise	3.01	1.148
Entrepreneurship/apprentices skill	3.02	1.411
Curriculum development	2.95	1.072

They must be able to plan, manage, monitor and evaluate specific activities in order to deliver the desired outputs; and knowledge management (M = 2.69). They must be able to promote the generation and sharing of knowledge and learning in order to enhance the productivity of the farmer/s (this shall include competence in a particular specialized field of study such as crop production, livestock production, horticulture, farm business economics, extension, land use planning, etc); services delivery innovations (M = 3.84), they must be able to explore and implement new ways of delivering services that contribute to the improvement of productivity of the farmers; problem solving & analysis (M = 3.77), They must be able to systematically identify, analyze and resolve existing and anticipated problems in order to reach optimum solutions in a timely manner (ability to conduct needs assessments with clients and stakeholders leading to desired outcomes, including the ability to design, develop and execute specific programmes or projects with minimal People supervision): management Empowerment (M=3.77) They must be able to manage and encourage diverse groups of people, optimize their outputs and effectively provide leadership in order to achieve the desired outcomes. Again, programme planning/ implementation (M=2.74), Program planning and implementation are important skills that extension professionals need. In a study done among extension agents, Gibson and Hillison (1994) found program planning rated as the most important competency need. Extension professionals not only have to understand planning and do planning within their organizations, they also have to facilitate their clients in doing the same. It is thus important that extension professionals should be able to: Understand policies, programs and strategies of agricultural development; Comprehend demographics, economic and human activity systems of the communities they serve; Assess the needs of farmers and other stakeholders; Identify, acquire and allocate resources to programs according to their priority; Establish working relationships with partners; Design and implement programs with stakeholders' participation; Use appropriate educational design to respond to local learning needs; Apply adult learning principles to extension education and training; Provide input to and seek feedback from participants/learners/clients. Education/information technology (M=3.14). 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. Extension professionals should be able to: Use computers for word processing, information access, data storage and analysis; Provide information via local radio stations, the Internet and mobile phones; Effectively use audiovisual materials for teaching adults; Use television and radio to communicate information to clients; Design and use educational materials on the basis of clients' needs and contexts. Leadership skill (M=3.67), 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 ownership in the programs. Moreover, they should; Understand group dynamics, work in a team and encourage teamwork in their organizations; Understand basic approaches to conflict resolution; Understand facilitation and the role of facilitators; Identify major political forces that operate in the communities; Use a variety of leadership approaches depending on their work contexts; Practice consensus decision making among clients and stakeholders; Understand barriers to participation and/or learning; Be able to interact successfully with diverse individuals and groups to create partnerships and networks; Delegate tasks to staff members;

Other competency skills included diversity, pluralism/multi-culturalism (M = 3.22). Most developing countries, including Nigeria, are home to many races, cultures, religions and ethnicities. Gender-related issues, such as gender disparities in services, are frequently raised in these countries. If extension professionals need to be familiar with the diversities of the communities they serve. Specifically, they should be able to: Demonstrate sensitivity to the diverse needs of various cultural groups in the community; Engage and enhance the participation of various ethnic and sociocultural groups in extension programs; Ensure that women and farmers from rural areas and marginalized groups participate in the extension programs; Identify, understand and appreciate the needs of diverse staff members and clients; Understand and update diversity and multiculturalism issues; Ensure that other service providers (e.g., private sector agencies, NGOs, farmer cooperatives, etc.) collaborate in AES and/or provide extension services to the clients. Evaluation/research (M = 3.50). 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 (Rodgers et al., 2012). Scholars have found program evaluation to be one of the important competencies required for extension professionals (Khalil et al., 2009; Namdar et al., 2010). Extension professionals should information about what, where, how and when extension programs are delivered and how successful these programs have been. In light of these demands, extension professionals should also: Understand theories of monitoring and evaluation; Understand and adopt formative and summative evaluations; Do regular monitoring of extension programs and services; Apply quantitative and qualitative data analysis tools, techniques to analyze and interpret monitoring, and evaluation data; Communicate monitoring and evaluation findings to clients—farmers, researchers, educators, line agencies and departments: Improve and/or redesign programs on the basis of evaluation results; Remain current with extension-related research findings and research approaches.

