

Outcomes and performance of Rwanda Agricultural Board employees trained by RUFORUM

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Abstract

This paper describes outcomes of a capacity development effort undertaken by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), in collaboration with the Rwanda Government, the Forum for Agricultural Research in Africa (FARA) and Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) to re-build research capacity for Rwanda. Based on indentified priority needs by the Rwanda Government, RUFORUM with funding from SCARDA (Strengthening Capacity for Agricultural Research for Development in Africa), supported the training of initially 11 MSc students in target areas to help jumpstart the research system. Additional 6 MSc students were trained as part of capacity development for the National University of Rwanda. The 17 Students trained at different universities identified by RUFORUM and have since returned to Rwanda and are championing development processes.

Key words: Research Capacity, RUFORUM, Rwanda Agricultural Board, SCARDA

Résumé

Cet article décrit les résultats d'un effort de renforcement des capacités menées par le Forum régional des universités pour le renforcement des capacités en agriculture (RUFORUM), en collaboration avec le gouvernement du Rwanda, le Forum pour la recherche agricole en Afrique (FARA) et l'Association pour le renforcement de la recherche agricole en Afrique orientale et centrale (ASARECA), pour reconstruire la capacité de recherche du Rwanda. Sur la base des besoins prioritaires identifiés par le gouvernement du Rwanda, le RUFORUM, avec un financement de SCARDA (Renforcement des capacités pour la recherche agricole et le développement en Afrique), a financé la formation de 11 étudiants à la maîtrise, initialement dans les zones ciblées, pour aider à relancer le système de recherche. Un Supplément de 6 étudiants à la maîtrise a été formé dans le cadre du renforcement des capacités de l'Université Nationale du Rwanda. Les 17 étudiants formés dans des différentes universités identifiées par le RUFORUM

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sont rentrés au Rwanda et se font les champions des processus de développement.

Mots clés: la capacité de recherche, RUFORUM, le Conseil Agricole du Rwanda, le SCARDA

Background

In response to capacity gap and severe shortage of highly trained scientists (amongst other things) within the realm of agriculture in Rwanda Agricultural Organizations (e.g. former ISAR), RUFORUM offered a lifeline, particularly through the opportunities provided for Masters level training (2008-2010) for RAB (ISAR) scientists. Eleven MSc candidates of RAB (ISAR) were hosted in various African Universities. These were Makerere University-Uganda (Dusengemungu Leonidas, Cyamweshi Rusanganwa, Uwizerwa Mathilda, Nyombayire Alphonse, Shumbusha Damien, Ndacyayisenga Theophile, Gafishi Martin and Habarurema Innocent), Egerton University-Kenya (Umunezero Olive and Dufitumukiza Wilson) and Jomo Kenyatta University-Kenya (Manzi Maximillian). All these people have already returned home and are providing important contributions for agriculture development in Rwanda through Rwanda Agriculture Board (RAB). They have been deployed in different locations of the country in order to fill the gaps and are grappling with the country's agricultural issues while identifying, generating and delivering research and extension outputs that meet the needs of small scale farmers (see map). Six other Rwanda MSc students were trained with support of RUFORUM and the Dfid DeIPHE funded project and are also back at the National University of Rwanda.

Leading Research Process in Rwanda

Below is the success story of RUFORUM-RAB alumni (2008-2010) in their respective fields:

Mr. Dusengemungu Leonidas (MSc holder in Agriculture Extension-Education)

