

UNIVERSITY OF ILORIN



THE TWO HUNDRED AND THIRTY-FOURTH (234TH) INAUGURAL LECTURE

“WORKERS TOGETHER, WORKERS TO GATHER
AND WORKERS TO GET THERE”

By

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UNIVERSITY OF ILORIN, ILORIN, NIGERIA**

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The Vice-Chancellor

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All other Academic Colleagues.
Members of the Administrative and Technical Staff,
My Lords, Spiritual and Temporal,
Traditional Rulers here present,
Members of my nuclear and extended family,
Esteemed Invited Guests, Friends and Relatives,
Distinguished Students of the Faculty of Agriculture,
Great Students of the University of Ilorin (Greatest Unilorites),
Gentlemen of the Print and Electronic Media,
Distinguished Guests,
Ladies and Gentlemen.

Preamble

I welcome you to my inaugural lecture titled "Workers Together, Workers To Gather, and Workers To Get There," in the name of God, the Father and of the Son, and of the Holy Spirit. As I stand before you today, I am humbled by the opportunity to address you as a Professor at this esteemed Institution. I would like to start by thanking God the Almighty who has supported me throughout my academic journey and has

made this day a reality. He is my foundation, atmosphere, sweet perfume. In Him I live, and move, have my being.

The First letter of Paul to the **Thessalonians, chapter 5, verse 18** reads:

“In everything give thanks; for this is the will of God in Christ Jesus for you”.

I had planned to deliver this lecture in 2020 but could not due to the Covid-19 pandemic which ravaged the whole world. After the pandemic, another date was proposed but this was also truncated due to the eight-month ASUU strike. But finally, glory be to God for keeping me alive to witness today which is the day that the Lord has made in which I am glad and rejoicing.

According to Ecclesiastes 3: 11, God has made everything beautiful in its time. He has also set eternity in the human heart; yet no one can fathom what God has done from beginning to end. I believe this is the perfect will of my Maker. Lord! I am grateful.

Permit me to welcome you to the 234th inaugural lecture of the prestigious Better by Far University. This lecture is the eleventh in the Faculty of Agriculture and the second of its kind in the Department of Agricultural Extension and Rural Development. The first in the department which was the 120th in the series of Inaugural Lectures of the University of Ilorin was delivered by Prof. Oluwasegun Adetokunbo Adekunle who was my teacher as far back 1989 and my undergraduate project Supervisor at the University of Ibadan, Ibadan.

Today, bringing the work of extension away from the farmers to the University Auditorium in the presence of scholars delights my heart as this is what I have been preparing for all my life. The title of my lecture embodies the fundamental principle that has guided my research and academic career. The idea that we achieve more together than alone has been at the heart of my work and continues to inspire me to push the boundaries of knowledge in my field. In this lecture, I will be exploring the importance of collaboration and teamwork in achieving our goals in the field of Agricultural Extension.

My Journey to Agricultural Extension

I started my education from Nawar-Ud-Deen Primary School, Waro village, in Oyo town at the defunct Oyo Local Government Area of Oyo State. My Uncle, Engr. J. A Adesiji visited our village on the day of vacation when I had collected my report card and requested for my result. He was impressed by my brilliant performance as I came first in my class and he immediately decided to adopt me.

I joined him in Ibadan in 1979 and enrolled in primary five class at Odo-Ona Community Primary School, Odo-Ona, Ago Taylor. I proceeded to Government College, Ibadan, for my secondary school education and later left for Ilora Baptist Grammar School where I completed my secondary education in 1986. I left there for my Higher School Certificate (HSC) at the then Oyo State College of Arts and Science, Ile-Ife, between 1986 and 1988.

As a young boy longing to become a Chief Consultant in the medical field, I applied for Medicine and Surgery but was admitted to University of Ilorin, in 1988 to study B.Sc Physics; when Prof. J. O Oyinloye was the Head of Department in 1988. My thought as a Physics student then was to end up being a teacher, but later I was motivated to sit for another Joint Admission and Matriculation Board examination choosing University of Ibadan as my first choice of University. However, I did not meet the cut off mark for the course of my choice and had to write a letter for change of course to Agricultural Economics. I submitted the letter and few meters away from the office of the Dean of Agriculture, I met a friend of mine (now Prof. Femi Fakunle, University of Maryland, USA) from HSC class who asked me what I came to do at the University of Ibadan. I told him about the change of course to Agricultural Economics and he smiled and told me that the richest man in the Faculty of Agriculture was Prof. S.K.T. Williams (One of the founding Fathers of Agricultural Extension in both Obafemi Awolowo University and University of Ibadan, Ibadan). He advised me to go back and change my course to Agricultural

Extension instead of Agricultural Economics. He said the man and his wife were riding Mercedes Benz V-Booth car. I immediately went back and picked up my change of course letter and deleted Economics from Agricultural Economics and wrote Extension Services. The decision of that day has brought me this far and by the special grace of the Almighty God, I rose from Lecturer II in 2004 to the position of a Professor in 2017. This evening, we are here for a lecture I titled “**Workers Together, Workers To Gather and Workers To Get There**”.

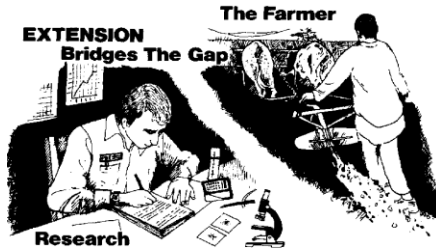
The concept of Agricultural Extension

Agricultural Extension is a method of communication and education that seeks to share the latest knowledge and technology with farmers, with the purpose of imparting novel information and technology that can enhance agricultural productivity, profitability, and sustainability. Over the years, the idea of Agricultural Extension has undergone changes and improvements, and it is now widely acknowledged as a crucial element of agricultural progress and growth. According to the Food and Agriculture Organisation (FAO, 2019), Agricultural Extension is "a system of transferring information, skills, and technology to farmers and rural communities to help them improve their livelihoods and well-being." Agricultural Extension employs different communication methods and channels such as field visits, demonstrations, training sessions, and media campaigns to spread information, encourage learning, and foster innovation among farmers and other stakeholders involved in the agricultural sector. The ultimate goal of Agricultural Extension is to promote sustainable agricultural development and food security by empowering farmers with the knowledge and skills they need to increase their productivity, profitability, and resilience to external shocks and challenges.

A major responsibility of Agricultural Extension is to ease the implementation of new agricultural technologies and methods among farmers. This may encompass imparting knowledge about new crop types, pest control methods, and farming practices that can enable farmers to boost their crop

yields and profitability. Extension workers may also provide technical assistance, such as helping farmers diagnose and solve problems with their crops, livestock, and providing guidance on farm management and marketing.

In addition to technology transfer, agricultural extension also plays a crucial part in enhancing the livelihoods of small-scale farmers. Extension programmes often include education and training on financial management, marketing, and entrepreneurship, which can help farmers increase their incomes and improve their overall well-being. Extension workers may also work with farmers to promote sustainable agriculture practices that conserve natural resources and protect the environment.



History of Agricultural Extension

Agricultural Extension according to Rivera and Qamar, (2003) can be traced back to the late 19th century, when agricultural educators and experts began to travel to rural areas to educate farmers about new farming practices and technologies. The earliest known example of Agricultural Extension dates back to 1873, when the government of Ontario, Canada, established a network of agricultural representatives to provide technical advice to farmers.

In the early 20th century, Agricultural Extension services became more widespread, with the establishment of government agencies and Universities that provided Agricultural Education and advice to farmers. The Cooperative Extension Service was instituted in the United States following the Smith-

Lever Act of 1914. This service established county-based offices to provide education and technical support to farmers.