Extension and organizational management (M=2.86), to deliver extension programs effectively, extension organizations need to function well. Extension professionals should therefore establish structure, organize processes, develop and monitor resources, and lead change to obtain extension outcomes effectively and efficiently (Maddy, et al., 2002). They should also:

Understand and be able to convey information about the vision, mission and goals of the extension services; Communicate effectively with staff members and clients; Conduct staff appraisal and keep staff members informed of their performance; Effectively implement reward and punishment systems in their respective offices; Find out staff needs — human resource development and others — and address them; Organize staff meetings in a timely manner and seek staff input. Professionalism (M=3.50), extension professionals should: Have a strong work ethic; Be committed to continuous

learning and career advancement; Have a positive attitude about extension work; Be accountable to their clients; Adhere to their professional norms: Maintain transparency: Demonstrate critical thinking and problemsolving skills; Be able to work independently. Technical subject matter expertise (M = 3.01), together with the process skills, extension professionals should be proficient in their subject matter. They should: Demonstrate that they have basic knowledge in their discipline: Understand the new technology being promoted -- what it is, and why and how it works; Be able to educate community members about risks and uncertainties due to climate change, market fluctuations, disasters, etc; Refer to and make use of publications, research reports, etc.; Demonstrate basic knowledge of agribusinesses and help entrepreneurship development among extension clients.

Table3. Beneficial of Being Competent

Perceived benefits	Mean	SD
Effective dissemination of	3.32	0.474
agricultural techniques		
Anticipation of new	3.29	0.574
knowledge		
Effectiveness in programme	2.85	1.163
design		
Effectiveness in programme	2.75	0.931
implementation		
Ability/readiness to harness	3.10	0.660
local knowledge		
Good understanding of	3.34	0.478
people, culture Y block		
Design and conduct/farmers	3.07	0.674
training		
Ability to convoy	2.98	1.180
extension messages		
effectively		
Possession of self-	3.54	0.504
motivation,		
determination/dedication		
Ability to encourage farmers	2.70	0.947
to adapt innovations		

Competencies Facilitates Extension Workers' Work

Table 3 showed that when extension staff acquires the needed competencies, they are in a position to be more effective and efficient in the execution of their tasks and responsibilities. The acquisition of the competent skills facilities extension work in the following ways – effective

dissemination of agricultural technologies as indicated by a mean score of 3.32, anticipation of new knowledge (M=3.29), effectiveness in programme design (M=2.85), effectiveness in programme implementation (M=2.75), ability/readiness to heirness local knowledge (M=3.10), good understanding of people, culture and block (M=3.34), design and conduct farmers training (M=3.07), ability to convey extension messages effectively (M=2.98), possession of staff-motivation, determination /dedication (M=3.54) and ability to encourage farmers to adopt innovations (M=2.70).

An extension worker who has to assume a variety of roles amongst the farmers must fulfill a number of different roles and therefore must prove to possess competencies in many diverse areas. Pickett, (1998), indicated that the identification of key competencies provides for individual and organizational growth, and helps the organization meet future demands. In almost all competency studies of extension workers in developing countries, the findings indicated the need for further strengthening of professional competencies in almost all areas of competencies identified (Hussain, 2004; Khan et al., 2004; Androulidakis and Siados, 2003). Once the extension worker is in the field s/he is expected to perform an assorted number of tasks, but Androulidakis and Siados (2003) pointed out that extension agents' competence should be in accordance with the task areas in which they will be assigned to operate in order to perform successfully. When the manager of extension workers, extension workers, and all stakeholders take steps to ensure that agricultural extension workers acquire the needed competencies, they are in a position to be more effective and efficient in the execution of their tasks and responsibilities

REFERENCE

- [1] Maddy, D. J., Niemann, K., Lindquist, J., & Bateman, K. (2002). Core competencies for the cooperative extension system. Oregon State University Extension Service. Retrieved November 22, 2014, from https:// www.msuextension.org/jobs/forms/Core_Competencies.pdf.
- [2] Khalil, A. H. O., Ismail, M., Suandi, T., & Silong, A. D. (2009). Human resource development competencies as predictors of agricultural extension agents' performance in Yemen. Human Resource Development International, 12(4), 429-447

