

RUFORUM MONTHLY

EARTH UNIVERSITY MODEL: THE MULTIDISCIPLINARY APPROACH TO EDUCATION

In September 2012, a group of 12 postgraduate students from Makerere University, Moi University and University of Malawi were supported by RUFORUM to visit Earth University in Costa Rica.

Below is their story.

After a long tiring flight, we finally arrived at San Jose, Costa Rica. Probably our hosts knew we needed a jovial driver on our arrival to welcome us. Little could they imagine that we could end up struggling to keep awake on our way to EARTH University. Our internal clocks were all reading **night!** As a result we missed to see much of the wonderful scenery, that Professor Nico had so joyfully described to us in our pre-visit literature.

The name of the university is symbolic to what takes place there. We did not know what to expect from this trip but we were hoping that things would work out well, and in the end we were not disappointed. EARTH University is located in [Guácimo](#), Limón in Costa Rica and lies on a 52,981 m² of land. The facilities at the University include a library specializing in agricultural and environmental topics, laboratories, a rainforest reserve and farms dedicated to agricultural and cattle production, the PEP Hotel where we stayed, lots and lots of beautiful flowers, short shrubs, trees and of course the "CATEFERIA", where Earth practices come to life. We were warned on the first day, do not put your hands in the small shrubs, you may come out holding a snake!



Above: Professor Nico and the students at Earth University

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- **RUFORUM Monthly** provides information on activities of the Regional Universities Forum for Capacity Building in Agriculture.
- This **Monthly Brief** is available on the last week of every month ■

ANNOUNCEMENTS

The RUFORUM 9th Annual General Meeting. 24th November, 2012. Botanical Beach Hotel, Entebbe-Uganda

Field Attachment Program Award (FAPA): Call for Proposals for the 2013 Funding Round.

Deadline for application is 30th November 2012 [Read more](#)

Doctoral Regional Research Grants (DoGs): Call for Proposals 2012 [Read more>>](#)

Competition Announcement and Extension of Deadline: IMPRESSA AWARDS 2012. [31st May 2013](#)

More information on RUFORUM activities can be accessed on the RUFORUM BLOG at <http://ruforum.org/a/ruforumblog/>

COMPETITION ANNOUNCEMENT and EXTENSION OF DEADLINE: IMPRESSA AWARDS 2012

Eligibility

The 2012 IMPRESSA Awards competition will be restricted to agricultural researchers and scientists from the **29 RUFORUM member universities**. Participation in the competition is by peer nomination. Both individuals and teams whose work, done in sub-Saharan Africa has contributed to the objectives of IMPRESSA are eligible for nomination. **The Deadline has been EXTENDED to midnight 31st May 2013.** [Click here to Read More>>](#).

RUFORUM Secretariat address:

**Attention: IMPRESSA Awards Plot 151 Garden Hill, Makerere University,
P.O. Box 7062, Kampala, Uganda Tel.: +256-414-535939**

For more information about the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), Contact: The **Newsletter Editor**, RUFORUM Secretariat, Plot 151 Garden Hill, Makerere University Main Campus, P.O. Box 7062, Kampala, Uganda. Fax: +256 414 534153; Tel: +256 414 535939; E-mail: secretariat@ruforum.org; or visit the RUFORUM Website at www.ruforum.org.



EARTH UNIVERSITY MODEL: THE MULTIDISCIPLINARY APPROACH TO EDUCATION - RUFORUM CARP VISIT

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EARTH University is a private non-profit university offering an undergraduate program leading to a Bachelor of Science degree in Agronomy Engineering. The University founded in 1990 focuses on the principles of Social and Environmental issues, Entrepreneurship, Technical and leadership skills. The educational model trains the students to become excellent members of their communities by putting emphasis on social commitment, environmental awareness, entrepreneurial spirit and strong ethical values.

In August 2012, RUFORUM organized a ten day study visit for its Community Action Research Program (CARP) students to EARTH University in Costa-Rica. The visit took place from the 29th to 06th September 2012. It comprised of eleven students from Makerere University, Uganda, Moi University, Kenya and Bunda College, Malawi, RUFORUM universities participating in the CARP Project whose objective is to "Improve the relevance and effectiveness of agricultural education at African Universities.