In the mid-1900s, Agricultural Extension services broadened beyond technical support to encompass more extensive social and economic development objectives. Extension workers began to focus on issues such as rural development, women's empowerment, and environmental conservation, in addition to agricultural productivity.

In the latter half of the 20th century, Agricultural Extension Services faced increasing criticism for its top-down approach and failure to fully engage with farmers and communities. This led to a movement toward participatory extension, which emphasised the importance of involving farmers in the design and implementation of agricultural programmes. (Antwi-Agyei and Stringer, 2021).

The term "extension" originated in the British university system during the early 1800s to describe teaching activities held outside of the primary university campus or for non-traditional student audiences. This concept was subsequently adopted by Americans when they sought solutions for their agricultural and technological issues. Therefore, the term "Agricultural Extension" emerged in the United States of America during the early 1900s. However, the term "advisory service" replaced "extension" in the British context during the 20th century. Various terminologies are used in different parts of the world to denote the same or similar concepts:

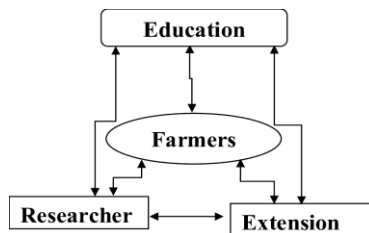
- Arabic: *Al-Ershad* (“guidance”)
- Dutch: *Voorlichting* (“lighting the path”)
- German: *Beratung* (“advisory work”)
- French: *Vulgarisation* (“popularisation”)
- Spanish: *Capacitación* (“training” "capacity building")
- Thai, Lao: *Song-Suem* (“to promote”)
- Persian: *Tarvij&Gostareh* (“to promote and to extend”) -
ت روپ جوگ سد ترش

The inception of Agricultural Extension services in Nigeria dates back to the colonial era in the early 1900s. The British

colonial government established demonstration farms and agricultural schools to promote modern farming methods and improve the productivity of the country's agriculture sector. After independence in 1960, the Nigerian government established the Ministry of Agriculture and Rural Development and the Agricultural Development Programme (ADP) to provide Agricultural Extension services to farmers. The ADP was designed to work closely with local communities to identify their specific agricultural needs and provide them with the necessary information and resources to improve their farming practices and increase their yields.

During the 1970s and 1980s, Nigeria had a surge in oil revenue, which resulted in the neglect of the agricultural industry. However, in the 1990s, there was a renewed interest in agriculture and Agricultural Extension services. The government established the National Agricultural Extension and Research Liaison Services (NAERLS) to coordinate and promote Agricultural Extension services across the country.

Despite concerted efforts, Nigeria's agricultural industry has encountered various difficulties, such as low productivity, insufficient infrastructure, and restricted accessibility to financial resources and markets. The government has continued to invest in Agricultural Extension services to address these challenges and improve the livelihoods of smallholder farmers. In recent years, the use of digital technologies, such as mobile phones and online platforms, has become increasingly important in extending agricultural services to a wider audience and providing farmers with timely and relevant information. This diagram below captures this progressive chain:



Principles of Agricultural Extension

The principles of Agricultural Extension constitute the basic directives that govern the provision of Agricultural Extension services. Below are some of the critical principles of agricultural extension:

- 1. Agricultural extension should commence at the farmers' level:** Extension education should start from the level of the farmers' understanding. According to Williams et al. (1984), extension services should operate at the level where the farmers are, taking into account their knowledge, interest, and readiness. This principle indicates that for new ideas to be embraced by farmers, they must be connected to their existing knowledge and familiarity. Therefore, if the aim of Agricultural Extension is to improve the farmers' standard of living, it is crucial that any introduction starts at the farmers' level of understanding.
- 2. Extension works with people, not for them:** The principle of "extension works with people, not for them" emphasizes the importance of involving rural people in the decision-making process regarding their own lives and livelihoods. Extension agents provide information and guidance, but ultimately, it is up to the farmers themselves to make decisions about how they want to farm and live. This approach empowers rural people to take ownership of their own development and build self-confidence in their decision-making abilities. When farmers and rural communities are involved in the decision-making process, they are more likely to be interested in the outcomes and have a sense of ownership and responsibility for the success of the programme. This can lead to better adoption and sustained use of new technologies and practices. In addition, involving rural communities in decision-making can help ensure that programmes are tailored towards the specific needs and priorities of those communities, which can lead to more effective and sustainable outcomes.

3. **Extension should be based on the needs and interests of the people:** Agricultural extension programmes should always start with identifying the needs and interests of farmers. Since these vary among individuals, communities, states, and cultures, there cannot be a single programme that fits all. Therefore, it is important for extension workers to have a good understanding of farmers' needs and interests to effectively plan and implement extension services. It is also important that extension workers avoid imposing their own needs and interests on the farmers.
4. **Extension workers should work with all members of the family:** In the context of Agricultural Extension, it is important to view the family as a cohesive unit both in the household and in the field. This means that extension workers should recognise the family as the fundamental building block of society and work with its members to achieve positive outcomes. By treating family members as competent and capable adults, extension workers can foster a sense of empowerment and collaboration that will lead to more effective decision-making. According to Yadav (2010), family members play a significant role in the decision-making process.
5. **Participation in extension programme:** Participation in extension programmes is not mandatory but voluntary, and it must be tailored to meet the diverse needs of individuals. As the participants in extension programmes differ in various aspects such as age, gender, education level, attitudes, interests, needs, and economic and social values, it is essential to consider their participation in the programme to ensure its success.
6. **Principle of leadership:** Involving local leaders is crucial in the success of any extension programme. Extension workers should utilise any available local groups to engage the people in their programmes. It is important to select and train local leaders so that they can assist in carrying out extension work. Local

leaders are trusted by the people, and they should be leveraged to introduce new ideas with minimal resistance. Adhering to this principle is crucial if the innovation is to be widely adopted by the people.

7. **Extension programme must undergo continuous evaluation:** To ensure that the extension programme is effective, there should be a continuous evaluation process to determine whether the objectives are being met. This evaluation should identify any gaps and provide steps for further improvement. The evaluation should be done periodically and take into account the changing conditions. The effectiveness of the programme should not only be measured in terms of achieving physical targets but also in terms of changes in knowledge, skills, attitudes, and adoption behaviour of the people. It is not only the extension agents who are interested in the evaluation process, but also the funding agencies both locally and internationally as the failure of an extension programme can have far-reaching implications and affect future extension work.
8. **Extension workers should use variety of teaching methods:** The use of various extension teaching methods is important to meet the diverse learning needs of individuals in the community regardless of their age or gender. No single method is sufficient on its own. When multiple methods are used to present a topic, it increases the opportunity for learners to see, hear, and practice the subject matter, resulting in better understanding and retention of the information.
9. **Extension should be based on the understanding of the culture:** To ensure the success of extension work, extension workers must be aware of the cultural differences that may exist among the farmers in their various communities. These differences may include variations in their values, attitudes, customs, and ways of life.
10. **Extension should be based on facts and knowledge:** This principle states that extension workers should work closely with researchers and farmers to ensure that the

information they disseminate is well tested and based on empirical facts. Extension acts as a link between researchers and farmers, dealing with the facts that result from experimentation and adaptation of findings. This collaboration ensures that the information provided to farmers is accurate and reliable.

