



SC-IDEAL-MG-RFA-2019-01: “Using podcasts as part of a collaborative learning approach to bring about social behaviour change within the farming communities of Karamoja - a pilot study”

Formative Research Review on the use of podcasts for collaborative learning in farming communities in Karamoja

June 2021

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1. Introduction

This report brings together the findings of research into the use of podcasts for collaborative (or social) learning, focusing on small-holder farming communities, in particular those in Karamoja. Improved farm recording is the desired behaviour change that this project is aiming to achieve. Therefore, this report also investigates the current level of farm recording in the Karamoja sub-region, as well as attitudes towards it. The research was conducted as a desk based literature review; as well as a survey of Ministry, NGO and Agency agricultural officers working in the sub-region, on their experience and opinions about the use of farm recording and radio/podcasts amongst small-scale Karamoja farmers.

The survey was circulated as a Google form link, via email, to a network of International NGOs, as well as Ministry District Agricultural & Veterinary Officers who work in Karamoja. As, after two weeks, we had received poor levels of responses, the Ministry officers were followed up with phone calls, reminding them about the surveys. Unfortunately, response levels remained low. It was felt that the level of response may have been partly due to internet connection problems for some officers. Therefore, hard copies of the survey were printed off and circulated to Ministry officers based in Moroto. After 4 weeks, only 5 responses had been submitted in total (3 of these from Ministry officers and 2 from international agency staff). Given that the survey comprised only 18 (mainly short) questions, we are uncertain of the reasons for the poor level of response, particularly as many of the Ministry officers had attended the project inception meeting, and had welcomed the project. The results of the 5 surveys that were received are included in this report (see Annex 1), though are clearly representative of only a small proportion of the agricultural officers who work in the sub-region.

Because radio and podcasts are so intrinsically linked, our research documents existing knowledge on the use of both radio and podcasts for social learning, and their ability to bring about social behaviour change (SBC). These findings will be used to inform planning and development of appropriate learning podcasts, which will be done in consultation with our partner Farm Radio International.

Note: For the purposes of this project a podcast is defined as: a digital audio file that can be downloaded from the internet to a computer or mobile device and is generally available as a series.

2. The use of radio for learning in farming communities

The use of radio for disseminating food security information and knowledge is well established across Uganda and indeed most of the developing world.

Farm Radio International (FRI) has been demonstrating the benefits of radio, and the use of radio for social change, since they began using radio to help farmers help themselves 40 years ago. Up to 40% of farmers who learn about a new practice through a radio program supported by FRI end up applying it on their farm. As well as supporting broadcasters directly, FRI makes scripts of the educational radio programmes it has helped produce available on its website, enabling other local broadcasters to translate and rebroadcast programmes, extending their audience and geographical outreach.

An example of a radio series that FRI supported, to assist small farmers with their business activities was one developed in Ethiopia¹. This responded to identified knowledge gaps in business skills, such as business planning and farm recording. The radio programs were made in partnership with IFC, a member of the World Bank Group, Heineken-Ethiopia and EUCORD, and broadcast information to inform malt barley-producing farmers' knowledge on planning and record keeping. The programmes aimed to teach best practice by sharing experiences of model farmers and expert advice.

A popular use of radio for bringing about behavioural change is through short radio clips called radio spots. Conventional commercial advertising can be considered a kind of radio spot. However, radio spots are often used for awareness raising and campaigning, sometimes with the aim of achieving behavioural change, such WASH campaigns that promote handwashing². Some problems can be encountered with radio campaigns, which highlights the need for expertise advice and implementation when radio is used. For example, Action Against Hunger outlines problems which programmes may encounter when running radio campaigns as part of project intervention:

- Radio programme developers may not have not understood the key message in all cases and so the message is not made clear.

¹ Farm Radio International [Down to business: Model farmer learns new techniques thanks to radio](#) Blog post Aug 28th, 2019.

² <https://www.bbc.co.uk/mediaaction/where-we-work/africa/kenya/wash>

- Money may be spent on programmes but the target group may not get to hear them – that is, unless people have their radios on at the right time of day, they will not receive the campaign messages.

Podcasts can begin to address some of the problems associated with radio programmes that aim to bring about behaviour change, particularly because they allow content to be listened to at convenient times, paused and replayed. Many radio stations make recordings of their programmes available to download at a convenient time. Thus, the boundaries between radio and podcasts are not always clearly defined.