The Experiential learning, Action Research model

In 2010, the Regional Universities Forum for Capacity Building in Agriculture commissioned a gap analysis study for one of its projects "Shifting from Outreach to engagement: transforming Universities response to current development trends in agricultural research and training in Eastern, central and Southern Africa." This project is linked to the Community Action Research program (CARP) the program under which we travelled to Earth University. Among the objectives of this Gap analysis study was *"to identify and describe best practices of experiential learning, and how such practices could be adopted and/or scaled up in African Universities."* One of the conclusions of this study was, *"At its simplest" Experiential learning can be equated to learning from experience but experience does not automatically lead to learning."*

Through this visit, we were able to practically see for ourselves that experiential learning can lead to learning if put to practice. The EARTH educational model offers students the opportunity to develop skills, abilities and knowledge and encourages their social, spiritual and intellectual growth. It trains students to be excellent members of their communities by emphasizing social commitment, environmental awareness, entrepreneurial spirit and strong ethical values.

The University model is based on 4 pillars: Technical and Scientific knowledge, Knowledge Development skills, Business skills and hostistic and subjective skills (*which include creativity, innovation, achievement desire, independence, risk taking and real world experience*) With these pillars and the principal of **Student-centered learning**, the university has produced leaders in sustainable development working as entrepreneurs, in government and private sector all over the world. If this model is applied to African universities where learning is

in most cases based on theory, it can help RUFORUM achieve its goals of facilitating the creation of responsive university programmes, (research, training and outreach) that delivers competent graduates trained to support farmers and Small-Medium Enterprises (SMEs). Therefore establishing sustainable agri-food value chains and enterprises which the CARP Project is also promoting.

Our visit to the communities associated with Earth University

Every Wednesdays and Saturdays, all students at Earth participate in what was called **work** and **professional** experience. During these experiences students go out to the farms and work with members of the surrounding communities, while others work on the University farms, supervised by either the fourth year students or their professors.

As part of our learning experience, we visited a farmer's



association called Neutral Carbon Community. This was one of the communities the university partner with as a "payback to the local community" This com-

munity was established in 2006 by the Costa Rican Government. Twenty nine landless families are settled on this land and each family was given a three acre piece of land for both farming and settlement. The families settled on this trust land can only be issued with a title deed after staying and farming on the land after a period of ten years.

As part of the Community Development program, all second and third year students at Earth work with small scale local producers on their farms and with organised groups in sustainable community Development activities. During this experience in the community, the students try to address problems facing the communities while facing real life experiences. This approach provides a learning opportunities for both the farmer and the student. Unlike most agricultural or technology based training programs where students go at the end of their training for internship programs, the EARTH model trains the student from day one of their University education, that learning is by doing and by experience. Unless you participate in the action, then learning will not be taking place.

One of the many goals of the university is to strengthen the

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value chain systems of the farming communities. Associated to this, were visits made to the Hacienda Ojo de Agua a pineapple export company and an Agri- business enterprise – the PRO-AGROIN company in San Carlos, which was also strengthened by Earth university through its outreach program. The company works with 500 farmers, whom they provide with markets for their commodities including credit management skills.

Transfer of Technologies from the University to the communities.

In its technology transfer model, the University has established



“The Alternative Energies laboratory” (*centre for renewable energy*). This was the first of its kind in latin America. Funded by the German Government, the objective of this centre is to

provide clean energy to rural areas. The centre was already working with the rural communities especially in the setting up of bio-gas digesters. The farmer association we visited We were able to witness first hand technology transfer from the university, especially biogas that was used by the farmers to prepare meals and in waste management. Through its outreach program, the university is able to provide technical skills and materials used in the construction of the biogas units. Apart from the biodigesters, Earth university has also introduced other technologies such as greenhouse farming where they constructed greenhouses with farmers. Other projects introduced to the farming communities include compost production, addition of Nitrogen to the soil through forage and natural CO₂ project that aims to improve sustainable Agriculture in the farming communities.



