

The University of Rwanda through its College of Agriculture, Forestry and Food Science (UR-CAFF) is increasingly engaging emerging industry partners and enterprises to discuss key areas of collaboration using practical experience in order to translate scientific findings into real-world solutions to address food security amid climate change in Rwanda.

The initiative jointly carried out in collaboration with the Germany-based Africa Institute, Neu-Ulm University of Applied Sciences (HNU), aims to ensure that the knowledge generated within the academia contributes meaningfully to the national economy and enhances productivity and climate-resilient agriculture.

To ensure a smooth implementation of the new partnership, UR-CAFF has established key pillars that aligns with its core mandate including quality innovative teaching and learning, research, grants and fundraising, community outreach and innovation and technology transfer.

Beacon of research in Agriculture

Dr. Guillaume Nyagatare, Principal at the College of Agriculture, Forestry and Food Science (UR-CAFF) of the University of Rwanda reflecting on how current aspiration align with the core mandate of this academic institution to become a beacon of research in Agriculture, points out that the new partnership aims to ensure that knowledge generated within the university contributes meaningfully to Rwanda's economy.

“Strategic partnerships with the industry are not merely a fundraising mechanism, but they are the essential engines of practical innovation,” Dr Nyagatare said.

While working alongside leading industries, researchers from UR-CAFF aim to ensure their curriculum becomes cutting-edge, preparing graduates who are job-ready and equipped with the technological prowess demanded by modern stewardship and production.

The job readiness of African graduates is, according to experts, a significant concern, with many facing challenges in securing employment after completing their education.

However, Prof Dr Thomas Bayer, a prominent figure at the Germany-based Africa Institute, Neu-Ulm University of Applied Sciences (HNU) asserted that university,

industry partners and entrepreneurs are three essential pillars in creating innovations for sustainable development.



Dr Thomas Bayer, a prominent figure at the Germany-based Africa Institute, Neu-Ulm University of Applied Sciences (HNU)

“Entrepreneurial teams of university graduates and practitioners play a pivotal role in turning them into solutions and marketable products,” he said.

This is because there is a potential for agriculture to be an engine for growth in Rwanda —the sector accounts for 25% of the national Gross Domestic Product (GDP).

Among other key areas of this new partnership include mainly sectors that offer particularly strong prospects for integration of research and industry engagement including agribusinesses, fertilizer, and timber or food innovation companies

“We are currently exploring available opportunities in the country where the industry can disseminate, commercialize and scale research outcomes much faster than academic institution operating alone,” Dr Nyagatara, Principal of the college said of the new initiative.

Providing industry-aligned curriculum

Among other proposed key areas of collaboration between industry and academia in Rwanda include mainly Small and Medium Enterprises (SMEs) mentorship in food processing and agriculture value addition, industrial placements and professional internships.

Dr Nathan Kanuma Taremwa, College Director of Research & Innovation (C-DRI) and Principal Investigator (PI) of UPLIFT-Agriculture Project emphasized the need to ensure that academic programs remain up-to-date, practical, and industry-aligned.

According to him, the new move also seeks to foster cross-sector collaboration and provide sustained momentum for high-quality and sustainable development.



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Key focus will be on ensuring Curriculum Relevance and Development, by providing the guidance to the college on current industry trends, skills in demand, future workforce needs and new courses, certifications, or technical skills needed to improve graduate employability.

“Boosting research-industry collaboration in the agriculture sector is critical to address the challenges of food insecurity, climate change, and low productivity among smallholder farmers,” Dr Taremwa said.

Career-ready graduates

While linking research and real-world applications remains crucial to improve best practices and sustainable farming methods, Dr Taremwa is convinced that innovation still remain an essential part that can play a crucial role in driving economic growth and development.

There was also a lot of emphasis on the need to support the establishment of centers of excellence, innovation labs, and incubators while strengthening technology transfer and collaborative innovation between the university and industrial actors in Rwanda.

“To meet job market expectations in the industry, another major focus [for the college] is on producing career-ready graduates,” he said.

Estimates by the 2024 Agriculture Household Survey (AHS) conducted by the National Institute of Statistics of Rwanda (NISR) shows that at least 30.7 percent of Rwandan youth aged 16 to 30 are engaged in agriculture-related activities, representing about 3.6 million people.

The Ministry of Agriculture and Animal Resources (MINAGRI) emphasizes the importance of attracting a new generation of trained workforce in the agriculture sector especially as many farmers are aging and mostly relying on small-scale subsistence agriculture.

Both Prof. Bayer and Dr Taremwa are convinced that local industry partners [in Rwandan Agriculture sector] have the financial means, reach and process know-how to scale and accelerate solutions of entrepreneurial teams by investing in their innovations.

“There is still a need in Rwanda, to promote a demand-oriented education that is

closely linked to enterprises,” Prof.Bayer pointed out.