11. **Extension workers should assist farmers to determine their own problems:** Extension workers should assist farmers in finding solutions to their problems and encourage them to take action, but this should not be interpreted as a sign that farmers are incapable of thinking for themselves. The extension worker should avoid solving problems on behalf of the farmers, as this would be imposing their own values on the farmers. Instead, the extension worker should facilitate the process of problem-solving by providing information, guidance, and support to the farmers.
12. **Subject matter covered in extension must have definite purpose and must be specific:** In other words, the subject matter of the extension programme must be practical and applicable to the daily lives of the rural people. The timing of the presentation of the subject matter is also crucial, as it should be delivered when it is most relevant and beneficial to the people. Additionally, the content of the programme must be achievable within the available resources and capabilities of the participants, both in terms of their physical and economic conditions as well as their social context and ability to learn.
13. **Principle of trained specialist:** Working with trained specialists and well-trained individuals is essential for extension personnel to effectively address the problems and needs of the clientele. This ensures that the expertise needed to provide quality services is available and utilised to achieve the goals of the extension programme.
14. **Adult learning remains high throughout life:** Extension workers must understand that adults have

had years of experiences, set beliefs, and habits that tend to change slowly. To achieve progress, extension workers must develop and use various strategies to address the needs, beliefs, and habits of farmers. It is important to note that change can be a slow process and may require a lot of patience and persistence.

- 15. The principle of professionalism should be followed:** Extension workers need to work with extension professionals who have the skills and knowledge to effectively communicate their programmes to the farmers. Credibility is important as it helps to build trust and confidence in the extension programmes. Extension workers should also have opportunities for continuous learning, training, and professional development to enhance their skills and knowledge in the field.

Sustainable Development Goal (SDG) of Zero Hunger (SDG 2)

In 2015, the United Nations adopted 17 Sustainable Development Goals, one of which is "Zero Hunger"(SDG 2). This objective seeks to put an end to hunger, achieve food security, enhance nutrition, and encourage sustainable agriculture by 2030.

The specific targets of SDG 2 are:

1. End hunger and ensure that all people, particularly those in vulnerable situations, have access to safe, nutritious, and sufficient food throughout the year. It also aims to address all forms of malnutrition, including stunting, wasting, and excess weight in children under five, and to meet the nutritional needs of pregnant and lactating women, adolescent girls, and older persons;
2. increase the agricultural productivity and incomes of small-scale food producers, especially women, indigenous peoples, family farmers, pastoralists, and fishers, by providing them with equal and secure access to land, productive resources, inputs, knowledge, financial services, markets, opportunities for value

addition, and non-farm employment, with the goal of doubling their productivity and incomes;

3. Guarantee sustainable food production systems and adopt durable farming methods that boost productivity and production, preserve ecosystems, enhance the ability to adjust to climate change, extreme weather, drought, flooding, and other disasters, and continuously enhance land and soil quality; and
4. Boost funding towards rural infrastructure, agricultural research and extension services, technology advancement, and conservation of plant and animal genetics to improve agricultural efficiency and sustainability.
5. Increase women's involvement and leadership in every aspect of agricultural systems, including policymaking, research, and extension services, and advocate for the rights of women and children to access safe and healthy food.



The linkage between Research-Extension-Farmers and Sustainable Development Goal (SDG) of Zero Hunger (SDG 2)

The REFL connection, which includes Research-Extension-Farmers, is essential in fulfilling SDG 2 (Zero Hunger) by offering farmers technology and knowledge transfer, enhancing agricultural practices and productivity, and guaranteeing food security and nutrition for all.

Research helps to generate new knowledge, technologies, and innovations that can improve agricultural

productivity, reduce post-harvest losses, and increase the resilience of crops to environmental stresses. The extension system helps to disseminate this knowledge and technology to farmers by providing training, advice, and support services to help them adopt improved agricultural practices. Farmers, in turn, can provide feedback to researchers and extension agents on the effectiveness of new technologies and innovations in their specific contexts.

This linkage can contribute to achieving SDG 2 by improving food production, reducing food waste, and increasing access to nutritious food for all. By increasing productivity and reducing post-harvest losses, REF can help to increase food availability and reduce food insecurity. Furthermore, by promoting sustainable and climate-smart agricultural practices, REF can contribute to achieving other SDGs, such as SDG 13 (Climate Action) and SDG 15 (Life on Land).

Innovation Platform

Mr. Vice-Chancellor, sir, I cannot talk about Workers Together, Workers To Gather and Workers To Get There without a mention of Innovation Platform.

What is an innovation Platform? An innovation platform in Agricultural Extension is a collaborative framework that brings together diverse stakeholders in the agriculture sector to identify and address common challenges and opportunities. The platform aims to foster innovation and knowledge exchange, with the goal of improving agricultural productivity, sustainability, and livelihoods.

The stakeholders involved in an agricultural innovation platform may include farmers, researchers, extension agents, government agencies, NGOs, and private sector companies. Each stakeholder brings unique knowledge, skills, and resources to the platform, and by working together, they can identify and develop new technologies, practices, and policies that benefit the agriculture sector as a whole.

One example of an agricultural innovation platform is the African Agricultural Technology Foundation's (AATF)

Cassava Mechanisation and Agro-processing Project (CAMAP). CAMAP is a multi-stakeholder platform that aims to improve cassava value chains in Nigeria through the development and dissemination of appropriate technologies and practices. The platform brings together stakeholders from across the value chain, including farmers, processors, equipment manufacturers, and government agencies, to co-create and implement solutions that improve productivity and income.

Another example is the Innovation Platform for Agricultural Risk Management (IPARM) in Bangladesh. IPARM is a joint initiative involving the government, private sector, and civil society organisations. It aims at encouraging the adoption of climate-smart farming methods and technologies. The platform offers a forum for stakeholders to exchange knowledge, expertise, and resources, and to create and execute innovative solutions that boost farmers' resilience and decrease risks.

Workers Working Together

Mr. Vice-Chancellor, sir and distinguished audience, this lecture stands on a tripod: The Workers Working Together, The Workers Working To Gather and The Workers Working To Get There.

It is on this basis that I proceed to espouse on the tripod. The first leg of the tripod: The Workers Working Together and this is going to be explained using Research-Extension-Farmers Linkage (REFL) which is a concept that refers to the collaboration between agricultural research institutions, extension agencies, and farmers to transfer knowledge, technologies, and innovations from research to practice. It is a critical component of agricultural development as it allows research findings to be disseminated to farmers and other stakeholders, and enables farmers to provide feedback to researchers and extension agents on the practicality and effectiveness of these technologies and innovations.

The primary goal of Researchers-Extension and Farmers Linkage is to bridge the gap between researchers and farmers. Researchers are responsible for developing new technologies and

improving existing ones, while extension workers are responsible for disseminating this information to farmers. However, without a strong connection between these two groups, the results of agricultural research may never reach the farmers who need it most. This can result in missed opportunities for farmers to improve their livelihoods and increase their food production. To address this challenge, Researchers-Extension and Farmers Linkage provides a platform for researchers and extension workers to work together and interact with farmers. This interaction allows researchers to understand the needs and challenges faced by farmers and to develop solutions that are tailored to their specific needs. At the same time, it also allows farmers to share their own experiences and knowledge with researchers, thus, helping to shape the direction of future research.

The benefits of Researchers-Extension and Farmers Linkage are numerous. For farmers, it provides access to the latest technologies and information, which can help them to increase their food production and improve their livelihoods. For researchers, it provides valuable feedback from farmers and helps to ensure that their research is relevant and practical. And for extension workers, it provides a platform for communication and collaboration with both farmers and researchers.

The REFL concept emphasises the importance of collaboration and communication among agricultural researchers, extension workers, and farmers. This approach recognises that research must be relevant to the needs and priorities of farmers, and that extension workers can help to disseminate research findings and innovations to farmers, as well as provide feedback to researchers on the practical application and effectiveness of their work. By working together in a coordinated manner, REFL can help to ensure that research is translated into practical solutions that can benefit farmers and contribute to agricultural development. The linkage is facilitated through various mechanisms such as participatory research, farmer field schools, and demonstration farms.