The Fun part of it

It was not all hard work without play, as part of the celebrations to mark the Afro Costa -Rican day, a day when the black heritage is appreciated, African students at Erath University and ourselves marched through the streets of Limon in with our African brothers. We managed to visit various tourist destinations including [Veragua Rainforest Research & Adventure Park](#). where we were able to see very many species of butterflies, frogs, snakes and finally

enjoyed the tram tour of the rainforest and the canopy tour. The museum at the capital city, San Jose had spectacular scenes with rich culture of the people of Costa Rica and their origin, with lots and lots of gold.



Lessons from this visit

- At Earth University, We learnt that Experiential Learning is work experience, entrepreneurial projects, community development, internship program, professional experience and the Graduation projects. The role of the professor is to “move the process while removing obstacles”.
- The professor student relationship was greatly advanced in this university. The bonding between the professors and students enabled the students to communicate effectively and allowed faster problem solving.
- We came to learn that Earth university has only one faculty that has a multidisciplinary approach to education. Here students are seen not as specialists in a particular field but as managers running an enterprise, and at the end of their course, they obtain a degree that enables them become entrepreneurs and employers. Indeed we saw this through the Alumni programme in their M&E.
- Connection of the University through its community Development Program-What we saw as impressive was the involvement of the university in community development, which included both the individual farmers, farmer associations and even companies. We were able to witness first hand technology transfer from the university, especially biogas that was used by the farmers to prepare meals. The equipment is provided by the through its outreach program. Earth provides both technical skills and materials used in the construction of the biogas units.
- The University was both an Educational Institution but also a business enterprise running a large export business of its own. The food prepared at the university’s cafeteria was purchased from the university farm. The commercial farm produced bananas for export while the other farms produced food for local consumption.
- The university’s organic farm had made tremendous effort to produce organic food without using pesticides. Trials in plant extracts in pest management was ongoing as well as the use of biological control agents which offered alternatives to pesticides.

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Given that Earth University is an Undergraduate institution, the few lectures given to us by the Earth Professors were “awakening”. For example through some professors who facilitated discussions on Sustainable Agriculture, value chain analysis, economics of Agricultural production in the world and how to easily do an economic analysis of a country’s status, we were able to quickly grasp figures, analyse and do comparative analysis of our countries’ economic status through the value chain approach.

Conclusion

Although university’s population is rather small, with a student population of only 400, the university admits students from all over the world with an aim of developing skills

which after completion of their studies, the students are expected to go back to their countries of origin and be Agents of Change in their rural communities while contributing to the GDP of their countries as a whole. We came away determined to be “**Agents of Change**” in our respective communities. We would like to extend our sincere thanks to the RUFORUM community, Earth University, the students of Earth University, our respective universities, our families and to the Bill and Melinda gates foundation for having made this possible. This study visit will not remain on Paper.

Contributions to this article were made by the CARP/RUFORUM students on the Study visit to Earth University and compiled on by Janet C Achora, part of the student body. For more information, Janet can be contact by email at jachora@wougnnet.org.

RUFORUM BIENNIAL CONFERENCE CREATES OPPORTUNITY FOR STUDENT AND FARMER ORGANISATION

Miss. Victoria Mbigidde, a former student under the RUFORUM Regional Program in Agricultural Information & Communication Management (AICM) had been looking forward to doing her attachment since 2009 at the 2nd RUFORUM Biennial Conference. Victoria attended a session in which Ms. Janet Cox Achola, from Women of Uganda Network (WOUGNET) presented a paper which had a lot in common with her research at the time. She says, “with a lot of fear, I gathered the strength and walked up to her and expressed my interest in doing my internship with the organization. To my surprise, she encouraged me and I went ahead with my idea. I just could not wait to finish school and join this great team. Anyway I did finish my studies and as you read this, am in my 3rd month happily doing my attachment with my dream organization, thanks to the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) which supported me in all ways possible through the Field Attachment Programme Award (FAPA) and made my dream come to life/reality”.

When she embarked on this journey, she looked forward to dealing with agriculture issues in Information & Communication Technologies (ICTs) and put into practice the theory learnt from the her studies with questions of how best she could use the knowledge acquired to bridge the gap and make a positive change which is most desired by many in the agriculture sector. Her interest was in learning from the people who were already in the field. This seemed difficult in her thinking but with she was optimistic and knew things would work out somehow, and yes they did with support from WOUGNET. The Apac field office, whom I was attached too was very hospitable environment and ready to mentor me.

