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Mobilizing academia and stakeholders to promote agricultural intensification in Africa

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Abstract

This volume presents six papers on sustainable agricultural intensification to improve Africa's land productivity. It introduces papers, among others, presented at the 5th African Higher Education Week and RUFORUM Biennial Conference in Cape Town, South Africa in October 2016 under the theme, 'Linking agricultural universities with civil society, the private sector, governments and other stakeholders in support of agricultural development in Africa: partnerships to unlock the potential of agricultural development in Africa.' The other papers (22), presented are submissions received prior to the Conference. The different presentations had issues highlighted in the papers catalysed debate on the key focus areas for consideration in achieving sustainable agricultural intensification in Africa especially since it is a key concern in the different continental frameworks focused on agricultural development and social economic transformation. We very much hope that this effort initiated at the RUFORUM convening event will catalyse further research and application of knowledge.

Key words: Application of knowledge, research, universities

Résumé

Le présent volume contient six communications sur l'intensification agricole durable pour améliorer la productivité des terres en Afrique. Il introduit, entre autres, des articles présentés lors de la 5e Semaine de l'Enseignement Supérieur en Afrique, et la Conférence Biennale de RUFORUM à Cape Town (Afrique du Sud) en octobre 2016 sur le thème «Connection entre universités agricoles, société, secteur privé, gouvernements et autres parties prenantes pour le développement agricole en Afrique: les partenariats pour libérer le potentiel du développement agricole en Afrique». Les autres documents (au nombre de 22) représentent des contributions reçues avant la Conférence. Les différentes présentations ont souligné d'importants aspects sur les principaux domaines à prendre en compte pour une intensification agricole durable en Afrique, puisqu'il s'agit d'une préoccupation clé dans les différents cadres de travail au niveau continental, basés sur le développement agricole et la transformation socio-économique. Nous avons espoir que cet effort initié lors de la réunion de RUFORUM entraînera beaucoup plus de recherches et l'application des connaissances.

Sustainable agricultural intensification: A key concern in Africa's developmental frameworks

Snyder and Cullen (2014) have provided a functional definition of sustainable agricultural intensification and have described it as a process of increasing output per unit of land area and time.

Sustainable intensification has been a much-discussed topic, as a means to improve the efficiency of land use and ensure that Africa's growing populations can be fed. Studies (Vanlauwe *et al.*, 2014) have now shown that increases in agricultural production in Africa have all but in a few cases emanated from increases in land use, rather than yield increases. Improving incomes and prosperity for a fast-growing rural population in Africa thus requires a transformation in how agriculture is practiced. Transformations in agricultural practices are needed both on and off farm, to ensure that farmers reap greater rewards from farm production. This is the subject of the African Union's Comprehensive African Agricultural Development Program (CAADP) which calls for increasing agricultural output in Africa's 54-Member States by at least six percent per annum. The Malabo Declaration, approved in 2014, renews this commitment, calling for implementation of the CAADP and recognizing that 'hunger and malnutrition are major causes of poverty and underdevelopment in Africa by causing poor health, low levels of energy, and mental impairment, all leading to low productivity and low educational attainment all of which can in turn lead to even greater hunger and malnutrition, thereby creating a viscous cycle'.

The rationale for sustainable intensification in Africa

Smallholder farmers are increasingly challenged by various constraints to agricultural production such as climate change, lack of knowledge/awareness of agricultural best practices and innovations, weak partnerships across various stakeholders, low diversification of production etc. Further, the focus on ensuring caloric intake for the rural poor is now known to mask greater nutritional challenges that need to be tackled. Partnerships across various stakeholder groups are necessary to ensure that knowledge that is available and that is being generated can be best used to support sustainable agricultural intensification for food and nutrition security and subsequently, for rural development. There is need to enhance the integration between research, extension and training in Africa to ensure that knowledge that has been generated by research and other knowledge institutions is used effectively to improve on-farm production. There is indeed a renewed momentum towards addressing agricultural intensification as highlighted in Royal Society (2011); Ganet *et al.* (2013) and Loos *et al.* (2014).

Conclusion

Sustainable intensification of smallholder agriculture is a key approach towards achieving the Sustainable Development Goals (particularly SDG2) in Africa. Key components of

sustainable agricultural intensification include: a) the production of more food per unit land, labour, and /or capital; b) preservation of ecosystem services, including health soil and water; and, c) resilience to shocks and stresses, including climate change. This volume presents a body of knowledge and research on all these issues.

This RUFORUM Working Document Series, No. 14 (4), contains papers that were, among others, presented at the 5th African Higher Education Week and RUFORUM Biennial Conference in Cape Town, South Africa in October, 2016 under the theme, ‘Linking agricultural universities with civil society, the private sector, governments and other stakeholders in support of agricultural development in Africa: partnerships to unlock the potential of agricultural development in Africa’. The papers have been arranged in key areas of Partnerships and innovations to strengthen higher education in Africa, Strengthening ICT and knowledge management in agriculture, Strengthening University outreach, community engagement and innovation platforms, Sustainable environment and natural resources management, Sustainable intensification within smallholder crop value chains, Sustainable intensification within smallholder livestock value chains, Marine science and blue economy - fisheries and aquaculture, Reducing postharvest losses, Agricultural marketing pathways, product uptake, trade and policy and, Addressing risk associated with climate change variability in agricultural systems.

We hope that you will find the papers contained herein useful for your own work, and for advancing knowledge and dialogue on needed action to strengthen agricultural intensification in Africa.

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References

- Garnett, T., Appleby, M.C., Balmford, A., Bateman, I.J., Benton, T.G., Bloomer, P., Burlingame, B., Dawkins, M., Dolan, L., Fraser, D. and Herrero, M. 2013. Sustainable intensification in agriculture: premises and policies. *Science* 341 (6141): pp.33-34.
- Loos, J., Abson, D.J., Chappell, M.J., Hanspach, J., Mikulcak, F., Tichit, M. and Fischer, J. 2014. Putting meaning back into sustainable intensification. *Frontiers in Ecology and the Environment* 12 (6): 356-361.
- Royal Society, Reaping the Benefits: Science and the Sustainable Intensification of Global Agriculture (London, 2009). Foresight: The Future of Food and Farming (Government Office of Science, London, 2011).
- Snyder, K.A. and Cullen, B., 2014. Implications of sustainable agricultural intensification for family farming in Africa: Anthropological perspectives. *Anthropological Notebooks* 20 (3): 9-29.
- Vanlauwe, B., Coyne, D., Gockowski, J., Hauser, S., Huising, J., Masso, C., Nziguheba, G., Schut, M. and Asten, P. van. 2014. Sustainable intensification and the African smallholder farmer. *Current Opinion in Environmentally Sustainability* 8:15-22.