The Workers Working To Gather

This is the second leg of the tripod. What are we gathering?

Knowledge and skills

Farmers possess a lot of knowledge about their farming system and environment, but extension agents can provide them with additional information that they may not have. This information can include knowledge about crop damage, pest control or how manure and compost provide plant nutrients. This new knowledge often requires farmers to develop new skills such as technical skills, organisational skills or farm management skills. The extension agent must identify the areas where farmers lack knowledge or skills and provide suitable learning experiences to help them acquire these skills.

The transfer of knowledge and skills to farmers is an essential extension activity and the extension agent must be well-prepared to fulfill this task. The extension agent must first identify which skills or knowledge areas are lacking among farmers in their area, and then organise appropriate learning opportunities for the farmers to acquire them.

Technical advice and information

Extension services not only provide farmers with knowledge and skills but also offer advice and information to aid them in making informed decisions and taking appropriate actions. This advice and information could relate to aspects such

as prices and markets or the availability of credit and inputs. Technical advice provided by extension agents may be directly related to improving or sustaining the farm's production activities. This advice is often based on the research findings in the field of agriculture.

Farmers' organisation

In addition to knowledge, information, and technical advice, farmers also require some form of organisation to represent their interests and enable them to take collective action. Extension services should, therefore, assist in the establishment, structure, and development of local farmers' organisations in collaboration with the farmers. These organisations should only be formed after consulting with the farmers. In the future, such organisations will facilitate the collaboration between extension services and local farmers and will also serve as a means of disseminating information and knowledge.

Motivation and self-confidence

Isolation and a sense of helplessness are significant obstacles to development for many farmers. Some farmers have faced challenging conditions throughout their lives, trying to provide for their families without sufficient support or motivation. Extension services providers must collaborate with farmers closely to inspire them to take initiative and participate in extension activities. It is equally important to persuade farmers that they can make choices, take action, and break the cycle of poverty.

The four key elements of the extension process are mentioned above, and it is not necessary for all extension activities to include each of them, nor is it suggested that some elements are more important than others. The extension approach should be tailored towards specific circumstances. Nonetheless, a comprehensive extension service should be founded on these elements and aim to promote them in rural areas. Depending on the situation, local farmers may require immediate information and advice, or more sustained efforts in

organizing and motivating. Therefore, an extension service must be adaptable to address different demands as they arise.

The Workers Working To Get There

The third and the last leg of the tripod is working to get there. Mr. Vice-Chancellor, sir, we have spoken about working together and working to gather, now where are we getting to? The targets are:

1. improved livelihoods in rural areas: Agriculture is a key sector for generating income and employment in rural areas, and promoting sustainable livelihoods can help to improve the well-being of rural communities. Through the implementation of suitable strategies and regulations, collaboration among farmers, extension agents and researchers can lead to the enhancement of the financial and societal welfare of rural areas, as well as the establishment of more durable and adaptable agricultural systems;
2. sustainable reduction of hunger and poverty among the rural dwellers. Eliminating hunger including undernourishment, malnutrition, and food insecurity, and ensuring that everyone can eat a healthy and balanced diet, and supporting rural farmers to access sufficient, safe, nutritious and culturally acceptable food at all times.
3. promote Gender Equality: The aim is to ensure that everyone in rural areas, especially the poor or the vulnerable, has equal access to economic resources, basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services, including microfinance. This is to guarantee equal rights for both men and women in these areas;
4. Climate-smart Agriculture is enhanced: The goal of collaboration is to boost agricultural productivity and incomes while simultaneously improving resilience to climate change and reducing greenhouse gas emissions. The process of improving climate-smart agriculture

- includes implementing practices that enable farmers to adapt to changing weather patterns while also reducing their impact on the environment;
5. getting to a place where farmers enjoy good health and wealth. Promoting good health and healthy living is critical to achieving sustainable agricultural development. Agriculture and food systems have a significant impact on human health, and promoting healthy living can help to improve the well-being of farmers, consumers, and communities. By adopting appropriate practices and policies, farmers, extension workers, and researchers can work together to improve the health and well-being of rural communities and create more sustainable and resilient agricultural systems;
 6. a place where post-harvest losses are reduced to the barest minimum. This is crucial in attaining food security and minimizing food waste in the supply chain. Post-harvest losses occur when harvested crops are not properly handled, processed, or stored, resulting in spoilage, contamination or damage;
 7. a state where farmers at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. Improving food and nutrition security is crucial for promoting the health and welfare of individuals and communities. Achieving food and nutrition security means that all individuals have consistent access to sufficient, safe, and nutritious food that fulfils their dietary requirements for a healthy and active lifestyle.
 8. A place where the incidence of pest and diseases are reduced to the barest minimum. By adopting appropriate practices and policies, farmers, extension workers, and researchers can work together to prevent and manage outbreaks of pests and diseases and create more resilient and sustainable agricultural systems;

9. a place where people see agriculture not as hoes and cutlasses but as a business and where conflicts between farmers and herdsmen are resolved
10. a place where farmers have access to extension service at the tip of their finger and are also involved in the decision making and in planning for any project that they will be the end users.

My Contributions to Knowledge

Health

Mr. Vice-Chancellor, sir, health is of great importance to farmers for several reasons and one of the reasons is the physical demands. Farming is a physically demanding job that requires strength, endurance, and mobility. Farmers must be in good health to carry out tasks such as lifting heavy objects, working in awkward positions, and operating heavy machinery safely.

Adesiji and Komolafe (2013) examined the factors that affect the use of traditional healing methods among farmers in Kwara State, Nigeria. The study found that several factors influenced the farmers' use of traditional healing, these include the distance of farm settlements to hospitals, low income, the effectiveness of traditional healing practices, and a belief in difficult-to-treat illnesses or diseases. The study also found that the majority (93.7%) of farmers used both traditional and western medicine, and most did not have any cultural beliefs against western medicine. The analysis further revealed a significant relationship ($p < 0.05$) between the frequency of using traditional healing and the level of education, income, and traditional healing practices of the farmers.

Adesiji, **Adesiji**, and Fagbami (2005) investigated the knowledge, attitude and practices of *brucellosis* in individuals with high level of contact with animals in Osun State, Nigeria. The finding showed that a high percentage (80.4%) of the respondents were ignorant of the cause, transmission and prevention of the *brucellosis* disease. Thirteen percent of the respondents knew that drinking of unpasteurised milk could lead to infection while 8% of them understood that the disease could

be transmitted by skin inoculation. Forty-six (46%) of the respondents had superstitious beliefs about the prevention of the disease. Practices that predispose individuals to risk of infection like drinking of raw milk and consumption of improperly cooked meat was also determined. More than one third (36%) engaged in the habits of eating half-cooked meat, while a low percentage (16%) drank raw milk.

Adesiji, Omokore and Aliu (2008) investigated the rural females' perception of HIV/AIDS in selected communities of Kwara State. The findings revealed that 93.5% of the respondents had heard of HIV/AIDS, 77.5% had heard of how it could be transmitted, 66.7% were convinced that HIV/AIDS is real and had the understanding of how it could be controlled or avoided. The finding revealed that not all those who heard about HIV/AIDS knew how it could be transmitted and not all those who had heard of how it could be transmitted were convinced about the fact that HIV/AIDS is real. Also, not all those who were convinced about the fact that HIV/AIDS is real had the understanding of how it could be avoided. Inferential statistic showed that of all the selected socio-economic characteristics, education had the greatest effect on the rural female perception of HIV/AIDS.