Victoria was involved in a number of activities at the center (WOUGNET) among which are attending to visitors who come at the center in search for information and



Above: Women in Apac District, Uganda under the WOUGNET project

internet services, generate articles and upload them on the KIC (Kubere Information Center) website to the wider public, interacting and sharing with farmers during field visits and fundraising. This has built her confidence, given her a clear understanding and appreciation of the attachment opportunities with the experience and exposure that comes along with it. There is still demand from the farmers who need research results and seek more information on agriculture related issues under WOUGNETs three main program areas of Information sharing and networking, Technical support and Gender and ICT Policy Advocacy which make the establishment worthwhile.

She has the zeal to go on and face each day, having learnt a number of key aspects under internship, she look forward to an even better experience and more opportunities by the end of her attachment.

Story from Miss. Victoria Mbigidde. MSc Agriculture Information and Communication Management (AICM) and Intern at Women of Uganda Network (WOUGNET), Apac Field office. She can be contacted at ymbigide@yahoo.com



RUFORUM DOCTORAL FINALIZATION GRANT: CALL FOR APPLICATIONS - Call ID: RU/2012/DFS/01

APPLICATION DEADLINE: 16th November 2012

This is to announce a call for applicants for grants to support the finalisation of PhD fieldwork, data analysis, thesis write up, publication and dissemination of findings. The purpose of these grants is to support students who do not have adequate finances to complete their degrees. The grant also aims at enabling the students to discuss their results with the communities they worked with.

The call is open to students registered in any of the following RUFORUM Regional PhD programmes;

- Dryland Resource Management at University of Nairobi, Kenya
- Plant Breeding and Biotechnology at Makerere University, Uganda
- Aquaculture and Fisheries Science at Lilongwe University of Agriculture and Natural Resource Management, Malawi
- Agricultural and Resource Management at Lilongwe University of Agriculture and Natural Resource Management, Malawi
- Soil and Water Management at Sokoine University of Agriculture, Tanzania. [Read more on about this call>>](#)

FIELD ATTACHMENT PROGRAM AWARD (FAPA): CALL FOR PROPOSALS FOR THE 2013 FUNDING ROUND

The Field Attachment Program Award (FAPA) is a competitive grants program designed as graduate student internship to link thesis research findings and recommendations to application and use at community level. The FAPA grants are intended to provide opportunity for dissemination of research outputs with a view to inform policy development and hone students skills in participatory (with communities) problem identification and articulation of complex research.

Key Dates

Announcement/Call Release	1 st November, 2012
Deadline for Applications	30 th January, 2013
Notification of Results	March, 2013**
Commencement of Activity	April - June, 2013**

**** While every effort will be made to comply with these dates, they are indicative only.**

For more information about the FAPA: Please refer to the Competitive Grants System (CGS) Grants Manual General Information and Guidelines which are available at www.ruforum.org. All prospective applicants are advised to contact RUFORUM Secretariat via email cgs@ruforum.org for the Application Form.



CALL FOR PROPOSALS: DOCTORAL REGIONAL RESEARCH GRANTS - Call ID: RU/2012/DRRG/01

APPLICATION DEADLINE: 31st January 2013

This is to announce a Call for Applicants registered in RUFORUM Regional PhD Programmes for a Doctoral Regional Research Grant to support their doctoral research over two years. The research supported through these grants must have a participatory, action research approach, working closely with a range of stakeholders and thus contributing to the RUFORUM mission of linking universities more closely with rural communities and with research, extension, development and policy-making agencies.

The grants are for a maximum of US\$.15,000 over a period of two years, and are meant to provide funds for student research, support supervision, produce the thesis and related publications, as well as report back to the communities they worked with. The detailed breakdown will be as follows:

Research – US\$. 10,000; Student travel – US\$.1,000; Student supervision – US\$. 1,500; Thesis preparation – US\$. 200

Cost of publication in peer-reviewed journal – US\$. 300; Conference participation – US\$. 2,000;

[Read more on about this call>>](#)

MAKERERE TRAINS LOCAL ANIMAL FARMERS LINKING WITH COMMUNITIES

The faculty of veterinary medicine at [Makerere University](#) launched an institute to train students to provide local farmers with practical knowledge on animal keeping.