Despite the potential of podcasts to support behaviour change, our partner FRI, whose mission is to “share knowledge, amplify voices, and support positive change” acknowledges a lack of evidence around the use of podcasts for social change within food security.

3. Collaborative Learning in farming communities

The relevance of social learning by farmers has been studied by Leta et al (2018³) who found that 55 per cent of farmers in the areas studied relied on social learning in an informal setting for agricultural skills acquisition. The farmers also acquired knowledge through communication and observation, public meetings and other events and groups. Informal institutions also helped farmers to learn and adopt technologies. Thus, an integrated approach to social learning was most effective.

Likewise, the work of Alive and Thrive⁴ highlighted the point that the greater the variety of ways in which the target group is reached, the more likely they are to adopt the target behaviour. They used multiple activities to deliver their key message of feeding children (6-23 months of age) an egg every day. The activities included face-to-face interactions, media and radio, road shows (at markets) and demonstrations with mothers and fathers. They found similar outcomes in most of their evaluations: The greater the variety of ways in which a mother was reached, the more likely they adopted the behaviour.

In its guidance document on Social and Behaviour Change, GIZ (2019) indicates that the frequency and consistency of communication is key to achieving outcomes, reporting that

³ Leta G., Stellmacher, T., Kelboro, G., Van Assche, K., Hornidge., *Social learning in smallholder agriculture: the struggle against systematic inequalities*, *Journal of Workplace Learning*, 2018.

⁴ Alive & Thrive (2016) *Understanding factors driving nutrition behavior change: the experience of Alive & Thrive*

“Repetition, consistent communication and nudging are essential in making behaviours that are not yet “habitualised” persist”. They acknowledge the contribution that radio can to behaviour change focused projects, though also recommend that multi-faceted approaches to communication optimise impact.

4. The use of podcasts within collaborative learning approaches in farming communities

While podcasts are used extensively by formal educational environments such as schools and colleges (for example universities commonly use podcasts as part of their distance learning courses), there is little research and few reports on their use within food security projects with small-holder farmers.

An article in the journal *Hybrid Pedagogy*, Audible Networks: Podcasts and Collaborative Learning study (2020⁵), discusses collaborative learning and the ways in which it encourages and engages students to share knowledge and discuss learning. In doing this they listen to each other and respond to each other’s ideas. As part of these classes, some of the tutors used podcasts and found they provided a positive addition to the existing tools for learning. Students also began to invite friends to speak on podcasts. This social aspect of podcasts was echoed in our baseline surveys carried out at the onset of this project in which several groups of small-holder farming households said they would like to hear examples of farmer’s successes.

Of the 5 agricultural officers surveyed about podcasts, only 3 had ever listened to a podcast; and only 1 had used one for training purposes. This officer worked for an international NGO and reported podcast to be “... a reliable and practical methodology to deliver trainings... especially (in) communities with relatively lower levels of literacy. It facilitated better understanding of the training content”. Four out of the 5 officers reported that they use phones that could accommodate a SIM card to play audio clips (podcasts), which bodes well for the dissemination activities of this project.

Many NGOs and other organisations working within the food security sector use podcasts to publicise the activities and impacts of their projects, but few appear to use them as tools for disseminating knowledge or information at farmer household level.

⁵ Drauker, S [*Audible Networks: Podcasts and Collaborative Learning*](#), *Journal of Pedagogy*, 2020.

One project that has used podcasts is described in a case study of the ‘Ensuring Nutrition, Transforming and Empowering Rural Farmers and Promoting Resilience in Zimbabwe (ENTERPRIZE) program’, conducted in in Guruve and Mt Darwin, Zimbabwe.

The ENTERPRIZE programme⁶, funded by FAO and implemented by MercyCorps in partnership with World Vision, looked to improve the food security and nutrition of smallholder farmers and communities in Zimbabwe by delivering a broad range of technical agricultural and nutritional advice to farmers via podcasts. The series of podcasts (26 in total) has been used as part of the programme since 2017 by Agricultural Extension Officers. They are tailored to fit in with the agricultural calendar, as well as monthly/yearly nutritional messages and gender themes, to maximise outreach. Their purpose was to scale outreach and increase technical service provision, to complement the other advisory channels within the project. Listening of the podcasts typically took place at agricultural production meetings, community meetings and ward levels gatherings. The improved access to the podcasts accelerated provision and access to production and marketing information, which was anticipated to increase food security and enable better livelihoods for smallholder farmers working within the ENTERPRIZE programme:

Mr Chipfunde is one of the 21 smallholder farmers who form the Hurudza Farmer group in Guruve District, Zimbabwe. “ I am learning ideas on how to turn my farming into a business with ideas from production to marketing and my wife is now a lead mother imparting knowledge on child health and nutrition gained from the podcasts to other mothers in this village and beyond” he says.