In a study conducted by Matanmi, **Adesiji**, Talabi, Omokore, and Abdull-Wahab (2011), we examined the usage and availability of HIV/AIDS mitigation strategies recommended by the Food and Agricultural Organisation (FAO) in 2001 to mitigate the effect of HIV/AIDS on affected farm households. The study aimed to sustain their livelihood with the broader goal of reducing food insecurity and poverty. The study found that the majority (69.4%) of the heads of affected farm households were between the ages of 21-45 year, indicating that they were within the active and socioeconomically viable age group. In addition, more than half of the household heads (55.5%) were male, which suggests that these households had better access to agricultural inputs and other productive resources. The data also showed that most (76.4%) of the affected farm household heads had some

form of formal education, which would equip them better to utilise the recommended HIV/AIDS mitigation strategies. The study also revealed that 70.6% of the affected farm households had not less than six dependents, while only 7.7% of the households earned an annual income of ₦36,000 and above, indicating that most of these households are poor.

Salihu, **Adesiji**, Ibrahim, Umar and Muhammed (2018): conducted a study to evaluate the food safety knowledge of farming households in North-central Nigeria. The study found that farming households in the area had low literacy levels despite being economically viable. The main cause of food borne illnesses among these households was poor hygiene, including the use of dirty water and open defecation. The study also found that the farming households had sufficient knowledge on food safety practices and generally implemented these practices effectively, as indicated by the mean benchmark.

A study conducted by Awoyemi, Ajiboye, **Adesiji**, and Kayode (2019) examined the knowledge and practices of food safety among farming households in Kwara State, Nigeria. The results of the study indicated that a large proportion of the farming households had limited knowledge of food safety practices. The main constraints to food safety practices identified were inadequate knowledge, lack of awareness and training, and limited financial resources. Further analysis revealed a significant relationship ($P < 0.05$) between the farmers' income and educational level and their adoption of food safety practices across the selected households.

Abdullahi, Salihu, **Adesiji**, Muhammed (2019): investigated the knowledge and practices of hand washing, water sources, and environmental hygiene among farming households in North-Central Nigeria. The study found that 38% of the respondents were aged between 31 and 40 years, with a mean age of 36.7 years, and had a low level of education. Health service workers visited the households an average of three times per year. Although most of the respondents (73.80%) were aware of the importance of hand washing after using the toilet, the

knowledge of using soap to wash hands before eating (36.30%), preparing food/cooking (20.30%), changing a baby's diaper (24.20%), after defecating (19.10%), and before feeding children (18.40%) was low. The majority of respondents obtained their household water from unprotected sources such as dug wells (57%) and boreholes (52%), and the majority (84%) treated their water by allowing it to settle before using it for drinking or other household purposes. This method is inadequate and exposes farming households to the risk of waterborne diseases. The main methods of defecation were using a bush or pit latrine, and most households (63.70%) disposed of their waste by dumping it in a nearby bush.

Climate

Climate change has a significant impact on farmers, as it can affect the productivity and profitability of their operations. Climate change can lead to more frequent and severe weather events such as droughts, floods, heat waves, and storms. These events can damage crops, reduce yields, and impact livestock production. Here are some of my contributions to knowledge on climate change.

Adesiji, Matanmi, Onikoyi and Saka (2012) examined some indigenous mitigation and adaptation strategies that have been practised by farmers in Kwara State, Nigeria. Findings showed that the majority sourced information through family/friends, while 93.18% were of the opinion that the environment and the climate in particular are changing due to diverse human activities. Most farmers (77.8%) indicated that climate change has led to various forms of crop infestations thereby reducing the quality and quantity of crops produced and increasing cost of food crops. In adapting to climate change, results showed that more than three quarters of the respondents cultivated different varieties of crops. The result further revealed that there was significant relationship between the personal characteristics of the farmers and their level of awareness of climate change (X^2 cal 440.599 > the X^2 Tab 41.34). Also, climatic change had significant effect on arable crop production

in the study area (X^2 cal 182.362 > X^2 Tab 67.50) and there was significant relationship between the farmers' perception and coping mechanism used during climate change (X^2 cal 212.597 > X^2 Tab (14.07).

Adesiji, Tyabo, Ibrahim, Fabiyi and Alalade, (2013) investigated the effect of climate change on the health of rural farmers in Offa, Kwara State, Nigeria. The study revealed a significant relationship between socio-economic characteristics of the farmers and their present health status ($r=0.344$, $p=0.001$ $\alpha=0.05$). There was a significant relationship between socio-economic characteristics of the farmers and their perceived effect of climate change on their health status ($r=0.381$, $p=0.001$, $\alpha=0.05$). It was revealed that the major source of information to the farmers on climate change were radio/television (mean=61.3) while only few (mean=36.3) heard from the research institute. The health status of the majority of the farmers was good but this has deviated from the normal as a consequence of climate change. The common ailment experienced was malaria with headaches while a negligible number had cholera.

Adesiji, Tyabo, Bolarin, Ibrahim, and Baba (2013) investigated how climate change affected poultry production in Ondo State, Nigeria. We found that a large majority (93.3%) of the farmers were aware of climate change and believed that temperature fluctuations, increased sunshine intensity, and global warming negatively impacted poultry production. In addition, almost three-quarters (72.4%) of the poultry farmers agreed that the cost of feed grains increased during hot and dry seasons, which could affect the number of birds raised for egg and meat production. The study also showed that climate change had an impact on the availability of feed grains, as high temperatures and low rainfall affected general grain harvest, their supply to the market, and ultimately the cost of poultry production. Furthermore, 94% of the poultry farmers agreed that climate change affected egg and meat production patterns, and an even higher percentage (95.2%) believed that moist climatic conditions encouraged the distribution and development of

diseases. There was a significant relationship between respondents' socio – economic characteristics and perception of poultry farmers on effects of climate change on poultry production ($r = 0.454$, $p = 0.001$). It also revealed there was a significant relationship between socio-economic characteristics of respondents and their level of awareness of climate change since the ($p > 0.05$ ($r = 0.652$, $p = 0.001$).

In a study conducted by Daudu, **Adesiji**, Matanmi, Olorunfemi, and Agbana, (2014) in which we investigated the awareness and indigenous coping mechanisms employed by women crop farmers to adapt to climate change in Kogi State, Nigeria. Results showed that crop rotation practices, planting of early maturing seed, reduced use of chemical fertilisers and changing of crop varieties were the most commonly used coping strategies by more than 60% of the respondents. On the other hand, bush burning, deforestation, continuous cropping, and complete tillage were identified as the major activities of respondents that contributed to climate change by more than 50%. Person Product Moment Correlation analysis showed that educational level and farm size had a significant influence on the level of awareness and sources of information ($p < 0.05$).

Indigenous Knowledge Systems (IKS) of Farmers

Mr. Vice-Chancellor sir, I also contributed to knowledge in the area of Indigenous Knowledge Systems (IKS) of farmers which refer to the traditional knowledge, practices, and beliefs farming communities developed and passed down to next generations. These systems are often unique to specific communities and are shaped by the local environment, culture, and history. For example, farmers in certain regions may have developed knowledge about how to grow crops that are resistant to local pests and diseases, or how to use natural materials to improve soil fertility. Some might have developed traditional practices for honouring and protecting the land and the natural environment.

