

## *The Division of External Studies*

### *The Robert H. Smith Faculty of Agriculture, Food and Environment*

Established in 1986, The Hebrew University of Jerusalem's Division of External Studies provides courses within the framework of the Robert H. Smith Faculty of Agriculture Food and Environment, educating students who come to Rehovot, Israel, from throughout the world. Innovative master's degree programs in Nutritional Science and Plant Sciences enable these international students, most of whom hail from developing nations, to expand their knowledge in order to address major agricultural and health challenges in their home countries.

Many of the Division's students come from countries which have been targeted for development within the Millenium Development Goals (MDG). MDG are eight international development goals that all 192 United Nations member states and at least 23 international organizations have agreed to achieve by the year 2015. Goals include reducing extreme poverty and child mortality rates, fighting disease epidemics such as AIDS, and creating a global partnership for development. Hebrew University helps developing nations to educate the professionals needed to help fulfil Millenium Development goals in a sustainable manner. This alleviates the need for countries to rely primarily on foreign experts who spend limited time in each region.

Students who attend Hebrew University's Division of External Studies typically become leaders in their respective fields, working for NGOs, the United Nations, and institutes for agricultural research and health organizations in their own nations. Israeli-led knowledge of sustainable agriculture and nutritional science becomes a life-saving export helpful to people in many parts of the world. These Hebrew University programs also build strong alliances between Israel and other countries, creating bonds of friendship and agricultural collaboration.



#### **PROFILES OF INTERNATIONAL STUDENTS**

**DR. JUSTUS RUTAISIRE**  
**COUNTRY: UGANDA**

Dr. Justus Rutaisire studied and taught at Makerere University. He completed his Ph.D. in Fish Biology at Rhodes, and attended postgraduate training in aquaculture in a number of countries. Since 2006, he has been Principal Research Officer and Head of Aquaculture at the Ugandan National Research Organization, National Fisheries Resources Research Institute.

Justus' first contact with The Hebrew University began in 1999, when he participated in the international post-graduate course in Aquaculture. He developed a professional relationship with HU Professor Berta Sivan, which led to a productive collaboration in aquaculture between Israel and Uganda.

After shaping a joint research project in fish spawning and breeding, Professor Sivan and Dr. Justus Rutaisire were approved for funding by the U.S.-Israel Cooperative Development Research (US-CDR) Program related to spawning studies of cyprinid fishes native to Uganda. US-CDR is a research activity of the U.S. Agency for International Development (USAID), and is an integral part of the U.S. program of development assistance. The program seeks to stimulate new

and innovative scientific research on issues of importance to developing countries. It provides

research grants for researchers in USAID target countries and Israeli scientists to pursue joint research following a highly competitive review." The project, which started in 2004, spurred important interaction between researchers, students, farmers and investors from Israel and Uganda. The two-country collaboration resulted in the first successful spawning of two indigenous fish species.

This project has had a positive impact on the fish industry in Uganda, rejuvenating fish farming and providing individual farmers with a much-needed source of protein for their families. It received one of only 12 grants from among more than 160 submitted proposals in the highly competitive Millennium Scientific Initiative for development of technologies. Currently, The Hebrew University's aquaculture program attracts students from Uganda, Nigeria, Kenya and South Africa.

**KIBROM TESFASELLASSIE KIDANE**

**COUNTRY: ERITREA**

Kibrom Tesfasellassie Kidane's B.Sc. in Chemistry was completed at Addis Ababa University in Ethiopia, after which he came to Hebrew University and participated in the fifth international post-graduate course in Food Technology (2004) and the first international M.Sc. program in Nutritional Sciences (2005-2006).

At the time, Kibrom's employer was the Eritrean Standards Institute, where he worked on standardization and quality assurance for food and agricultural products in Eritrea. He currently holds a high-level post with UNICEF Eritrea as a Nutrition Specialist.

Kibrom stated: "I am the only Nutritionist in MSc. level in Eritrea, and work closely with health personnel and community volunteers in the field." He devotes many hours each month, working with teams to save the lives of Eritrean children under five years of age. One of his objectives is to meet Millennium Development Goals (MDGs) related to reducing mortality rates and improving nutrition.

Kibrom's work entails collaborating with Eritrea's Ministry of Health. His educational experience at HU's Division of External Studies enables this Eritrean professional to develop comprehensive plans for supplementary and therapeutic nutrition, both of which help to prevent malnutrition and disease, especially in young children.

**DR. STEPHEN NGIGI**

**COUNTRY: KENYA**

In 2008, a request for training in Agricultural Water Management was received by HU's Division of External Studies from Dr. Stephen N. Ngigi of Kenya. Dr. Ngigi is a high-level U.N. official with the Millennium Development Goals Centre for Eastern & Southern Africa. He oversees water and agriculture development for 14 Millennium Village Projects (MVP) affecting rural development in Africa. The proposed improvements encompass agriculture, health, transport, energy, technology, telecommunications and Internet connectivity. The MVP proposes a proven, integrated package of interventions to relieve villagers from extreme poverty.