This example highlights the way in which podcasts could work within farming communities, providing technical advisory information on a wide variety of farming topics.

The podcasts used in the ENTERPRIZE programme were developed by a team, which included Agricultural Extension Officers and content review panels to ensure the podcasts were relevant to the audience.

The study also notes that the listening of the podcasts typically took place within social gatherings and farmer groups, some of which were created by the farmers themselves. This

⁶ The ENTERPRIZE programme, FAO & MercyCorps <http://www.fao.org/e-agriculture/blog/podcasting-improve-food-security-and-nutrition>

suggests that the farmers preferred to listen to podcasts within a collaborative environment with other farmers, rather than on their own.

Podcasts have several advantages when applied to training:

- Groups/individuals can listen to them at any time, pause them at any time for discussion and revisit them due to the longevity of podcasts. This allows for greater frequency of listening, one of the key aspects of SBC.
- They can be made available to trainees (via downloads on phones for example) for revisiting and sharing, so they are still available to them post-intervention.
- Podcasts on the whole are much simpler to create than radio.
- Because they are not live podcasts can be produced to a high level of content and consistency of quality. They can also be reviewed and edited.
- The transcripts can be shared amongst organisations and translated as required.
- Careful design of podcasts will allow elements of the podcasts to be broadcast on the radio, allowing further consolidation and knowledge sharing and discussion, particularly important for project legacy and sustainability.
- Spoken rather than written words are more accessible to those who are illiterate.
- Radio may not be available in all areas whereas podcasts are transportable as digital files.
- For learning content which requires a step-by-step approach, for example farm recording, then podcasts can be stopped and started and so integrate well with other learning resources.

There is evidence that podcasts enhance the learning experience for participants even where the material is very visual, as is the case in this project. In a study involving the addition of podcasts as a learning tool, into the teaching of dental students⁷, where the material taught was highly visual, the study concluded that students benefitted from the use of podcasts and showed a favourable attitude to the use of them as a supplementary teaching and learning aid, with one of the main reasons being the ability to listen to

⁷ Kalludi SN, Punja D, Pai KM, Dhar M. Efficacy and perceived utility of podcasts as a supplementary teaching aid among first-year dental students. AMJ 2013, 6, 9, 450-457. <http://dx.doi.org/10.4066/AMJ.2013.1786>

repeatedly and at their own convenience. The absence of diagrams or pictures in the podcasts was however cited as a problem, highlighting the need for a multi-tool learning approach if visual material is a key element of the teaching.

If properly designed, well-structured and with relevant content, we have demonstrated that podcasts can be valuable tools for both formal and informal learning. In GIZ's Practitioner's Guide on Social and Behaviour Change⁸, it is suggested that partners are identified who can complement the competencies of the implementing team. In this context, and given that radio has proven successful when it comes to behavioural change, we have partnered with Farm Radio International to provide Good Practice documentation and guidance on the structuring, design and production of the podcasts, due to their technical expertise in producing radio programmes. FRI will also review the podcast content, ensuring that consistent, high quality podcasts are produced.

5. Farm Record Keeping Practices amongst small-holder farmers in Karamoja

All 5 of the officers surveyed about farm record keeping reported that they have rarely/sometimes observed farm records being kept for individual farmers/ farmer groups in Karamoja; and that in nearly all case (4 out of 5), these were kept for farm groups/cooperatives (mainly by a male designated book keeper) rather than by individual farmers (only 1/5). All 5 officers reported that the records they had seen were simple notebooks/ledgers, including only lists of total costs and sales, with written text and numbers (that is, not using systems of tallies, counters or symbols).