Adesiji et al. (2009) conducted a study to investigate the use of indigenous methods to control pests of rice by farmers in

Patigi Local Government Area of Kwara State, Nigeria. We were able to find out the various indigenous methods used by the farmers to control these pests and these are raw fruits of pawpaw, wood ash, light trap, exudates substances, frightening sounds, torchlight batteries, cassette tapes, and wire-mesh. While almost all the respondents (98.1%) attested to the effectiveness of these methods, a very small percentage (1.9%) of the farmers often used them. The majority (81.0%) obtained information about these methods from their parents, grandparents, and other relatives. The study also revealed that educational level had a significant negative relationship ($r=-0.411$, $P=0.000$) with the use of indigenous control methods, but there were no significant relationships between age ($r=0.067$, $P=0.496$), farm size ($r=0.028$, $P=0.773$), and the use of indigenous control methods.

Adesiji, Komolafe, and Ibrahim (2014) studied the sources of indigenous knowledge on healing practices among farmers in Kwara State, Nigeria. The study found that the majority of participants (78.1%) learned about herbal medicine from their parents, while only a small number learned from practitioners. The most common health issues reported by participants were malaria, body pain, and catarrh, with body pain being the most frequent (reported by 94% of participants). Through PPMC analysis, the study found that body pain, injury, and snake bites were significantly (with $p<0.05$) related to the source of knowledge regarding traditional health practices.

Adesiji, Olarewaju, Olaleye and Komolafe, (2015) assessed the indigenous methods of processing Shea butter among women in Ilorin East Local Government Area of Kwara State, Nigeria. The study discovered that most of the traditional techniques used by the participants in processing Shea butter included picking fruits, washing, depulping, drying, selecting seeds, cracking them, roasting kernels, milling, boiling, kneading, mixing, filtering, solidifying, and packaging. A significant majority (75%) acquired knowledge of indigenous Shea butter processing from their family members. The main challenges that most participants faced while processing Shea

butter included inadequate water supply (95%), insufficient processing equipment (86.1%), and a lack of credit facilities (81.7%). Correlation analysis showed that the age (-0.153, $p < 0.05$) and years of experience (-0.270, $p < 0.01$) of participants were significantly related to their use of traditional techniques in processing Shea butter.

Entrepreneurship

Entrepreneurship is a powerful tool for empowering rural farmers, promoting gender equality, and driving economic development in rural areas. Farmers and entrepreneurship are closely linked as farmers can benefit from entrepreneurial skills and mind-set to start new businesses and generate additional income. Farmers can use entrepreneurial skills to diversify their farming operations and explore new revenue streams. This can include value-added processing of farm produce, creating agritourism opportunities or starting a farm-to-table restaurant. By diversifying their businesses, farmers can reduce their reliance on a single source of income and better manage risk. Mr. Vice-Chancellor, sir, here are some of my contributions to knowledge in the area of entrepreneurship.

The study conducted by Komolafe, **Adesiji**, and Adebayo (2018) assessed the capacity building needs of yam entrepreneurial farmers in Ekiti State, Nigeria. The study discovered that the respondents lacked proficiency in several areas and required training in sourcing and using essential farm tools and machinery (mean=1.85), operating farm machinery (mean=1.21), processing yam tubers into various products (mean=2.28), sourcing funds to finance yam farming and processing activities (mean=1.75), value addition skills for processing yam tubers into different products (mean=2.41), packaging skills for yam produce and processed products (mean=2.66), keeping basic records of farm income and expenses (mean=2.44), planning, prioritising, and organising yam farming tasks (mean=2.26), assessing and managing yam enterprise risks (mean=1.22), precautionary practices against yam enterprise-related hazards (mean=2.34), identifying and

cooperating with government bodies (mean=1.54), team working skills, persuasive communication, and negotiation skills (mean=2.36).

Barau and **Adesiji** (2018) studied the socioeconomic determinants influencing the willingness of the agriculture undergraduates to participate in agripreneurship in Northwest, Nigeria. The study found that the respondents have positive attitude towards participating in agripreneurship, but it was not considered as their primary occupation. The family's economic status was the most significant socioeconomic determinant that influenced the students' willingness to engage in agripreneurship. The study also revealed a positive and significant relationship between the willingness to participate in agripreneurship and gender, community background, family background, family economic status, as well as ethnicity.

Komolafe and **Adesiji** (2018) assessed the farmers' knowledge of yam entrepreneurial skills in Ekiti State, Nigeria. According to the findings, most farmers had access to yam entrepreneurial business training or seminars (75.5%) and obtained information from sources such as agricultural extension agents (86.2%), radio (83.3%), and fellow farmers (79.5%). However, the farmers' overall knowledge of yam entrepreneurial skills was low. Specifically, the respondents had a high level of knowledge in cultivation skills ($X=67.0$) but lacked proficiency in management skills ($X=39.5$), cooperation/networking ($X=29.3$), customer/marketing skills ($X=27.1$), and opportunity skills ($X=21.3$).

Omotesho, **Adesiji**, Akanbi, Awoyemi and Ekwemuka (2019) investigated the adoption of agricultural entrepreneurial skills among arable crop farmers in Kwara State. The study found that the farmers' mean age, household size, farm size, and years of farming experience were 45 years, seven persons, 2.72 hectares, and 20 years, respectively. However, the level of adoption of entrepreneurial skills among the farmers was low. The adoption level was found to be significantly influenced by age, household size, level of education, frequency of extension

visits, and membership of farmer-groups at $P < 0.05$. The study also revealed that inadequate access to inputs, markets, and start-up capital were major challenges faced by the farmers.

Adesiji, Joseph, Gunu, Awoyemi and Adelowo (2022) analysed the contributions of rice entrepreneurial activities to sustainable livelihood assets of rice farmers in Kwara State, Nigeria. The results showed that the majority of the rice entrepreneurs had a positive attitude towards rice entrepreneurial activities in the study area and they were majorly into processing and marketing value chain. It was also found that rice farmers participated in production (100%), processing (61.5%), and marketing (53.0%) while few (22.3%) participated in transportation to a great extent. Results further showed that financial asset (mean=2.19), and natural assets (safe drinking water and irrigation water) with mean=15.7 and mean=15.4, respectively were the topmost assets acquired by farmers as a result of their participation in rice entrepreneurial activities. The leading constraint to rice entrepreneurial activities was inadequate access to rice processing equipment (mean=15.5). Correlation analysis revealed that age ($r = -0.437$), household size ($r = -0.196$) and years of experience ($r = -0.459$) of farmers were significantly correlated with the perceived contribution of rice entrepreneurial activities to asset at $p \leq 0.05$ level of significance.

Omotesho, Babasola, **Adesiji** and Olaoye (2017) assessed the attitude of catfish farmers in Kwara State towards value addition in fish production. It was discovered that majority of catfish farmers (79.69%) displayed a favourable outlook towards value addition. Results indicated that socio-economic factors including age, marital status, primary occupation, fish farming experience, farm size, educational attainment, training access, social association membership, and extension contact number had a significant association with their attitude towards value addition in fish production at a significance level of $p < 0.05$.

Matanmi, **Adesiji**, Olasheinde and Oladipo (2011) assessed the usage of upgraded indigenous Shea Butter

Processing Technology by women processors in Moro Local Government Area of Kwara State, Nigeria. We were able to establish that more than half (54.1%) of these women had over 15 years of experience in Shea butter processing and 95% earned only over N50,000.00 as their annual income from shea butter. The study further showed no significant relationship between level of usage of Shea butter upgraded technology and socio-economic characteristics of women processors. However, there was a significant relationship between Shea butter processing and usage of upgraded technology. Despite the constraints experienced by the women processors, the study revealed that they preferred the use of the new technology (upgraded technology) to the indigenous method they were used to.

Mr. Vice Chancellor, sir, I also carried out research in the area of training needs.

