# NaLIRRI Roundup

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## WORLD BANK VISITS NARO IN A MOVE TO STRENGTHEN TIES FOR AGRICULTURAL TRANSFORMATION

The National Agricultural Research Organisation (NARO) reaffirmed its partnership with the World Bank in driving Uganda's agricultural transformation during a high-profile visit by a World Bank delegation to the National Crops Resources Research Institute (NaCRRI) and the National Livestock Resources Research Institute (NaLIRRI). While touring research facilities and key activities at both institutes, the delegation observed innovations in crop and livestock research, including vaccine development, forage improvement, and value addition initiatives.

In his keynote address, Dr. Yona Baguma, Director General of NARO, celebrated the organisation's remarkable growth, noting the increase in scientific capacity from just five PhD holders at inception to 154 today. Over the past three years, NARO has released 294 improved crop varieties, developed an anti-tick vaccine, and established a cassava centre of excellence that has transformed cassava into an industrial raw material. He appealed for continued World Bank support in irrigation, seed systems, and value addition. Mr. Kim Young, Division Director at the World Bank, underscored Uganda's untapped agricultural potential, noting that maize yields average just 2.3 metric tons per hectare, compared to the global average of 6.7 metric tons per hectare.

He stressed that closing this gap could double or triple farmers' incomes through productivity gains and value addition. He advocated for an integrated rural development approach that links research, inputs, irrigation, infrastructure, energy, and market access.

Mr. Kim reaffirmed the World Bank's commitment to supporting Uganda's agricultural sector. Former NaLIRRI Director and current NARO Governing Council Chair, Mr. William Mukabi, reflected on NARO's humble beginnings, crediting the World Bank's early interventions for laying the foundation that has enabled the institution to grow into a regional research powerhouse.

Addressing the gathering, Hon. Frank Tumwebaze, Minister of Agriculture, Animal Industry and Fisheries, emphasized agriculture's central role in food and national security. He called for value-chain-based project designs that are sensitive to farmer realities, saying: "A project must be relevant to the farmer at every stage – from seed to market – to keep them motivated and productive."

The visit concluded with a renewed commitment to deepen collaboration in research, infrastructure, vaccine development, seed systems, and value chain transformation, positioning agriculture at the heart of Uganda's development agenda.

# UGANDA PRISONS OFFICERS TOUR NALIRRI TO LEARN LIVESTOCK MANAGEMENT

On 23rd September 2025, officers of the Uganda Prisons Service undertaking the Intermediate and Staff Course (Intake 004) at the Prison Academy and Training School visited NaLIRRI for a study tour. The objective of the visit was to gain practical knowledge on livestock production and management, with a focus on small-scale farming, pasture development, animal health, nutrition, breeding, marketing, and socio-economic aspects of livestock enterprises.

During the tour, the officers visited NaLIRRI's anti-tick vaccine production facility, explored innovations in zero-waste technologies derived from cow dung, observed the pasture fields, and interacted with ongoing research at the cowshed and dairy unit. The visit offered the team hands-on insights into modern livestock management and highlighted NaLIRRI's role as a hub for knowledge transfer and agricultural transformation.

# NALIRRI EXPLORES REGIONAL MARKETS FOR NAROVAC® ANTI-TICK VACCINE

Last week, NaLIRRI's Marketing Unit presented findings from a Regional Market Intelligence (REMI) study conducted in Kenya, Tanzania, Rwanda, and South Sudan. The study assessed the commercial potential of the NAROVAC® Anti-Tick Vaccine, Uganda's homegrown innovation designed to combat tick-borne diseases that cripple livestock productivity across East Africa.

