



Nigeria

Population: over 130 million people

Agricultural population: 30% of the economically active population

Proportion of undernourished in the population: 9%

Share of women in the agricultural labour force: 38%

Government spending on agriculture (2004): \$1.56 billion

ODA for agriculture (2003-05): \$17.5 million

Percent of total ODA to agriculture (2003-05): 0.6%

Socio-economic welfare ranking: 158 out of 177
(2007/8 UNDP Human Development Report)

Smallholder sector agricultural output: 90%



Climate Change Adaptation Goes Soap: Using radio drama to share ways smallholder farmers in Nigeria can adapt to a changing climate

This case study examines the potential of a radio drama project to enhance learning and dialogue in farming communities coping with climate change in northern Nigeria. It illustrates the following principles of resilience:

- Promoting opportunities at household, local, and regional levels for learning
- Supporting flexible and adaptive approaches to learning that engage multiple actors

Country context: Agriculture in northern Nigeria

The project is focused in four states in northern Nigeria – Kaduna, Katsina, Kano and Borno—which encompass

several agro-ecological zones. Important agricultural crops in these states include millet, sorghum, maize, cassava, rice, cowpeas, groundnuts and cotton. Animal husbandry of cattle, sheep and goats is also practiced. Most farmers practice rain-fed agriculture on an average land holding of approximately four hectares, but a few also have access to irrigable lands. Hired labour is very common and is increasing in many of the areas. Water for domestic use is mainly from traditional wells and boreholes. Agroforestry is not common, though women depend heavily on firewood for domestic cooking. Issues faced by farmers include poor soil fertility, soil erosion, deforestation, loss of grazing land and desertification. Farmers are also increasingly aware of climate change and their particular vulnerability to irregular rainfall.

Radio drama: Blending education and entertainment in a climate of uncertainty

Smallholder farmers in northern Nigeria are highly vulnerable to climate change. Many are developing coping strategies independently. However, there remains a need to provide opportunities for sharing successful adaptation strategies with other farmers and to combine this with research to lessen the



Photo: Blythe McKay, Farm Radio International

increasing in the region. Nigerian agricultural research institutions and NGOs are already collaborating with farming organizations to find adaptation strategies and the radio drama is building on their research. Hausa and Fulani are widely spoken by people living in the four states and cultural traditions are similar. The majority of people living in the region have access to a radio.

To develop content for the drama, a series of focus groups was undertaken by WOFAN, an NGO based in Kano, in northern Nigeria, to examine farmers' perceptions of climate change. In these focus groups, farmers from eight communities expressed how the changing climate is affecting their livelihoods, and that information to help them adapt is difficult to access.

According to farmers from Gude community in Kano State, "[The] amount of rainfall has reduced drastically ... a few days back it rained heavily and erosion has washed away our farmlands including the crops. This year we have suffered the impact of low rainfall and drought to the extent that we had to replant our crops three times before the rain became normal! After which pests and fungal diseases destroyed our crops. You can see to what extent we need information of climate change and weather forecasting."

According to a woman farmer from Unguwar Dogo community in Kaduna State, "Now that productivity is going down, we are also faced with inadequate fertilizer and irregular rainfall. To crown it all, we see less professionals who are willing to share information on this issue."

While farmers explained they would like to access more information to help them adapt to climate change, they also mentioned that traditional methods such as cross ridging and planting grasses on slopes to prevent erosion exist to combat extreme weather events such as intense rainfall.

The information from the focus groups, together with information from a literature review and collaboration with Nigerian agricultural institutions, helped provide content for the radio drama.

A project activity that aimed to connect different stakeholders was a workshop that was held in the capital city of Abuja. It brought together scriptwriters and radio producers from six radio stations in northern Nigeria to learn more about how climate change affects smallholder farmers who depend on rain-fed agriculture. The par-

impact of climate change on their livelihoods. A major challenge facing governments, research institutions, civil society organizations and donors is providing opportunities for sharing adaptation strategies with large numbers of people, many with limited literacy. The two-year project, supported by the Climate Change Adaptation in Africa (CCAA) program, a joint initiative of Canada's International Development Research Centre (IDRC) and the United Kingdom's Department for International Development (DFID), tests the efficacy of radio drama to strengthen the capacity of smallholder farmers to adapt to climate change. The radio drama project is led by the African Radio Drama Association (ARDA), a Nigerian-based NGO, in partnership with Farm Radio International, the University of Guelph and the Women Farmers Advancement Network (WOFAN). A twenty-six episode radio drama called *In Kidi ya Chanza* ("When the drum beat changes you must change your dance steps") is being produced in Hausa and Fulani. The drama will be broadcast weekly by at least six radio stations to reach farmers and herders in the four states over a period of six months starting in the first quarter of 2009. The stations selected were ones that farmers in the four states listened to the most.