4 of the 5 officers reported that they would like to see more farms carry out record keeping; with the fifth officer being unsure of this. The reasons for this were:

- It supports cost benefit analysis and aids planning.
- For proper planning.
- Farm records helps farmers to keep records of farming events for future references, it helps in future planning, farm records guide farmers in mobilizing resources required, a farmer is able to determine the profitability of an enterprise

⁸ Petr Schmied, Prostejov., *Practitioner's Guide – Social and Behaviour Change – Insights and Practice*, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2019

from records, records of events such as rain days and drought helps to plan for any looming disaster, records helps farmers acquire loans.

- To make them understanding whether their making profits or losses during the time they harvest and be able to compare the returns from harvest with input cost invested during the farming period.

The survey also explored the main limitations to record keeping amongst farming communities. Lack of awareness of the benefits of farm recording (4/5); lack of understanding of how to keep farm records, and lack of literacy/numeracy skills.

Other thoughts and ideas that the officers had with regards to financial record keeping included:

- That alternative symbols would make farm recording easier for illiterate farmers
- That it is very hard to cost and quantify some activities like family labour.
- That the project will build on ATTA's past work on farm recording keeping in Napak (a Karamoja district), conducted through the DFMS project, which the farmers had expressed an interest in at the time.

6. Summary

Farm officer surveys indicated that record keeping is an unusual activity amongst Karamojan farming communities and, where witnessed, is usually performed for farmer groups, by specially designated record keepers who are normally male. The officers saw farm recording as a positive practice which they would like to see more of, but pointed out the challenges of poor literacy (one suggested a system of symbols for illiterate farmers, as proposed in this project's proposal), as well as the costing of certain inputs such as family labour.

As seen from the ENTERPRIZE programme, podcasts can be a highly effective tool for delivering information and their use appears to motivate and inspire farmers, furthering their knowledge and quest for learning. This is endorsed by the positive opinion of podcasts by the officer who had used them for training delivery.

When podcasts are used as a multi-tool approach, alongside visual materials and demonstrations, they can be used to supplement the teaching of technical subjects. There is

little evidence of their use as a tool in structured, food security collaborative training sessions.

The use of radio in the food security sector to bring about SBC is well documented and utilising expertise from such disciplines when planning training to bring about SBC is recommended.

For SBC to occur, the frequency of communication is a key aspect, as well as motivation, repetition, and consistency of information. A multi-activity approach increases the likelihood of SBC to occur.

This IDEAL project enables social learning, by playing podcasts to farming community groups made up of couples from individual households. These are facilitated by a trained officer, who provides subsequent support and follow-up. Thus, the project integrates podcasts in a social learning environment, as well as field officer support and follow-up visits which, we can anticipate, will raise the probability of adoption of the desired behaviour change of record keeping.

Annex 1: Farm Officer Survey on Farm Recording and Podcasts (data sections include results)

Investigation of Farm Record keeping by farmers in Karamoja

AgriTechTalk is conducting a study, funded by the USAID IDEAL programme, to investigate the potential for farmers in Karamoja to improve their performance through farm record keeping; and whether they can be encouraged and trained on how to do this via group training using podcasts*. Bearing in mind the lack of literacy amongst the farming community, it would explore the use of both written ledgers and symbols/simple counting systems. As a start, we are exploring farm recording practices in the sub-region, barriers to farm recording, as well as the use of podcasts for training. We would be grateful if you could complete this short questionnaire. Thank you!

* NOTE: A podcast is a digital audio recording, which can be played and shared digitally, by a radio, tablet or phone with access to the internet or a SIM card

