

NEWS & FEATURES

Tanzania's Path to Agricultural Transformation: Leveraging Technology and Strategic Planning in Irrigation

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On February 11th, 2025, a dynamic Agribusiness East Africa Room meeting was held on Clubhouse and YouTube, bringing together leading experts, stakeholders, and agricultural enthusiasts to explore the transformative potential of modern irrigation in Tanzanian agriculture. Moderated by Juma Bruno Ngomuo, an expert in market linkages and value chains, and opened by Geoffrey Kirenga, CEO of the SAGCOT Centre, the event focused on addressing key challenges and maximizing productivity through innovative irrigation solutions.

Agribusiness East Africa, in collaboration with the **Association of Mango Growers Tanzania (AMAGRO)**, **COPRA**, **TOSCI**, **SAGCOT**, **TAHA**, **Diligent Consulting Limited**, **Holly Green Ltd**, and **Afriflux Ltd**, hosted a unique discussion on how to improve agriculture through modern irrigation technologies. 🌱🌿

A recording of this insightful discussion is available-

The meeting began with a strong emphasis on the critical importance of planning in irrigation systems. Eng. Octavian Laswai, CEO of Holly Green Agric Group Ltd., eloquently stated, "Irrigation is not just about installing systems; it begins with the farmer's choice of land." He highlighted how strategic land selection directly impacts irrigation systems' efficiency and cost-effectiveness, advocating for meticulous farm layouts and comprehensive infrastructure planning.

Eng. Dickson Mallya, representing the Lower Moshi Irrigation Scheme, reinforced the importance of thorough planning by emphasizing the need for feasibility studies. "The primary factor...is planning, along with the layout and design of our farms," he stressed, urging careful assessment before making significant irrigation investments. His presentation delved into various water storage solutions, solar power integration, and gravity irrigation methods' applications. Additionally, he underscored the necessity of securing permits and ensuring water quality.

Ayubu Eliah Mundekeye, Managing Director of Green Integration Company, skillfully connected technology to the urgent need for climate change mitigation in agriculture. "Investing in proper irrigation techniques and utilizing expert advice is crucial for better crop management," he asserted, emphasizing the vital role of technology in adapting to increasingly unpredictable weather patterns.

During the interactive session, Dr. Betty Kwoko Mgimba, a former bank executive, agri-researcher, and farmer, shared a cautionary tale about the risks of unverified

recommendations. “Verifying expert advice and conducting trials before large-scale implementation is crucial,” she warned, citing a friend’s struggles with an unsuitable cassava variety as a stark reminder of these risks. Mr Ayubu further emphasized the value of establishing trial plots and demo farms for practical learning, referencing the invaluable research conducted by TARI (Tanzania Agricultural Research Institute). Mr. Kirenga reinforced the need for continuous farmer education, urging consistent engagement with agricultural training and resources.

The Q&A session addressed a range of practical concerns, providing detailed guidance on best practices for drip irrigation. Experts emphasized the importance of feasibility studies, meticulous planning and design, water quality assurance, and regular system maintenance. They also discussed water quality testing, selecting appropriate crop varieties based on climate, soil type, and market demand, and strategies for improving irrigation system management through staff training, maintenance schedules, and utilising automated systems where feasible. The transformative potential of technology, including GIS and remote sensing for optimizing resource use and yield prediction, was extensively explored.

Adding another layer of expertise, Prof. Andrew E. Temu, Managing Director of Diligent Consulting Ltd., urged farmers to actively engage with the Cereals and Other Produce Regulatory Authority (COPRA) and stay informed about emerging crops such as canola and dragon fruit. His advice emphasized adapting to evolving market demands and capitalizing on new opportunities.

The meeting concluded with Mr. Kirenga's thanks to all participants and a strong call for continued engagement. He underscored the transformative potential of technology and expert guidance in modernizing Tanzanian agriculture and driving increased productivity. The event concluded on a high note with a vibrant traditional Malawian song, serving as a powerful testament to the collaborative spirit and shared commitment to advancing sustainable agricultural practices in Tanzania.

This gathering highlighted the challenges and showcased the immense potential of modern irrigation techniques to transform Tanzanian agriculture and pave the way for a more sustainable and productive future.

Quote of the day

“Agriculture is technology; without technology, it is very challenging. Agriculture is science; without science, it is very challenging. Agriculture is water; without water, agriculture is impossible.” — Kirenga, SAGCOT Centre CEO.

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