

Translating forecasts into farming

In East Africa, the rainy season dictates when farmers can sow, cultivate and harvest their crops. By making sure that farmers have access to accurate forecasts – and can understand them – WISER is helping to make farming more successful and more efficient across the region.

Laban Bamwenda lives in Irobe village in the Kibaale district of Uganda. He inherited six acres of land, but has found it difficult to make a sustainable living from farming. Unexpected changes to the local climate and poverty made it hard for him to grow crops and earn a living. Now, thanks to innovative partnerships and ingenious ways of disseminating weather information, Laban is able to make informed decisions, improving his farming practices, and is now better able to support his family.

“I now use scientific weather and climate information to plan for my agricultural activities, a thing that was not possible before I received training and started getting updated weather information,” Laban says.

The training and updated information have been made possible thanks to the partnerships across Uganda and elsewhere that the Weather and Climate Information Services for Africa (WISER) programme has brought together. By working closely with national meteorological services, such as the Ugandan National Meteorological Authority (UNMA), WISER has enabled the improvement of seasonal forecasts while also engaging with communities to pinpoint users’ needs to make sure projects deliver what is required.

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Two sides to translation...

One key part of the whole jigsaw is translation. Firstly, translating what can often be complex scientific language into a more accessible format, allows people like Laban to understand and act upon it. Secondly – and fundamentally – translating the forecasts into local dialects so that everyone has access to the information they need.

Caroline Okello is Grants Manager for World Vision, Uganda, a developmental charity that works closely with communities to tackle the root causes of poverty and help families across the world. Her team receives regional weather information from UNMA that has been translated into actionable insights. “They break down the information into smaller pieces that are more usable and understandable for the farmers,” explains Caroline.

World Vision then takes this information and distributes it to people across Uganda. “The farmers access the information from extension workers, who have been trained in the interpretation of weather through the WISER programme,” says Caroline. “They also monitor the different farming groups and assess whether we are meeting their needs.”

The information includes ten-day as well as monthly and quarterly forecasts. Extension workers meet with farmers on a weekly basis to make sure that they can access the forecasts disseminated through channels such as radio, notice boards and community meetings. Having accurate information at their fingertips can make all the difference. “Let’s say I grow beans, but rain is forecast to be late, then beans might not be able to withstand the drought. The information means I can plant crops that are more resistant to the weather changes,” explains Caroline.

... and two great successes

The project has been successful in two key ways. Firstly, farmers now have access to much more accurate forecasting. Before the project, accuracy levels were around 60%, but during the last season of dissemination, up until December 2019, those levels had shot up to 90% according to the seasonal feedback surveys conducted with the recipients of this information.

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Secondly, farmers like Laban have received training on what to do with the information they receive. For example, if a drought is predicted they can decide whether to plant indigenous crops or something that is slightly more expensive but drought resistant.

World Vision helps get this vital information out by translating it into the local dialects – a huge task in itself, as there are 22 different dialects across the region. Information is disseminated via emails to local partners and by printed forecasts, written in the local dialect and in English.

So far, the project has managed to reach an incredible 189,000 farmers across 20 different districts. “One of the things that we celebrate is that communities are now able to demand this information and they know where to access it,” enthuses Caroline. It has transformed climate information provision across the country: “This simply wasn’t in place two years ago,” she says.

Reaching out to 300,000 households

Another inspiring WISER project in the region is Coastal Resilience and Improving Services for Potato Production (CRISPP). The project doesn’t just focus on potato farming, but also helps farmers across Kenya’s coastal region. There is a mixture of agriculture types in the area, from pastoralism in the semi-arid regions to crop-based agriculture in the wetter areas. Along the coast itself, fishing is also an important industry.

To support this wide range of farming needs, CRISPP is working with four partners across the region, including the Kenyan Meteorological Department (KMD), the Kenyan Red Cross Society, Inforkomm and NIRAS.

KMD has outlined the needs of the different agricultural communities across the region and is now delivering forecasts to meet those needs. They produce daily, weekly and seasonal forecasts as well as a marine forecast, designed to help people operating within in-shore waters.

The Kenyan Red Cross Society, meanwhile, is helping to engage with communities, as they already have a huge network of volunteers and staff in place. They can provide feedback on how people are using forecasts and where they are accessing them, which complements the work of NIRAS who are seeking to measure the socio-

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economic benefits of the project's interventions. Inforkomm is the final piece of the puzzle. They take care of communications, ensuring that messages reach the farmers who need them. By training county directors in how to engage with journalists and radio stations and designing engaging content, they can make sure messages reach as many people as possible.

“We’re aiming to reach 300,000 households,” explains George Gibson, International Development Manager at the Met Office, the UK’s national meteorological service. “The emphasis has been on services that can be delivered at zero cost for KMD, focusing on social media, radio bulletins and the networks available through the Kenyan Red Cross Society.”

Farmers are already seeing an impact. For instance, Philemon Echoka listens in to Anyole Radio every week to catch weather updates and advice on farming methods. He decided to act on advice broadcast by the station and bought a portable water tank trailer, which has been invaluable to him during the prolonged dry spell, enabling him to use water to protect his livelihood. “But when it starts raining, I will do what everyone does: plant crops,” says Philemon.

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