Akangbe, **Adesiji**, Fakayode and Aderibigbe (2011) investigated the constraints and training needs of oil palm fruit processors- ‘palm oil extractors’ in Nigeria. The results of the study showed that palm oil extractors were mostly older women with minimal or no formal education, who had been involved in palm oil extraction activities for roughly 35 years. Almost all palm oil extraction activities were conducted through traditional, outdated, and unhygienic techniques. The training needs assessment indicated that sterilization (mean score = 7.54), stripping (8.17), mixing (9.36), skimming (8.46), and clarification activities (8.72) in palm oil extraction were the key areas that required training.

Adesiji, Omotesho, Bolarin and Balogun (2012) assessed the training needs of cashew farmers in Owan East Local Government Area of Edo State, Nigeria. The findings revealed that the tasks performed by the cashew farmers ranged from land preparation to harvesting and storage of farm produce. The research discovered that cashew farmers in the region needed training in the water management, transplanting, harvesting and storage, and nursery preparation. The results of the correlation analysis demonstrated that the farming experience

of the respondents had a significant association with their training needs ($r=0.489$, $p=0.05$).

Ifabiyi, **Adesiji**, Komolafe and Ajibola (2014) focused on the motivation of farmers in participating in social networking on the use of irrigations in north central Nigeria. The result revealed that family had the highest mean (3.86) based on their level of participation in social networking which was followed by water users' association (3.82). The participants rated market information (2.47) as the most significant benefit of social networking regarding the implementation of irrigation practices. On the other hand, the Agricultural Extension Agency (2.85) was rated as the most effective social network in terms of granting access to resources for irrigation farming.

Adesiji, Matanmi, Falola and Ahmed (2011) examined the effects of credit utilisation on the output of the youth rice farmers in Nigeria. It also assessed the sources of information on credit available to the farmers and the use of the credit and the problems encountered by the farmers in having access to credit. It was discovered that the farmers prefer cooperative societies to every other source of credit information. Banks, cooperative societies and Esusu/saving groups were the major sources of credit to the farmers. On average, farmers obtained ₦132,301 in credit, which they primarily spent on fertilisers, the seeds, and expanding their farmland. The main challenges they encountered when obtaining credit were insufficient amounts, a lack of collateral, and high interest rates. Nevertheless, using credit had a positive overall impact on the farmers' output.

Omotesho, **Adesiji**, Akinrinde and Aluko (2018) described the socio-economic characteristics of women farmers who were members of farmers' groups, identified the benefits derived from their membership and examined the level of control of women in the farmers groups. The study found that the primary benefit of belonging to farmer groups for these women was improved access to agricultural information, with a mean score of 3.4. The level of control that women had within these groups was found to be low, with a mean score of 2.21, and was

significantly influenced by age, annual income, education level, and farm size at a significant level of $p < 0.01$.

Community Services in University of Ilorin

I joined the service of the University of Ilorin as a Lecturer II in the Department of Agricultural Extension and Rural Development on 14th June, 2004 and rose to the exalted rank of a Professor of Agricultural Extension effective 1st October, 2017. I was a member of several committees, the most notable being a member of the Committee that birthed the now popular Unilorin Water industry under the Chairmanship of Prof. K. L. Ayorinde. I was the Ag. Head of Department of Agricultural Extension and Rural Development. In August 2020, I was appointed the Ag. Dean of Faculty of Agriculture, the position I held till 31st day of July, 2022. I have been the Director of Unilorin Sugar Research Institute since 1st August, 2021 till date. I am currently the Senate representative on CCMAS. I have also served in various administrative positions some of which are: Chairman, Dress Code of the Faculty (2019 to 2021); Faculty Coordinator, Community Based Experiences & Services (2015 to 2020); Member, University Library & Publications Committee (2018 to 2020); Ag. Head, Department of Agricultural Extension & Rural Development (2015-2017); Examination Commissioner (2016/2017); Faculty Representative & Board member of University of Ilorin Technical and Entrepreneurial Centre (2009-2014); Faculty Representative on University of Ilorin Sugar Research Institute Management Board (2008-2014); Departmental Coordinator, Farm Practical Training (2008-2009); member, Staff Disciplinary Committee (2007-2009); Faculty Representative on Communication Committee (2006-2008); member, Faculty Quiz Committee (2006-2008); Chairman, Management Committee, Sasakawa Pacesetters MCS Ltd Hostel (2012-2013) and Chairman, Loan Committee, Pacesetters MCS Ltd (2011-2013).

Community as a whole

I was the pioneer Coordinator of Community-Based Experiences and Service (COBES) programme for Faculty of Agriculture. The COBES programme identifies critical agricultural needs of the rural communities and mobilises the communities to action to solve the needs.

I have served as External Examiner to many reputable universities including University of Ibadan, Ibadan; Ahmadu Bello University, Zaria; Ladoke Akintola University of Technology, Ogbomoso; Federal University of Agriculture (FUNAAB); Federal University of Technology, Minna; Federal University Oye-Ekiti (FUOYE), Ekiti State; Osun State University, Osogbo, Osun State; Kwara State University, Malete; BOWEN University, Iwo; and North-West University, Mafikeng, South Africa. I have also served on several national and international assignments, such as a member of National Universities Commission Accreditation Team to many Universities in Nigeria; reviewer for NUC on CCMAS; Mentor for North Central Awardees of Federal Government of Nigeria Youth Enterprise with Innovation in Nigeria (2012-2015), South West Panellist for Federal Government of Nigeria Youth Enterprise with Innovation (YouWin!) in Nigeria (2011 to 2015). I was also a resource person for Training of Trainers, N-Power Agro, Federal Government of Nigeria; (2017) and the Returning Officer/Local Government Collation Officer in 2018 and in the last election. I was a consultant to International Funds for Agricultural Development (IFAD) on Climate Change Adaptation and Agribusiness Support programme in the savanna belt. I am a recipient of many local and international awards including Bill & Melinda Gates Foundation awards, Qatar Airways award for teacher of the year 2020 and United Nation Erasmus + Programme (KA 107) Teaching Mobility Grant. I have also won several travel grants to attend international conferences as well as several grants from bodies such as IFAD and TETFUND. I am also a member of many professional bodies in which I play many prominent roles including Nigerian

Forum for Agricultural Advisory Services (NIFAAS); International Association of Agricultural Extension and Education (IAAEE); Child & Youth In-Agriculture Programme in Nigeria (CYIAP); Agricultural Extension Society of Nigeria (AESON) and Rural Sociological Association of Nigeria (RuSAN) among others. I was the Chairman, Landlords Association, Ifesowapo Community, Oke-Arula, NUT Area, Osogbo, Osun State for eight years; Head, Benevolence Department, Commonwealth of Zion Assembly (COZA), Ilorin, Kwara State and currently the Head of Department; Academics/Communion team, Commonwealth of Zion Assembly (COZA).



Conclusion

In conclusion, the collaboration among farmers, extension agents, and researchers has the potential to transform the lives of rural people. Our observations have taught us that rural communities can overcome challenges such as market accessibility, productivity enhancement, and sustainable agricultural practices by collaborating with various actors to develop creative solutions. Effective collaboration among these actors requires mutual trust, effective communication, and a shared commitment to achieving common goals. Our partnerships have been successful because we have focused on

building strong relationships, listening to each other's perspectives, and working together to find solutions that benefit everyone. The impact of this collaboration can be seen in the lives of the rural people. Farmers are experiencing higher yields and incomes, extension agents are better equipped to deliver high-quality services, and researchers are producing new knowledge that addresses the needs of rural communities. We are proud of what we have achieved together, but we know that there is still much work to be done. As we move forward, we must continue to prioritize collaboration among farmers, extension agents, and researchers. The collaboration among farmers, extension agents, and researchers is a powerful force for positive change in rural communities. Our dedication is to collaborate towards the development of a more promising future for all individuals living in the rural areas.