* Required



Name of Officer *

Your answer

Name of Organisation *

Your answer

Do you work in Karamoja? *

☐ yes

☐ no

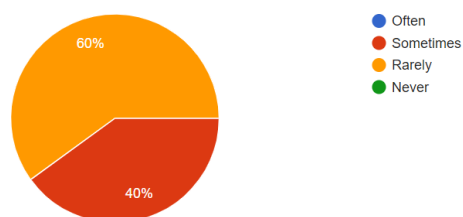
Where are you based? *

Your answer

1. During your work, have you observed farm records being kept for individual farmers/ farmer groups in Karamoja

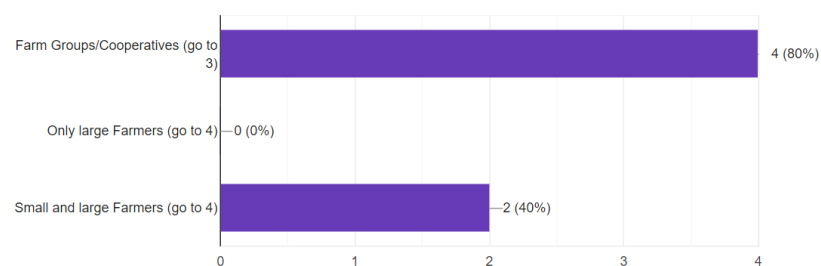


5 responses



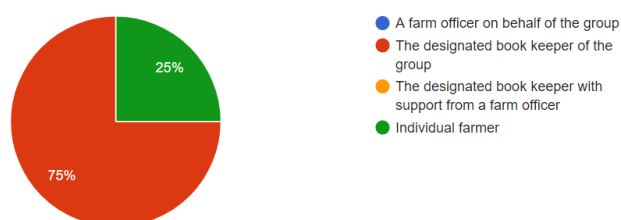
2. If you have, were these records kept for:

5 responses



3. If you ticked Farm Groups/Cooperatives in Question 2, was the recording done by:

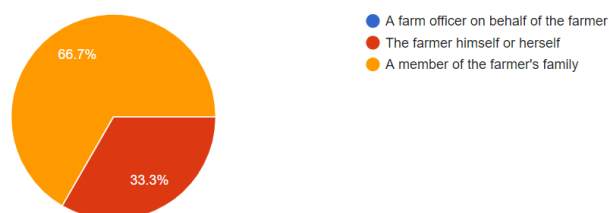
4 responses




4. If you ticked Farmers (large or small) in Question 2, was the recording done by:

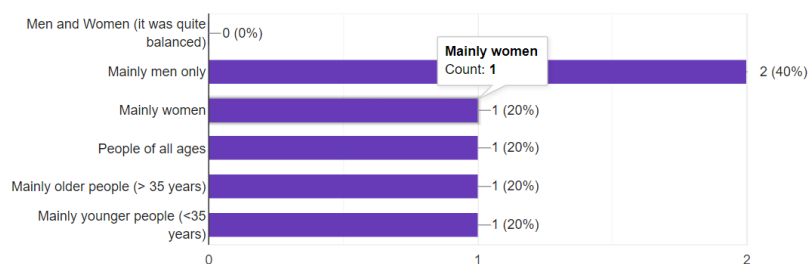



3 responses



5. If you have observed farmer groups/farmers keeping their own records, was the recording mainly done by: 


5 responses



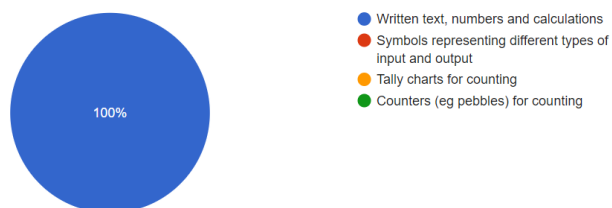
6. If you have observed farmer group/farmers' records, were these kept as: 


5 responses



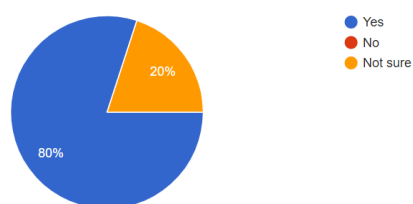
7. If you have observed farmer group/farmers' records, did they use: 

5 responses



8. Would you like to see more farmers using farm recording? 

5 responses



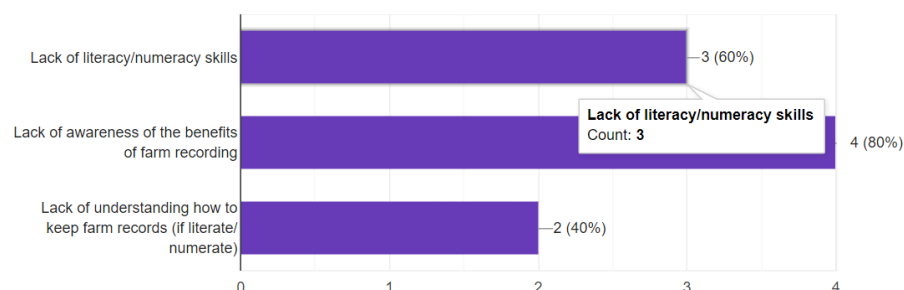
9. If you answered yes to above, why?