Mr Dusengemungu Leonidas is a Rwandan national, married. He graduated with MSc in Agriculture Extension/Education from Makerere University in (2008-2010) with RUFORUM-SCARDA support. After the MSc training, he rejoined RAB (ISAR) in 2010. He is currently the socio-economist researcher at Rwanda Agriculture Board (RAB), Head of Agricultural Innovation Platforms (2012). After his deployment, Mr. Dusengemungu organized farmers and other stakeholders, and grouped them into Innovation platforms. Recently, he created



an innovation platform around the issue of fishing for enhanced management of Lake Kivu resources where fish stocks are heavily depleted. The platform has brought together fishermen, local leaders, researchers, extension workers, police, militaries, small traders, and drivers who ferry the fish to Kigali (capital city of Rwanda) for sale, sellers, and consumers to come up with intelligent ways of exploiting, managing and conserving severely limited fish resources. He has been able mobilize the commitment of this innovation platform actors, including government, to implement a decision of putting the lake into a 2 months quarantine after every 6 months. During this period no harvest is made from the lake as part of restocking exercise. Currently Mr. Dusengemungu is establishing innovation platforms for maize, common bean, rice and coffee in the Eastern Province of Rwanda, Kirehe District.



Cyamweshi Rusanganwa Athanase (MSc Soil Scientist)

CYAMWESHI Rusanganwa Athanase is a Rwandan national; he is married. He is a Soil Scientist and MSc holder of the College of Agricultural and Environmental Sciences at Makerere University since 2011. His MSc study was funded by RUFORUM-SCARDA. After his MSc training, he was redeployed in RAB-Western Agriculture Zone Division as Researcher in the Department of Natural Resource Management & Mechanisation (NRM). Recently, he was



nominated Director of NRM department where he coordinates activities related to Research and Extension. His main duties include implementation of various soil conservation research programmes to determine suitable mechanisation and infrastructure development strategies; assisting in organising various technology transfer and training programmes on soil



conservation techniques for extension staff and the farming community; enhancing linkages between soil fertility management and sustainable intensification of crop production, and its greater integration within national agricultural policies, Farmers' mobilization for malnutrition eradication, etc.

Mrs. Olive Umunezero (MSc in Animal Health)

Mrs. Olive Umunezero is a Rwandan national and she is married. Her MSc study was supported by RUFORUM-SCARDA at Egerton University in 2008. She has submitted her thesis and is waiting for defense. After coming back to Rwanda, she was appointed in Southern Agriculture Zone Division as Researcher in the



field of Agrostology for animal nutrition where, with her colleagues, she is conducting multiplication trials for promising forages located in different altitudes in Rwanda. The forages under trials are grasses such as *Brachiaria hybrid*, *Brachiaria decumbens*, *Chloris gayana*, *Cenchrus ciliaris*, *Panicum coloratum*, *Melinis munitiflora*, and legumes like *Lablab purpureus*, *Desmodium distortum*, *Macroptilium atropurpureum* and *Trifolium semipilosum*.

Dufitumukiza Wilson (MSc holder in Soil Science from Egerton University)



Wilson Dufutumukiza is a Rwandan National and is married. He is a Soil Scientist and completed his MSc study under RUFORUM-SCARDA support at Egerton University-Kenya in January 2012. Currently, he is the Head of the Tea Programme where he coordinates research and

extension activities related to tea crop. His main tasks include conception, planning, implementation, monitoring and evaluation of participatory tea production research and extension projects, preparation and production of reports and publications on tea production, among others. Other responsibilities within the Tea Programme include promotion of partnership with public-private sector actors at national, regional and international stakeholders on the improvement and development of tea production and conservation, ensuring capacity building of scientific and technical staff dealing with tea production and conservation, participation in policy and strategy formulation in tea production and conservation and other connected duties.

Alphonse Nyombayire-MSc holder in Plant Breeding and Seed System)

NYOMBAYIRE Alphonse graduated with MSc in Plant Breeding and Seed system from Makerere University in 2011 under RUFORUM-AGRA scholarship. After the MSc training, he rejoined his home Institute, Rwanda Agriculture Board (RAB), where he is now working as the Maize Researcher in

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Eastern Agriculture Zone Division (EAZD). He is involved in various activities in the Maize Program such as: maize variety development and maintenance, especially inbred lines development, for maize hybrid development. Nyombayire Alphonse is also evaluating locally and introduced

maize germplasm for their adaptability. He is also involved in participatory variety selection (PVS) with farmers and building



capacity of technicians and farmers. At the same time, he is coordinating maize research activities in the mid-altitude zone of Rwanda. Alphonse NYOMBAYIRE can be contacted at: nyombaip@yahoo.fr