The four states in northern Nigeria were selected for the radio drama project because extreme weather events are



Photo: Salamatu Garba, WOFAN



Photo: Adamu Musa Okonkwo, Gombe Media Corporation

ticipants discussed the best ways to use radio drama to capture the interest of listeners, create plots and characters that resonate with different audiences, and how to integrate important messages into the entertainment. Along with the script-writers and radio producers, participants included smallholder farmers, researchers, and personnel from government and civil society. The workshop helped determine what some of the key climate change adaptation messages would be in the drama.

One of the drama's challenges was determining which agricultural topics to highlight in a way that would recognize the diversity of farming systems in the four states and therefore, ensure the agricultural topics and associated adaptation strategies were specific enough to each farming system.

Another challenge was making sure the information in the drama was gender sensitive. To address this challenge ARDA spent a lot of time sharing the plotlines with different organizations to receive their feedback. The plotlines were reviewed according to local gender-related customs and norms.

The first radio drama episode will be pilot tested with smallholder farmers and reworked as necessary. At the end of each episode, the radio host will take several minutes to highlight local climate change initiatives and site-specific adaptations and provide farmers with contact information for organizations working on climate change issues. The goal for this is to encourage farmers to get involved in local initiatives related to climate change adaptation. Listeners will be encouraged to provide feed-

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back via text messages, phone and mail, both individually and through listener and farmer groups.

The drama focuses on four key areas:

- General climate change indicators based on the observations of those who are closest to the land.
- Successful adaptation techniques to reduced rainfall and water available for crops, livestock and humans —such as diversifying crops to reduce risk of crop failure, as well as using household grey-water to irrigate vegetables in home gardens.
- The implications of climate change for livestock, and measures for improving livestock feed availability.
- The loss of trees, shrubs and stories of adaptation measures including planting barrier hedges along contours to reduce soil erosion and provide fuel-wood.

A preview of the drama

The main story is about Gimbiya Maikano, a 25 year-old educated Hausa woman, widowed with one son and recently divorced from a jealous husband. Gimbiya is a primary school teacher in a village near Kaduna, called Kaworana, where, despite average rainfalls, the poor farmers still struggle with various climate change issues such as later onset and shorter duration of rainfall on one hand, and increased insect infestation on the other.

Gimbiya's father is the head of a village in the Sudan savannah ecological zone, known as Karkaran Jatau. It has been two anxious years in that village as rainfall has become extremely unpredictable. Last year, it was very late and then came down in such torrents that several farms and homesteads were washed away in flash floods.



Photo: Blythe McKay, Farm Radio International

The harvests were poor and people had to eat their reserves and actually buy or beg food. This year, the rains came early but stopped early causing drought, wilting and scorched seeds and soil. The stress and worry has increased her quiet and reticent father's hypertension and caused him to have a stroke. As the eldest child, she soon finds herself obtaining treatment for her father as well as organizing the family, consisting of her mother and two stepmothers as well as her much younger siblings, to find ways to survive.

Gimbiya is under a lot of pressure to provide for her father's household and make the farm turn around and pay its way. Finding water for domestic and farm use, especially water for the herds, is a big worry for Gimbiya as the village stream has dried up. Another challenge is the number of suitors seeking audience with her daily, distracting her from her farm work. Despite this, she stays on and finds ways to solve the problems. She seeks help from agricultural organizations. However, when she finds out that there is no women farmers association in her community, she joins forces with other women and starts one, which becomes very

successful in carrying out some development activities in the community that benefit many poor households. Many had doubted her father's wisdom in assigning such a big responsibility to a female child, but soon enough they are impressed and start to respect women's abilities.

There are several sub-plots woven through the 26-episode radio drama that audiences can look forward to. They combine climate change adaptation strategies with tales of jealousy, resiliency and collaboration.

Conclusion

To date, much of the project has focused on developing the content for the radio drama. In order to ensure that the content is relevant to the audience, intensive consultation with farmers, researchers and other institutions has been carried out. Over the coming months, many lessons will be learned about the impact of the radio drama—whether the information in the drama was of use to farmers, and whether the project was effective in encouraging community dialogue, innovation and action on climate change adaptation.