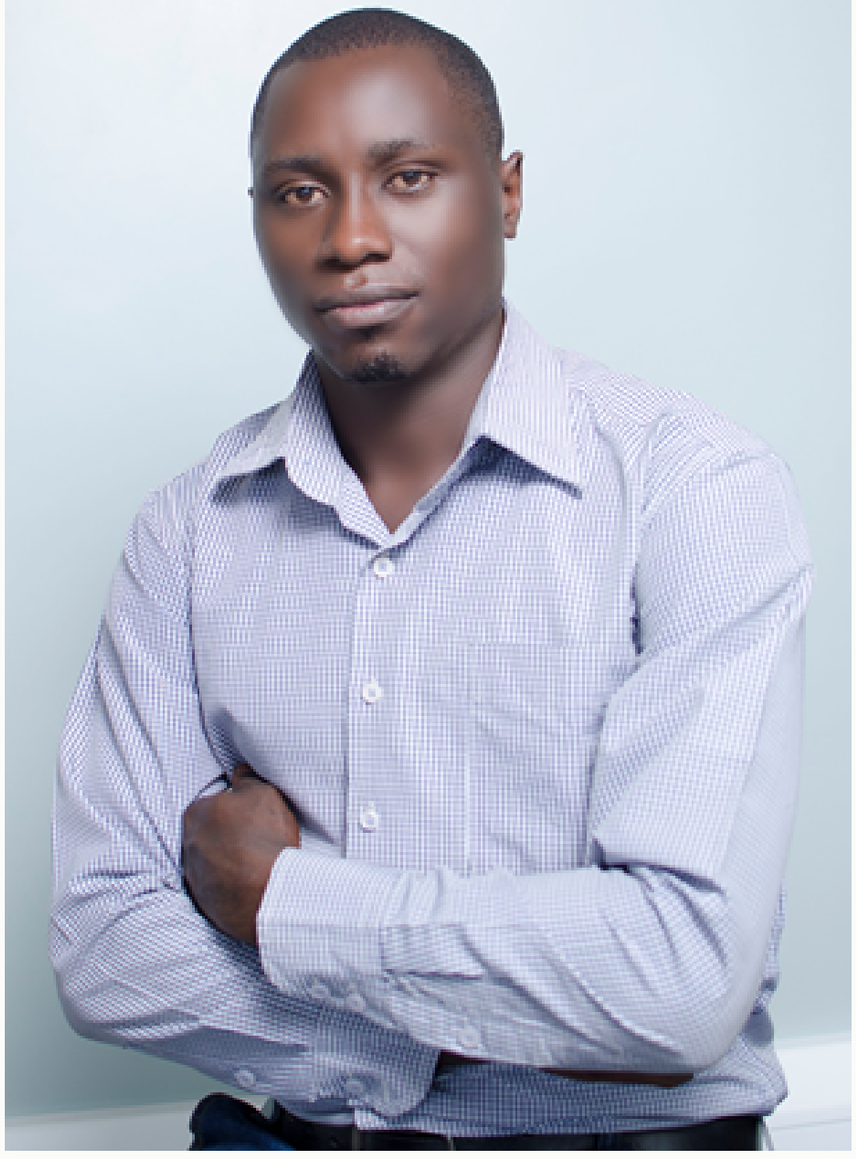
The survey revealed strong demand across the region, driven by high tick prevalence and growing resistance to acaricides. Tanzania, with its 36 million cattle, emerged as the most promising market, followed by Kenya with 22 million cattle and a well-developed veterinary supply chain. Rwanda was noted as a potential pilot country due to its strong governance in animal health, while South Sudan presents a longer-term opportunity through humanitarian and development channels

## SOROTI UNIVERSITY EXPLORES PARTNERSHIP WITH NALIRRI

A team from Soroti University, led by Principal Accountant, visited NaLIRRI on a benchmarking visit as the university prepares to establish a dairy farming platform under its new Agricultural Research Center. During a meeting with NaLIRRI's Director, Prof. Samuel Majalija, the team revealed that land has already been secured and fundraising efforts are underway, with NaLIRRI identified as a potential strategic partner.

The visitors emphasized that their planned dairy platform is aimed at improving dairy breeds in Eastern Uganda to boost milk production and strengthen the region's dairy value chain. They were particularly impressed by NaLIRRI's zero-waste platform, which adds value to livestock by-products. Discussions highlighted opportunities for collaboration, including NaLIRRI scientists supporting curriculum development, supervising students, and providing internship placements. The team was advised to formally write to the NARO Director General to initiate the required MoU process.

## NALIRRI TECHNICIAN DEFENDS RESEARCH ON SAFER SOYBEAN FODDER



Mr. Bukenya Charlse, an Animal Production Technician at NaLIRRI since 2018, successfully defended his Bachelor's degree in Animal Production Technology and Management last week. His research focused on the comparative effect of germination on trypsin inhibitor concentration in germinating soybean under aeroponic fodder production conditions.

The study aimed to validate germination under aeroponics and revealed that germination significantly reduces trypsin inhibitors; compounds that cause indigestion and limit protein availability in animals. Findings showed that by day five, soybean fodder can be safely harvested and fed to livestock, making it a nutritious and safer feed option. The comparison, conducted between MAK SOY3N and MAK SOY6N, Uganda's most preferred soybean varieties, confirmed the potential of aeroponic fodder systems to improve animal nutrition.

Bukenya, who also holds a diploma in Animal Production from Busitema University, Arapai, hopes to graduate in January 2026. His work adds to NaLIRRI's ongoing innovations in livestock feeding and nutrition research.