4 responses

It supports cost benefit analysis
For proper planning
Farm records helps farmers to keep records of farming events for future references, it helps in future planning, farm records guide farmers in mobilizing resources required, a farmer is able to determine the profitability of an enterprise from records, records of events such as rain days and drought helps to plan for any looming disaster, records helps farmers aquire loans
To make them understanding whether their making profits or losses during the time they harvest and be able to compare the returns from harvest with input cost invested during the farming period

10. What are the main barriers to farm recording amongst farmers in Karamoja?

5 responses



11. Any other experiences or thoughts your would like to share about Farm Recording?

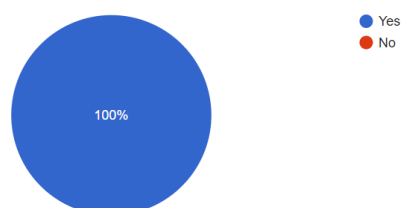
4 responses

It improves knowledge on the gestation periods within production cycle
Get alternative symbols to help illiterate farmers
Most farmers because of lack of records treats farming as it depends on chance yet in the actual sense if they kept records, they would be able to determine their farming outputs. It's also very hard to cost and quantify some activities like family labour
train the farmers on the importance of keeping farm records as Agro-tech talk had tried in Napak DLG some years back ,and the farmers were appreciating

12. Do you think radio is an important source of advice and information for the farming communities you work with?



5 responses



13. What was the reason for the answer you gave above?

4 responses

It's the best online medium to reach out to a larger community

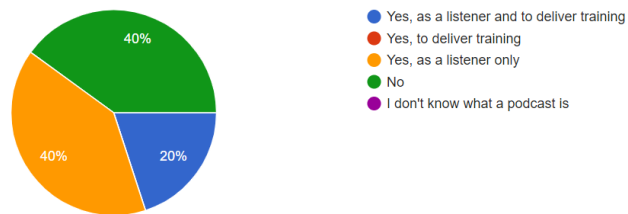
Wide listenership
Uses all languages

It's coverage is wide with a wider audience at a time

It covers wide area at the same time and nowadays all most all farmers have radios for government programs that are aiming at development of rural communities more so farmers livelihoods

14. Have you used podcasts, either as a listener or trainer?

5 responses



15. If you have used podcasts to receive/deliver training, what was your experience of this? Do you have any suggestions to make?

2 responses

It's a reliable and practical methodology to deliver trainings in especially communities with relatively lower levels of literacy. It facilitated better understanding of the training content

what is podcasts and how is it used in delivering training and listening?

16. If you have not used podcasts to receive/deliver training, do you think they could be a useful tool for training delivery (you may find it useful to refer to the opening questionnaire description to answer this question)? Please explain your answer.

4 responses

Yes, it improves participation during training sessions

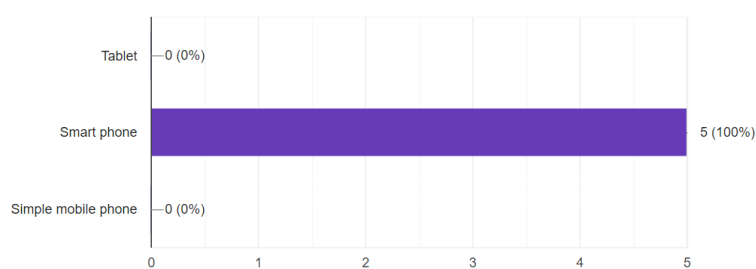
It will help deliver results

Yes because it can be cheaper and faster way of dissemination

i have not seen it and I don't know

17. What kind of phone/tablet do you use for your work?

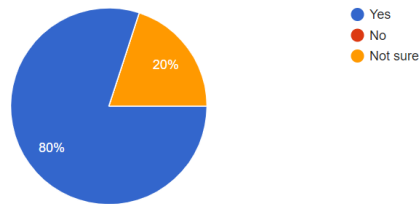
5 responses



18. To your knowledge, could your phone or tablet accommodate a SIM card to play audio clips (podcasts)?



5 responses



THANK YOU FOR COMPLETING THIS SURVEY. This survey was made possible by a grant from The Implementer-Led Design, Evidence, Analysis and Learning (IDEAL) Activity. The IDEAL Small Grants Program is made possible by the generous support and contribution of the American people through the United States Agency for International Development (USAID). The contents of the materials produced through the IDEAL Small Grants Program do not necessarily reflect the views of IDEAL, USAID, or the United States Government.