Dr. Ngigi attended a Division course in groundwater management, and gained knowledge that enabled him to take a leadership role in Kenya. He found his education so helpful, that he requested

a customized course for 30 participants from Kenya; the course was held from December 2008-January 2009. The majority of participants were M.Sc. or Ph.D. degree holders involved in water coordination, infrastructure and agriculture in the Millennium Villages and supervised by Dr. Ngigi.

Dr. Ngigi's proactive stance in spearheading this advanced HU training in water management has provided the impetus for positive change in Kenya. The Robert H. Smith Faculty of Agriculture, Food and Environment's expertise is forming the basis for Kenya's success in meeting Millennium Village Projects' goals.

**LOVEMORE NKHATA MALUNGA**

**COUNTRY: MALAWI**

Lovemore Nkhata Malunga pursued his M.Sc. studies at Hebrew University's Division of External Studies to help the people of Malawi. After completing his B.Sc. degree in Food Technology at the University of Malawi, Lovemore joined the Malawi Bureau of Standards, which enrolled him in an international course in Food Management at the Robert H. Smith Faculty of Agriculture, Food and Environment, where he participated in the 2007-2008 international M.Sc. program in Nutritional Sciences.

Students from different backgrounds and cultures are united through academics and comradeship. We used to call The Hebrew University program a 'small United Nations' and we formed a strong group of friendship and support. The program gave us the tools to help us be instrumental in the development of our respective countries, and gave us hope that it is possible to succeed with minimal resources.

Many projects in developing countries fail because of the lack of resources. We have seen for ourselves how Israel achieves great things with minimal resources. Our attitude has completely changed as we look to maximize the resources that we have.

Malawi is one the poorest countries in the world. About 40 percent of all children in Malawi become undernourished by 18 months. Forty-six percent of the children below age five have stunted growth, and twenty percent of babies don't live to see their fifth birthday. Malnutrition contributes to our low life expectancy: just 47 years of age.

My M.Sc. program research project at Hebrew University concerned a fortified chocolate milk drink for children that would improve their nutrition and health. This product, I believed, might also stimulate the growth of the dairy industry in Malawi. The concept is being considered by local dairy companies.

Based on lessons learned at The Robert H. Smith Faculty, I initiated a self-sustaining model project, which improves nutrition for 80 children from Malawi villages while providing support to newly-established farms run commercially by local volunteer families, under the guidance of an agricultural expert. Much of the farm income buys food for new nursery schools.

Thirdly, corn flour porridge is a supplementary food fed to infants in Malawi, but it has low nutrient value. My M.Sc. thesis research at Hebrew University explored the use of chickpea, with its high nutrient composition, to supplement the porridge. Chickpea is already grown in Malawi, and may provide a cheap but very effective means of improving nutrition.

These three projects evolved from my studies at the Robert H. Smith Faculty and its Division of

External Studies. Through these programs, we have rekindled the belief that Malawi can develop and thrive.

**SUDHA KHADKA**  
**COUNTRY: NEPAL**

Sudha Khadka earned her B.Sc. in Agriculture at the Institute of Agriculture and Animal Science in Nepal. She became a teacher and also volunteered at the Institute for Sustainable Agriculture in Nepal, after which she became a trainee officer at the South Asia Watch on Trade, Economics and Environment.

In 2003, she spent almost a year in Israel, where Sudha undertook agricultural training in the Arava region. A year later, after becoming a member of the Farmers' Institute for Participatory Research and Development in Nepal, Sudha returned to Rehovot, and participated in the sixth international M.Sc. program in Plant Sciences at the Smith Faculty.

Her M.Sc. thesis, entitled, "Response of banana plants to moderate salinity – functional anatomy of the lamina", was developed under the supervision of Professor Amnon Schwartz in the Department of Horticulture. The thesis has turned into a published paper, and her M.Sc. degree was awarded Magna cum Laude.

Intent on using this knowledge to improve the lives of her countrymen and women in Nepal, Sudha returned home and joined a non-profit, non-governmental organization, funded by a development fund in Norway. She assumed responsibility for coordinating, planning and implementing different agricultural projects, often working directly with farmers in the field and promoting agro-biodiversity. The crops being developed include rice, corn, wheat and buckwheat, all considered for their nutritional properties.

Sudha ultimately joined Oxfam, UK, and is based in Katmandu, where a community-based seed production center was created. Each day, she uses her academic knowledge gained in Israel to better her country's agriculture, health and nutrition.

**VICTORIA RAMOS**  
**COUNTRY: MEXICO**

Victoria (Vicky) Ramos completed her B.Sc. in Nutrition and Food Sciences at the Universidad Ibero-Americana, A.C. in Mexico (2004), and became a research assistant and nutrition consultant. At The Robert H. Smith Faculty's Division of External Studies, she successfully completed the first international M.Sc. program in Nutritional Sciences (2006).

Returning to Mexico, she was chosen to become head of Nutrition at a major public hospital there. Vicky stated: "The hospital is very poor and has lots of needs, but there are good people to work with." In this pivotal role and at a relatively young age, Vicky became responsible for a staff of 80 in the hospital's Nutrition Department, dealing with the myriad dietary needs of patients.

Very grateful for the education she received through the Division of External Studies, and a great fan of Israel, Vicky has become active in the Mexican Friends of The Hebrew University.