



Editorial

Issues and lessons on strengthening Extension service delivery, entrepreneurship, and agricultural intensification in African farming Systems

E. ADIPALA

Editor-In-Chief, African Journal of Rural Development

Corresponding Author: e.adipala@rae.co.ug

ABSTRACT

This Issue of African Journal of Rural Development includes seven papers addressing diverse topics: extension service delivery, promoting entrepreneurship in Agri-food Systems, land tenure, vermicomposting, livestock breeding, water harvesting, production of bioethanol from cassava and occurrence of devastating Fusarium wilt disease of bananas in Benin. These studies were conducted in different parts of Sub-Saharan Africa and do provide insights into some of the issues and research being conducted across the continent. More of such research findings need to be disseminated widely using various publication outlets.

Key words: Africa, cassava bioethanol, entrepreneurship, extension delivery, land use management, vermicomposting

RÉSUMÉ

Ce numéro du Journal africain de développement rural comprend neuf articles abordant des sujets divers : la prestation des services de vulgarisation, la promotion de l'entrepreneuriat dans les systèmes agroalimentaires, le régime foncier, le vermicompostage, l'élevage du bétail, la collecte des eaux, la production de bioéthanol à partir du manioc et l'apparition de la redoutable maladie de flétrissement fusarien des bananes au Bénin. Ces études ont été menées dans différentes régions de l'Afrique subsaharienne et apportent des éclairages sur certaines problématiques et recherches menées à travers le continent. Il est nécessaire de diffuser plus largement de telles découvertes de recherche en utilisant différents moyens de publication.

Mots-clés: Afrique, bioéthanol de manioc, entrepreneuriat, prestation de services de vulgarisation, gestion de l'utilisation des terres, vermicompostage

Recent statistics by the Food and Agriculture Organisation (FAO) indicate that the food security situation in Africa has worsened over the last 5-10 years compromising the gains made over the past years. Only a few countries appear food secure notably Tanzania and Malawi whose food security situation improved considerably compared to in previous years. Notable economies such as South Africa and Kenya record deficiency in food supply

leading to increases in food imports. There are a multitude of factors contributing to the poor food supply in Africa, including unsustainable farming practices leading to low productivity, the increasing challenges posed by climate change and variability, the rapid increases in population growth, and the recent COVID pandemic, amongst other factors. The World and Africa in particular is aware of these challenges and have called for strategic interventions at

different levels including policy, strengthening research and innovation capacity in the continent, harnessing global partnerships to strengthen agri-food systems in the continent, and promoting inclusivity in all undertakings. In this regard, strengthening practices at the smallholder farmers level is key since they produce the bulk of food in Africa. Ensuring smallholder farmers have the knowledge, information, skills and supportive infrastructure is thus key for enhancing increased productivity and sustainability of agri-food systems in Africa.

This Volume of the African Journal of Rural Development explores some of the issues above including possible needed interventions. The first paper by Ochen *et al.* (2022) discusses a long outstanding challenge confronting smallholder farmers across Africa: inaccessibility of quality extension support systems with only a few accessing extension services. The paper describes various initiatives that have been tried in Uganda to strengthen extension service delivery, the success and failures of the efforts including the recent engagement of military personnel as extension/input service providers. Several lessons can be drawn from these various efforts in Uganda key amongst which is that delivery of extension information accompanied by input and indeed credit provision is paramount. For effectiveness, strong farmer institutions that harnesses inclusivity need to be established and nurtured. Future interventions would need to foster broad gender participation and as much as possible take advantage of farmer friendly Information delivery services including use of Information Technologies.

The second paper also examines a major challenge confronting farming systems in Africa: Land tenure insecurity. The study done by Mbudzya *et al.* (2022) in Norok County in Kenya clearly shows that a secure tenure of agricultural land is key for enhancing sustainable productivity and for promoting investment in

agricultural production systems. The study showed that land insecure households would increase their food security by 38% if they were land tenure secure. Similarly, in Malawi, Ajefu *et al.* (2020) showed that land tenure security enhanced coping against drought-induced food insecurity. Thus policies to enhance land tenure security are needed to enhance food and livelihood security of farming communities.

It is today recognized that promoting entrepreneurship in various facets of life is critical for competitiveness. The study by Ajer *et al.* (2022) done in Uganda explored issues of entrepreneurial orientation, learning orientation, cost focus and innovation in agri-food systems small and medium enterprises (SMEs) in Uganda. The study results indicate the need for enhancing learning orientation, cost focus and innovation. The study highlights the need to promote entrepreneurial proclivity to enhance entrepreneurial mindset, although not necessary innovation. A related study done in Malaysia is described by Akbar *et al.* (2020). Opolot *et al.* (2022) examined profitability and factors driving farmers' decision to produce bioethanol from cassava. As eluded to earlier strengthening entrepreneurship mindset and practices is key for turning livelihood activities into business opportunities and for increasing incomes of households.

Subsequent papers in this Volume examine some production constraints hampering crop production in Africa. Toessi *et al.* (2022) describes and maps out the increasing occurrence of Fusarium wilt (Panama disease caused by *Fusarium oxysporum* f.sp *cubense* (E.F Smith) disease of bananas in Southern Benin where the disease is decimating banana production as it has done in several other countries. The disease is widespread in East and Central Africa especially in Uganda (Tushemeirwe *et al.*, 2000; Oyesigye *et al.*, 2021; Anouk *et al.*, 2022). Collaborative research needs to be intensified to

address this spreading disease problem.

The paper by Mfitumukiza *et al.* (2022) examines adaptation and factors limiting use of rainwater harvesting technologies amongst smallholder farmers in Uganda. The findings indicate that most rainwater harvesting techniques used roof surfaces for water catchment which was channeled into storage facilities for domestic and production purposes. Clearly there is need to promote rainwater harvesting for production as well as for home use. Research is also needed to enhance safety of the harvested water.

The final paper in this Volume by Marius *et al.* (2022) presents results of an initiative that is establishing an open nucleus communal livestock breeding system in Namibia

In conclusion, this Issue of AFJRD presents a diversity of papers that provide insights on some challenges and opportunities for sustainable agricultural intensification, opportunity for instilling agribusiness mindset in Agri-food systems and options and lessons for strengthening farmer extension service delivery. There are related works being done across the continent and we need to share the findings widely.

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