According to the former vice-chancellor, Prof. Venansius Baryamureeba, the Africa Institute for Strategic Animal Resource Service and Development (AFRISA) will train youth in livestock management.

"Students will be trained on farms in community training services to equip them with practical skills. The students will but will provide the necessary knowledge to the lay farmers," he said. Baryamureeba, at the launch of the institute at [Makerere University](#), confirmed that applications for admission for the next academic year are open.

He added that students would be distributed to districts, counties to complement government programmes like NAADS. "They will later be distributed and attached to farmers in the country and all over Africa. The university wants to be directly relevant to [Uganda's](#) community," Baryamureeba said.

According to the finance ministry, the project was allocated sh1b in the budget for the financial year 2010/2011. Daudi Kabasa, the dean of the faculty of medicine, said the institute will promote value addition and develop high market value products from cattle, goats, sheep, pigs and rabbits.

He said the primary objective of AFRISA is to enhance animal sector education, research and services to meet national, regional and International demands. "This will be



done alongside promoting a holistic approach skills, technology innovation for production, employment, health and development," he added.

Initially, the institute will have two centres. The Makerere In-training Community Services Centre will focus on vocational and technical excellence, value addition and entrepreneurship.

The second is the Makerere Centre for Strategic Bio-Security and Biotechnology, which will focus on appropriate skills, vaccines and technology for disease diagnosis, surveillance and control bio-security and technology.

The project is supported by the President's office, the agriculture and the finance ministries.

This story has been published from In East Africa with a few modifications. He can be contacted at [In2EastAfrica Reporter](#)

FEATURED PUBLICATIONS AVAILABLE ONLINE



Building the Capacity to Manage Pests and Conserve Ecosystems: Back in 1992, Mozambique ranked as one of the world's poorest and most heavily indebted countries, at or near the bottom of the list on most global development indicators. Now, the country's booming postwar economy relies heavily on both commercial agriculture and small-scale farming, upon which around 80 percent of

the population depends for their livelihoods. The critical need for researchers with the scientific knowledge to support development and economic growth in both sectors can be illustrated in the story of the Asian fruit fly, or *Bactrocera invadens*. The insect, somewhat larger than a common housefly, and adorned with brilliant yellow and brown stripes that give it an appearance similar to a bee, was first detected in Kenya in 2003 and has since become widespread, and widely destructive, across Africa, making its first appearance in Mozambique in 2007. Responding to the scourge, a research team from UEM secured a competitive research grant from RUFORUM to map the outbreak, study its impacts and test biological control methods – a project which has helped the university contribute towards the government's efforts to deal with the infestation, which poses tough economic and food security challenges, says Dr. Domingos Cugala, the principal investigator on the project. [Read More>>](#)



Participatory Action Research Boosts Incomes and Food Security through Small-Scale Aquaculture: As Malawian farmers face an increasingly uncertain future, due to the combined forces of climate change, soil depletion and the free market, Mwase and his wife Flora are working with researchers from the Bunda College of Agriculture, at the University of Malawi, a leading regional institution for training

and research on issues of poverty and food security, to help develop aquaculture as a viable enterprise to improve livelihoods and food security.

The Community Action Research Programme (CARP), as the project is called, is funded by RUFORUM. The programme is still young, but the results so far have been impressive. The first harvest, in July, produced a bumper yield of 497,63 kilograms of fish, which sold for 342,080 Malawian Kwacha (about USD \$1,275), a sum which was shared amongst eight participating farmers. The fish yield translates into an average of 1663 kilograms per hectare per year for each farmer, which is double the current productivity of 750 kg/ha/year. This productivity in turn translates into earnings of around US\$ 481 per farmer per year, which already amounts to a significant improvement in livelihoods, in a country where the majority of the population lives on less than 1 US\$ per day. [Read More>>](#)