Ndacyayisenga Theophile (MSc Holder in Plant Breeding and Seed System)

Mr Ndacyayisenga Theophile is a Rwandan national, MSc holder in Plant Breeding and Seed System of the College of Agriculture and Environmental Sciences at Makerere University under RUFORUM-AGRA support. After his MSc study, he



has been appointed in Northern Agriculture Zone Division as Researcher in the Potato programme in Rwanda Agriculture Board (RAB). He is in charge of potato germplasm conservation, potato variety improvement and potato variety evaluation.

Damien Shumbusha (MSc in Plant Breeding and Seed System)

Mr. Damien Shumbusha is a Rwandan national. He obtained his MSc in Plant Breeding and Seed System at the College of Agriculture and Environmental in Makerere University with RUFORUM-AGRA support. Immediately after completing his MSc study, he rejoined RAB's sweetpotato programme as Researcher and Head of the programme and in-country leader



of Sweetpotato Action for Security and Health in Africa project (SASHA)/Rwanda Super foods Proof of concept and AGRA sweetpotato breeding project. H is the coordinator of AGRA sweetpotato breeding

project of RAB, focusing on the development of sweetpotato varieties for dual purpose use through participatory breeding. Through accelerated breeding scheme, promising varieties are currently under on-farm trials and the best will be participatory selected to be recommended for release next year (2013). He is also involved in SASHA project activities focusing on availing orange fleshed sweetpotato varieties with processing qualities. In the framework of sharing experiences with senior sweetpotato breeders, he participated in different forums with the purpose of leason learning and sharing to improve his work. In August 2012, he participated in the advanced course on Modern breeding techniques for improvement of sweetpotato, held in Ghent, Belgium. Damien can be contacted on the address below: tel: (+250)78845 99 57, email: shudam@yahoo.fr, Skype: Damien.shumbusha

Mr Habarurema Innocent (MSc in plant plant Breeding and Seed System)

Habarurema Innocent is Rwandan National, married. He did his MSc studies in the Department of Plant Breeding at Makerere University with RUFORUM-AGRA scholarship. He has submitted his MSc thesis and is due to defend the thesis this October 2012. After rejoining RAB,



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he was deployed in Northern Agriculture Zone Division as Researcher and head of Wheat Programme where he coordinates wheat research and extension activities in Rwanda. Other responsibilities include, among others, planning and developing national wheat breeding programmes and research on breeding of potential local and introduced wheat to improve wheat quality and produce new varieties for commercial development, his roles also include guiding, supporting and training technical staff on wheat breeding techniques and writing and publishing scientific findings on breeding of wheat crop.

Uwizerwa Mthilda (MSc holder in Soil Science of Makerere University)

Uwizerwa Mathilda is Rwandan National. She is soil scientist, MSc holder of Makerere University. She benefited from RUFORUM-SCARDA support during her MSc training in 2008-2010. After rejoining RAB, she was deployed in Southern Agriculture Zone Division as Researcher and Head of Soybean Programme where she is coordinating soybean research and extension activities in Rwanda. She has been recently redeployed in Eastern Agriculture Zone Division with the task of mobilizing farmers to produce the required soybeans for a soybean factory recently established in Eastern Province.



Mr. Gafishi Martin (MSc holder in Plant Breeding and Seed System)

Mr. Gafishi Martin is a Rwandan National, married. He is MSc holder in Plant Breeding and Seed System from Makerere University. He benefited from RUFORUM-SCARDA support during his MSc training in 2008-2010. After rejoining RAB, he was deployed in Northern Agriculture Zone Division as Researcher in the Maize programme and Head of RAB-Kinigi station responsible for on-station research activities. His main responsibilities include development of maize varieties including inbred lines and hybrids for high altitudes of Rwanda.



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