- [3] Gibson, J. D., & Hillison, J. (1994). Training needs of area specialized extension agents. Journal of Extension, 32(3). Retrieved January 16, 2015, from http://www.joe.org/joe/1994 october/a3.php.
- [4] Namdar, R., Rad, G. P., & Karamidehkordi, E. (2010). Professional competencies needed by agricultural and extension program evaluation staff and managers of Iranian Ministry of Agriculture. Journal of International Extension and Education, 17(2), 17-31. doi:10.5191/ jiaee.2010.17202
- [5] Androulidakis, S. I., & Siardos, G. C. (2003). Agricultural extension agents' perception regarding their relevance and competence in certain professional task areas. European Journal of Agricultural Education and Extension, 1(3), 1-14.
- [6] Hussain, N., Ali, T., Khan, M. A. J., & Ahmad, M. (2004). Training of agricultural extension administrators in planning extension activities in the Punjab, Pakistan. International Journal of Agriculture and Biology, 6(5), 941-942.
- [7] Khan, M.A.J., Ali, T., & Hussain, N. (2004). Competencies regarding extension methodology possessed by agricultural officers in Punjab. Indus Journal of Plant Sciences, 3(1), 31-33.
- [8] Pickett, L. (1998). Competencies and managerial effectiveness: Putting competencies to work. Public Personal Management, 27(1), 103-115.
- [9] Rodgers, M. S., Hillaker, B. D., Haas, B. E., & Peters, C. (2012). Taxonomy for assessing evaluation competencies in extension. Journal of Extension, 50(4), 4FEA2.
- [10] Cochran, G. (2009). Ohio State University extension competency study: Developing a competency model for a 21st century extension organization. Doctoral dissertation. Retrieved from https://etd.ohiolink.edu/.
- [11] Cochran, G. R., Ferrari, T. M., & Chen, C. Y. T. (2012). Trends affecting Ohio State University extension in the 21st century and the implications for human capital. Journal of Agricultural Education, 53(2), 43-57.
- [12] Extension Committee on Organization and Policy (ECOP). (2002). The extension system: A vision for the 21st century. Retrieved from http://dasnr2.dasnr.okstate.edu/documents/commit tee_report.pdf.
- [13] Gibson, J. D., & Brown, A. S. (2003). Use of managerial proficiencies in agricultural and extension education: An assessment of Virginia Cooperative Extension. Journal Of International Agricultural and Extension Education, 10(3), 19-24.

- [14] Maguire, C. J. (2012). Agricultural education and training to support agricultural innovation systems. In Agricultural innovation systems: An investment sourcebook. Washington, DC: World Bank
- [15] Melak, D., & Negatu, W. (2012). Agricultural education and technical competency of development agents in Ethiopia. Journal of Agricultural Extension and Rural Development, 4(11), 347-351. doi:0.5897/JAERD11.114
- [16] Rajalahti, R. (2012). Sourcebook overview and user guide. In Agricultural innovation systems: An investment handbook. Washigton, D.C.: World Bank.
- [17] Rivera, W., Blum, M., & Sulaiman, R. (2009). Extension: Object of reform, engine for innovation. Outlook on Agriculture, 38(3), 267-273.
- [18] Sulaiman, R. V., & Davis, K. (2012). The 'new extensionist': Roles, strategies, and capacities to strengthen agricutural and advisory services. Lindau, Switzerland: Global Forum for Rural Advisory Services (GFRAS
- [19] Swanson, B. E. (2008). Global review of good agricultural extension and advisory service practices. Rome, Italy: Food and Agricultural Organizations (FAO).
- [20] Swanson, B. E., & Rajalahti, R. (2010). Strengthening agricultural extension and advisory systems: Procedures for assessing, transforming, and evaluating extension Systems. Washington, D.C.: The World Bank.
- [21] Stone, B., & Coppernoll, S. (2004). You, Extension and success: A competency-based professional development system. Journal of Extension [On-line],42(2), 2IAW1. Retrieved from http://www.joe.org/joe/2004april/iw1.php
- [22] Swanson, R. A. (1996). Analysis for improving performance: Tools for diagnosing organizations and documenting workplace expertise. San Francisco, CA: Berret-Kpehler.
- [23] Seevers, B., D. Graham, J. Gamon, and N. Conklin, 2007. Education through Cooperative Extension. New York: Delmar Publishers
- [24] Reynolds, W. B. (1993). Professional competencies needed by extension agents in the Louisiana Cooperative Extension Service (Unpublished doctoral dissertation). Louisiana State University and Agricultural & Mechanical College, Louisiana
- [25] Gonzalez, I. M. (1982). The professional competencies needed by Extension agents in the Pennsylvania

- [26] Cooperative Extension Service (Unpublished doctoral dissertation). The Pennsylvania State University,
- [27] University Park, PA. Graham, R.C. (2009). Ohio State University Extension competency study:

Developing a competency model for a 21st century Extension organization (Unpublished Ph.D. dissertation). The Ohio State University, Columbus

Citation: Chikaire, Jonadab Ubochioma, Emerhirhi, Emily, Anyoha, Ndidi Pascal and Onoh, Peter Agu (2018). Perceived Competencies of Agricultural Extension and Advisory Services Providers in Building Rural Farmer Capability in Imo State Nigeria. International Journal of Research in Agriculture and Forestry, 5(6), pp 25-32.

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