

West African Forum on Water Management in Family Farming

April 14 to 17, 2026, Kaolack, Senegal

This forum was organised for sharing the experiences of the "Promoting local innovation in water management in family farming in the Sahel" (Proli-GeaFaSa) project, implemented in Senegal and Burkina Faso during the period 2023-2026. The project was funded by Misereor, Germany, under the Prolinnova umbrella, and was coordinated by AgriBio Services, Senegal. Its aim was to develop local, accessible and sustainable solutions to improve water management in family farming, within a context of water-related challenges linked to climate change in the Sahel. A team from AgriBio

Services organised the event while the Prolinnova CPs in Senegal and Burkina Faso supported by the Prolinnova International Support Team contributed to its content.

The forum created a space for shared learning with a wider agricultural research and development audience and discussed ways to include family farmers in policy advocacy related to issues of access and management of water resources. It brought together a range of stakeholders from regional and national research institutes, civil society organisations (CSOs), farmers organisations, government agencies as well as

farmer innovators. The forum was graced by officials of the local government authorities and was declared opened by the Mayor of Kaolack.

A highlight of the opening day was an exhibition of local innovations in water access and management that were presented by 22 farmer innovators, women and men, young and old, from Senegal and Burkina Faso. Among the farmer innovations presented were locally-developed drip irrigation kits and sprinklers, desalination techniques, use of mulching and combinations of animal manure and biomass as compost to increase soil moisture retention capacity, combinations of crops for more efficient usage of water, rainwater harvesting and usage, variations to the zai planting technique, etc. There were also social and organisational innovations such as a women's group that was growing



Participants engaged in discussion and sharing at the West Africa Forum on Water Management in Family Farming.

Credit: AgriBio, 2026

mint for sale in order to pay for their irrigation water, a group that had a fee-levying system for use and maintenance of their water pump, and others who had set up an irrigation rotation scheme. Each innovator was allocated a time slot to present their innovations to the forum participants that gave rise to animated discussions.

The next two days were dedicated to presentations, panel discussions and debates on a variety of aspects related to the theme of the forum. The legal and institutional framework for agricultural water management and its limitations, using the cases of Senegal and Burkina Faso, was discussed in a panel led by Njido Ardo Kane, CERAAS (Regional Research Centre for the improvement of drought adaptation) based in Senegal, and Sigue Hamade, CNSRT (National Centre for Scientific and Technological Research), Burkina Faso. Lessons drawn from the experi-

ences of CSOs such as Symbiose and Agrecol Afrique, the IFAD-funded Agri Jeunes project as well as of formal agricultural research agencies on agricultural water management were shared and discussed in the light of the current and desired policy frameworks. The coordinators of the Proli-GeaFaSa project in Senegal and Burkina Faso also shared their experiences and findings in supporting farmer innovators in joint research related to various aspects of agricultural water management. The conclusion was given by Fadullah Olayiwola Issa from the National Agricultural Extension Research Liaison Services, Ahmadu Bello University, Nigeria, making the case for institutionalising farmer-led innovation development for sustainable agricultural water management in Family Farming Systems based on a study conducted in West Africa.

The event was concluded with renewed energies of the participants to lobby for the inclusion of farmer innovators in matters related to legal and institutional systems of agricultural water management. The participants agreed that there is much work still to be done in reaching this goal and that combining their strengths and grounded evidence through collaborative advocacy efforts is central to bring about such change.

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Women participants discussing posters at the event.

Credit: AgriBio, 2026

My story as an innovator

My name is Charity Ndivo, and I come from Kayata village, Kasikeu ward, in Mukaa Sub-County, Makueni County in Kenya. I am a farmer innovator, a mother, and someone who has always believed that we already have the solutions to many of the challenges we face if we take the time to observe and experiment. For many years, I struggled with the same issues that affect most households in my community: unproductive poultry farming, seasonal food shortages, and constant pressure to provide nutritious meals for my family, even when resources were constrained.

Like many women here, I depend on indigenous chickens for both food and income. But my hens often abandon their eggs, or they can cover only a few eggs at a time when incubating them. This meant I rarely had enough chicks to grow my flock or sell for income. At the

same time, the dry seasons made it difficult to access vegetables and other nutritious foods, and I wanted to find ways to ensure my children ate well year-round.

These problems led me to begin experimenting on my own with various approaches. I started by experimenting with food processing and storage. In my kitchen, I tried drying vegetables for use during dry months when they are scarce, and I tried blending cereals and legumes into nutritious flour mixes for porridge and other meals. This improved my food storage, cutting down waste. These also made a big difference in my family's diet. Because of this, I began receiving visits from other women who wanted to learn how to do the same, which encouraged me to keep trying new ideas.

During this time, I wanted to

incubate eggs and produce chicks so I could raise many chickens for the market. However, modern incubators were too expensive for me, both in starting costs and operating expenses. Then I saw something that changed how I manage my poultry. I noticed that while my hens brooded for 21 days, the turkey took longer to brood. It also sat for long periods without moving, remained calm even when disturbed, and showed a strong, steady brooding instinct. I asked myself whether I could use this unique turkey behaviour to hatch more chicken eggs and do so more reliably than a hen. The idea seemed simple, but I felt it was worth trying.

I prepared a clean, secure nest in a peaceful corner of my homestead and placed several chicken eggs under the broody turkey. Because of its large size, the turkey could cover many more eggs than a hen could. I checked the nest



Charity Ndivo explaining to visitors about spin-off innovations.

Credit: Jacob Wanyama

daily, removing broken eggs and making sure the turkey remained comfortable. After twenty-one days, the chicken eggs began to hatch. I removed the chicks immediately to prevent the turkey from injuring them with its weight and placed them in a brooder. The results amazed me. Hatchability rose sharply as more chicks hatched, increasing the number of chicks produced per cycle. When my neighbours saw the success, they came to learn from me, and many have since adopted the same method.

My experience as an innovator deepened when I connected with Prolinnova–Kenya through the ELI-FaNS1 initiative. Their support exceeded my expectations. They recognised me as a local innovator and encouraged me to share my practices with confidence. They helped document my work so others could learn from it, and we also jointly experimented, an exercise which I enthusiastically led. Through the

learning sessions and exchange visits facilitated by Prolinnova-Kenya, I met other farmers who were experimenting at home and learned from their experiences. The support from Prolinnova-Kenya made me believe that my ideas were valuable and worth sharing widely. They also connected me with extension officers and other groups interested in my innovations, helping me reach even more people.

Today, my home has become a learning centre for my community, where fellow women and young people visit to observe my innovations, ask questions and experiment with new ideas. I freely share my knowledge with them because I believe that when one person gains useful skills, the whole community gains and grows stronger. My innovations have helped improve my family's nutrition, increased my poultry productivity, and created a more dependable source of income. However,

my greatest satisfaction comes from seeing other women embrace the practice of innovating to improve the well-being of their own families.

From my experience, I encourage other farmers – especially women and young people – to trust their ideas and start small. Innovation does not always require money or advanced technology. It begins with paying attention to what is around you, testing simple ideas, learning from mistakes, and being patient with the process. “Do not be afraid to use your knowledge and local resources to resolve any problems you may be facing. Share your ideas with others to provoke their creativity. My journey has shown me that innovation is not the preserve of experts or outsiders but belongs to all of us”.

Charity Ndivo

Farmer innovator from Makueni County, Kenya



Hens hatched from eggs incubated by one of Charity Ndivo's turkeys.

Credit: Jacob Wanyama