

Radio-based agricultural extension promotes uptake of entrepreneurship in sheep fattening: Evidence from Central Ethiopia



INITIATIVE ON
Sustainable Animal
Productivity

Small ruminant value chain

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Outcome

The radio-driven initiative has significantly increased awareness and practical application of improved sheep fattening techniques among smallholder farmers in rural Ethiopia. In collaboration with FM radio stations, 3.6 million farmers across 11 local languages were reached in Central and Southwestern Ethiopia. The result was an enhanced 67% uptake of improved sheep fattening practices, with a significant 343% increase in household incomes. This activity was conducted as part of the Feed and Forage activities of the CGIAR Initiatives, [Sustainable Animal for Livelihoods, Nutrition, and Gender Inclusion](#) (SAPLING) and [Mixed Farming Systems](#) (MFS) and [Accelerating Impacts of CGIAR Climate Research for Africa](#) (AICCRA).

Partners

This transformative initiative was led by The [International Center for Agricultural Research in Dry Areas](#) (ICARDA) in collaboration with the Bonga, Areka, and Debrebrehan Agricultural Research Centers, alongside local radio broadcasting partners Fana FM and the Southern Radio and Television Agency. The project also received crucial support from local government bureaus, agricultural extension services, and microfinance institutions across three regional states of Ethiopia.

Why did we do this research?

Traditional farming practices in Ethiopia have limited productivity and income generation for smallholder rural farmers. Women and youth, often excluded from mainstream agricultural extension services, face additional barriers. An [assessment of communication approaches for the effective dissemination of livestock production technologies via community radio](#) revealed that radio as a medium to disseminate agricultural technologies is significantly related to gender, educational level, religious beliefs, and place of residence. The challenges of radio as a medium that farmers cited included the scarcity of radio programs focused on livestock production and the fact that existing programs failed to address local-specific agricultural issues. Under the SAPLING initiative, a pilot radio program on improved sheep production was broadcast in Central and Southwestern Ethiopia (previously SNNPR) over twelve months. A [mid-term evaluation](#) revealed that despite increased knowledge and higher mid-term household incomes - 4.7 times the baseline - the economic impact on livestock ownership was minimal due to short-term constraints and barriers to social learning. This caused a regressive decline of 8% in knowledge-sharing among farmers. To overcome these barriers and encourage the adoption of improved practices, radio listening groups were established. The listening groups were evaluated based on a radio program broadcasted once a week in five local languages across five different zones of Central Ethiopia over six months. Each native language received a total of 24 broadcasts, with content specifically tailored to sheep fattening and entrepreneurship skills, derived from the manual [Sheep Fattening: A Manual for Livestock Farmers and Extension Workers in Ethiopia](#).

Evidence

An [endline survey](#) conducted in 2024 showed that radio listening groups significantly improved farmers' knowledge, attitudes, and practices. Key impacts included improved livestock feeding practices by 91% of the participating farmers in the listening groups, income enhancement (90%), reduced production costs (82.7%), and entrepreneurship development (83.3%). Group dynamics encouraged adoption through peer influence. Listening group participants outperformed regular farmers by 7% in feed management knowledge, 6% in entrepreneurship, and 5.0% in improved management practices. Facilitating group formation with targeted support and continuous radio broadcasts may ignite discussions, resolve misconceptions, and foster joint learning, increasing the likelihood of adopting new technologies. Peer influence within these groups can drive social validation, motivating people to adopt improved livestock practices after witnessing the accomplishments of their peers.

Mekdes Shimeles from the Doyogena listening group shared her experience: “Listening to the radio program has transformed how I approach sheep fattening. I learned to manage feed properly and monitor my animals' health. Most importantly, I have gained knowledge on maintaining financial discipline—I can now carefully track my earnings and ensure that I do not consume business capital”.

Media journalists from radio stations, government bureaus, and livestock national researchers have received [training](#) on the possibilities, approaches, and strategies of developing interactive radio programs that focus on small ruminant production.

This study proposes actionable recommendations for scaling up radio-based agricultural extension services to maximize their reach and effectiveness in addressing livestock production challenges. Practitioners should promote regular farmer clusters for listening to livestock-based structured radio broadcasts. Group discussions tend to encourage adoption by fostering shared learning, peer influence, and technology adoption. Two-way communication with the support of extension agents can enhance community validation, problem-solving, and relevance.

Next steps

- Scaling up the program to reach more regions and including additional topics on advanced livestock technologies.
- Integrating support mechanisms such as microfinancing to empower women and youth facing resource limitations.
- Enhancing the interactive components of the broadcast to encourage listeners to share gained knowledge within their communities, fostering wider adoption and impact.

This project highlights how community radio can transform agricultural practices, strengthen livelihoods, and promote resilience in rural Ethiopia.



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