Recommendations

1. Special public funding should be provided to support small holder farms. In achieving sustainable agriculture and food security, small holder farms play a significant role and are a vital part of the global food system. These farms often face numerous challenges, including limited access to capital, technology and markets, which can hinder their productivity and profitability. Providing special public funding to support farmers is an effective way to address these challenges and enhance their contribution to the food system. Public funding can be provided in various forms, such as grants, low-interest loans, technical assistance, and capacity building programmes.
2. Extension agencies should ensure that services provided to the local farmers are relevant to their needs and responsive to local conditions, and at the same time meeting their actual needs. Since Extension agencies play a crucial role in delivering practical and useful information, knowledge, and technical assistance to farmers to improve their agricultural practices and

increase productivity, they must make sure that the services they provide to the local farmers are relevant and responsive to their needs in order to achieve sustainable agriculture and food security. Therefore, it is essential that these services meet the actual needs of farmers and are tailored towards local conditions.

3. The end users who are farmers should have a choice of the service providers that they want and these service providers must be accountable to them as well. When farmers have a choice of service providers, they are more likely to receive high-quality services that are tailored towards their specific needs and preferences. In addition, holding service providers accountable to farmers ensures that they are delivering services that are effective, efficient, and responsive to the needs of farmers.
4. Linkages with research: Extension services should be linked to research institutions to ensure that farmers have access to the latest research findings and innovations. This can help to ensure that extension services are evidence-based and are grounded in the latest scientific knowledge.
5. Technology transfer: Extension services should facilitate the transfer of appropriate technologies to farmers. This can include the use of modern farming technologies, such as precision agriculture, climate-smart agriculture, and ICT-enabled services.
6. Needs assessment: Extension services must be based on a thorough understanding of the needs and priorities of farmers. A comprehensive needs assessment should be conducted to identify the challenges faced by farmers and the gaps in their knowledge and skills.
7. Participatory approach: Extension services should be designed and delivered in a participatory manner that involves farmers in the planning and implementation of extension activities. This approach can help to ensure

that the services provided are tailored towards the specific needs of farmers and are more likely to be accepted and adopted.

8. Communication and outreach: Extension services should be delivered through a variety of channels and platforms, such as mobile phones, radio, television, and community meetings, to reach a wide range of farmers. Effective communication strategies can help to ensure that extension messages are understood and acted upon.
9. Capacity building: Extension services should focus on building the capacity of farmers to adopt sustainable agricultural practices and to effectively manage their farms. Capacity building can include training, mentoring and coaching, as well as the provision of relevant information and resources.
10. Policy and regulatory support: Governments should establish clear policies and regulations that support the effective delivery of extension services. This can include policies that promote participatory approaches, encourage innovation and technology transfer and provide incentives for extension agents to deliver high-quality services.
11. Training and capacity building: Governments should invest in the training and capacity building of extension agents to ensure that they have the knowledge and skills they need to deliver effective services. This can include training in participatory methods, communication skills, and the use of modern technologies.
12. Establish forums for collaboration: Government can establish forums such as conferences, workshops and seminars that bring together researchers, extension agents, and farmers to share information and knowledge. This can create opportunities for dialogue, networking, and collaboration among these different stakeholders.
13. Provide funding for collaborative research: Government can provide funding for research projects that involve

collaborations between researchers, extension agents, and farmers. This can encourage the development of research projects that are relevant to the needs and priorities of farmers and enhance the knowledge and expertise of different stakeholders.

14. Promote participatory research methods: Governments can promote the use of participatory research methods that involve farmers in the research process. This can help to ensure that research is grounded in the realities of farming communities and that the knowledge and expertise of farmers is incorporated into the research process.
15. Facilitate technology transfer: Governments can facilitate the transfer of technologies developed through research to farmers through agricultural extension agents. This can involve working with extension agents to identify the most appropriate technologies for different farming contexts and providing the necessary training and support for farmers to adopt these technologies.
16. Recognise and reward collaboration: Governments can recognise and reward collaboration between researchers, extension agents, and farmers through awards and other forms of recognition. This can help to encourage and incentivise collaboration and can highlight the importance of these collaborations for the sustainable development of agriculture and rural communities.
17. Monitoring and evaluation: Governments should establish systems for monitoring and evaluating the performance of extension agents to ensure that they are delivering high-quality services to farmers. This can include regular performance assessments, feedback from farmers, and other mechanisms for monitoring and evaluation.
18. Collaboration and networking: Governments should encourage collaboration and networking among

extension agents to facilitate the exchange of knowledge and best practices. This can include the establishment of extension networks and forums, as well as the promotion of peer-to-peer learning and mentoring.

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Mr. Vice-Chancellor sir! I am a man helped by the Lord. I therefore, appreciate God, the Giver of life. The One who is, who was and who is to come. Pantocrato, Almighty Mighty God, Sovereign Ruler of the world. I am what I am all because of Him. He has been my support and has shown me love and guidance throughout my entire life. **He has made me into a miracle; no wonder I trust Him and praise Him forever! Many marvels at my success, but I know it is all because of Him, my mighty protector!** (Psalms 71:6-7 TPT).

I would like to convey my utmost appreciation to the Vice-Chancellor, Prof. Wahab Olasupo Egbewole, SAN (also known as "Mr. Efficiency") for authorising my inaugural lecture. I would like to take this opportunity to thank you for your unwavering commitment to promoting academic excellence and fostering a culture of research and innovation at our University. Your leadership and guidance have been instrumental in enabling us to achieve our academic goals and make meaningful contributions to society.

To Prof. Sulyman Age Abdulkareem, the immediate past Vice-Chancellor of this great University and my destiny helper, sir. My life story cannot be complete without mentioning you as my "Apostle of Lifting". Thank you for appointing me as an Ag. Dean of Faculty of Agriculture and for appointing me again to resume immediately as Director Unilorin Sugar Research Institute. Serving under you is the best thing that has happened to me in life. I am constantly thanking God for your life sir. God will increase you and your children more and more. You will live a full-long life in good health. I am humbled and most grateful, sir.

The other Vice-Chancellors I have served under, starting from Prof. S. O. Amali, Prof. I. O. Oloyede who chaired the

panel when I was interviewed for regularization of my appointment; and Prof. A. G. Ambali who appointed me as Ag. Head of my Department and at the same time approved my wife's first Sabbatical position and appointed her also as the Ag. Head of her Department. I appreciate you all, sirs.

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Today is the day I want to take out time to celebrate my girlfriend of 32 years and wife of 26 years, Prof. Yemisi Olukemi Adesiji, a Professor of Medical Microbiology, a woman of uncommon grace, an indescribable gift to me. A delightful hostess of honour, a woman of faith, prayer and prophecy with a sweet and loving personality. Her calm and influential disposition remains a wonder to me-she is truly dear to my heart. As a mother, our children call her blessed. As her husband, I will pray to marry her over and over again if it is possible to marry in heaven or ask God to allow me to have my mansion next to hers. Blessed was the day I met you Miss. Y (as you were popularly called then). Thank you for loving me beyond

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Mr. Vice-Chancellor, sir, please permit me to end this: Inaugural Lecture with this song by William McDowell, titled "My heart sings":

How could I describe
A God that's indescribable?
How could I explain
A love that's unexplainable?
I'm at a loss for words
Oh Oh Oh
My heart sings
Oh Oh Oh
Oh Oh Oh
My heart sings
Oh Oh Oh
Thank you for listening!!!

I appreciate you all. God bless you richly. You will all return to your homes safely. Amen.

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