

International

Ugandan delegation visits University of Chile to advance Nile tilapia genetic improvement and aquaculture production

Researchers from Uganda's National Agricultural Research Organisation are visiting Chile to work with the Aquaculture Genomics and Genetics Laboratory at the University of Chile's Faculty of Veterinary and Animal Sciences (Favet). The visit is part of an international collaboration focused on sharing scientific knowledge and technological expertise to advance the genetic improvement and production of Nile tilapia in Uganda.

Santiago, september 2026 - Uganda's National Agricultural Research Organisation (NARO) has awarded funding for applied and adaptive research aimed at improving the productivity and climate resilience of agri-food value chains through the **Uganda Climate Smart Agricultural Transformation (UCSAT)** project, financed by the World Bank. The programme includes research in **fisheries and aquaculture**, particularly initiatives focused on developing high-performing and heat-tolerant fish varieties.

Researchers from NARO and Favet jointly developed the proposal "*Harnessing Genomic Selection to Accelerate Growth Performance of Nile Tilapia Towards Climate-smart Aquaculture in Uganda (GENEFAST): UCSATP-CRG/CGS-7/03/24,*" which was selected for funding. The project seeks to improve Nile tilapia production in Uganda by increasing growth performance through genomic selection.



As part of the initiative, a delegation of fisheries and aquaculture researchers from Uganda — Dr. Ivan Abaho, Dr. Nasser Kasozi, Dr. Gerald Kwikiriza, Dr. Papius Dias Tibihika and Mr. Andrew Izaara

Victor Arinaitwe — travelled to Chile for an intensive technical visit. During their stay, they will work closely with the team at Favet's Aquaculture Genomics and Genetics Laboratory, led by Dr. José Manuel Yáñez, Professor at the Faculty, on a range of scientific and technical activities related to the project.

Favet Dean Dr. Christopher Hamilton-West officially welcomed the delegation during a meeting held at the Faculty, where he learned more about the objectives and scope of the visit.

"Welcome to the Faculty of Veterinary and Animal Sciences of the University of Chile. For us, creating opportunities for international cooperation is very important, as they enable professionals from different countries to share knowledge, experience and expertise. We hope that your stay will be an enriching experience and an opportunity to continue building collaborative ties," said Dean Hamilton-West.



According to Dr. José Yáñez, the project currently has funding to establish a genetic improvement programme for Nile tilapia and develop a high-performing local strain adapted to Uganda's production conditions. Nile tilapia is one of the most important farmed fish species in the country.

The Chilean visit represents an important step in the collaboration between Favet and NARO, Uganda's leading institution for agricultural research. While the teams have already exchanged information and worked remotely, the project also requires direct interaction and knowledge exchange between researchers in both countries.

"This meeting gives us an opportunity to share our experience in tilapia production and genetic improvement in countries such as Ecuador, Brazil and Costa Rica, while also learning about the work being carried out in Uganda," Dr. Yáñez explained.

"We have an intensive programme of training and field activities that will allow us to move beyond information exchange and towards a solid and concrete scientific collaboration," he added.



Dr. Ivan Abaho, who is leading the Ugandan delegation, highlighted the value of working directly with the University of Chile's research team.

"We are working with this group of researchers on the genetic improvement of Nile tilapia, collaborating with the University of Chile, particularly in the area of genomic selection. We are learning about the university's expertise and services to help accelerate the growth performance of tilapia production in Uganda," he said.

“We will be here for ten days, working with the LabGen team and learning about Nile tilapia production through genomic selection,” he added.



For Dr. Abaho, the visit marks the beginning of a longer-term partnership between the two institutions.

“Our expectation is to work closely with the laboratory team and build our capacity in aquaculture production. During these ten days, we will take part in theoretical and practical sessions that will help us understand how to improve our production system in Uganda,” he said.

“This visit is also the beginning of our collaboration. Over the next three years, we will work together on this programme. Aquaculture production in Uganda will improve, and producers will benefit from having larger, healthier fish that grow faster,” Dr. Abaho said.

The delegation’s programme includes theoretical and practical training in genotypic data analysis, SNP panel development and other genomic tools, as well as technical visits to production facilities and meetings aimed at defining the next stages of the collaboration.

